Ministry for the Environment
Manatū Mō Te Taiao

Freshwater Improvement Fund

Project Closure Report

Organisation:	**Horizons Regional Council**
Project name:	**Manawatū Awa Freshwater Improvement Project**
Funding period:	**2017 - 2023**
Deed number:	**#22401**
Date of report:	**4/10/2023**

Official information and privacy

Official Information Act 1982

Important: Information presented to the Minister for the Environment or the Ministry for the Environment is subject to disclosure under the Official Information Act 1982 (OIA). Certain information may be withheld in accordance with the grounds for withholding information under the OIA. Further information on the OIA is available at www.ombudsmen.parliament.nz.

Information held by the Minister or Ministry may have to be released under the OIA in response to a request from a member of the public (or any other body) for that information. If you wish to provide sensitive information to the Minister or Ministry which you do not want released, it is recommended you consult with the Ministry as to whether the information is necessary for the Project Closure Report, and whether there may be grounds in the OIA for withholding the information. For instance, if release of the information would disclose a trade secret, or be likely to unreasonably prejudice the commercial position of the person who supplied or who is the subject of the information, then there may be grounds to withhold the information. If an OIA request relating to your Project Closure Report is received, the Ministry will endeavour to contact you to discuss it, and what the implications of releasing your information are.

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Important: The Ministry for the Environment (8 Willis Street, Wellington 6011, Wellington 6011) may collect, use, hold or disclose personal information for the purpose of evaluating the Freshwater Improvement Fund funding. Individuals have the right in accordance with the Privacy Act 2020 to request access to and correction of their personal information.

Introduction

Project Closure Report

This document will ensure consistency of reporting for all Freshwater Improvement Fund projects coming to completion. It will help you evaluate your project against the objectives, outcomes and benefits detailed in the Work Programme. It allows you to reflect across the entire life of the project to:

- review and validate the objectives and success of the project
- report the overall project expenditure against the estimated budget
- confirm outstanding issues and risks and how these will be managed
- identify project highlights, lessons learnt, and best practices for future projects
- provide any other information relevant for the closure of the project.

As a result, better project management methodologies will be identified, which can be shared with other funding recipients who may wish to undertake similar projects. In addition to the recipient's benefits, project closure reports allow the Ministry to evaluate all projects to assess the success of the Freshwater Improvement Fund in achieving its purpose.

When your report is complete

Your report is to be submitted no later than three months after the funding deed expiry date.

Email to your fund analyst or post your report to PO Box 10362, Wellington 6143.

What happens next?

Your assigned analyst will assess the report to ensure you have met the requirements for funding as specified in your funding deed.

Once the Ministry for the Environment is satisfied that your Project Closure Report meets the funding requirements, your assigned analyst will arrange the final payment with the Ministry's finance department.

At least 10 per cent of the final financial year's Freshwater Improvement Fund contribution (or an alternate sum as agreed in writing the Ministry) will be withheld until approval of the Project Closure Report by the Ministry.

SECTION 1: Recipient and project details

Organisation details

Organisation name	Manawatū-Whanganui Regional Council	
Trading name (if different)	Horizons Regional Council	
Physical address	11-15 Victoria Avenue Palmerston North	
Postal address	Private Bag 11025, Manawatū Mail Centre, Palmerston North 4442	
Telephone	021 22 77 090 *Mobile*	0508 800 800 *Telephone*
Website address	https://www.horizons.govt.nz/	

Contact details for this project

Recipient's main contact (name and organisation)	Logan Brown Horizons Regional Council	Ministry's main contact	Aoife Broad
Organisation	Horizons Regional Council		
Email address	Logan.brown@horizons.govt.nz	Email address	Aoife.broad@mfe.govt.nz
Phone	06 9522 910 *Landline* 021 22 77 090 *Mobile*	Phone	027 602 2433
Postal address	11-15 Victoria Avenue Palmerston North	Postal address	PO Box 10362, Wellington 6143
Physical address	Private Bag 11025, Manawatū Mail Centre, Palmerston North 4442	Physical address	23 Kate Sheppard Place, Pipitea, Wellington

Project overview	
Project name	Manawatū Awa Freshwater Improvement Project
Project purpose	The purpose of this grant is to provide funding to Horizons Regional Council for their delivery of the Manawatū Awa Freshwater Improvement Project.
How many years did the project run for?	5 years
Total project cost *Do not include in-kind contributions in the total project cost.*	$8,375,691.77
Name and location of water body *If your project includes more than one water body, include details of each water body.*	Manawatū Awa and its tributaries

SECTION 2: Project Overview and key facts

Provide a summary of the achievements over the life of the project. Consider the original purpose of your project – what did you intend to accomplish through this project and has this been achieved?

The Manawatū Awa Freshwater Improvement Project had a 'multi pronged' approach to addressing water quality issues within the Manawatū Catchment. Primarily, it helped by funding and implementing works addressing point source and diffuse inputs.

There is also a strong desire from iwi, communities and agencies to protect the river before it declines further and to enhance where it is close to, or below targets. Seven projects were proposed, and six were completed through this project. A summary of the seven projects, the proposed targets and achievements over the life of the project is detailed below.

1. Stream fencing - this project set out to construct 250km of stream fencing. Stream fencing to exclude stock is a well documented tool for achieving positive water quality outcomes, including reducing inputs of phosphorous, nitrogen and pathogens into waterways. A total of 303.45 kilometres of stream fencing was completed in the five year project period. More fencing than originally programmed was able to completed due to the higher financial input and interest from landowners and uptake of the funding by landowners and farm managers.

2. Riparian planting – a total of 427,807 riparian plants went in the ground as a result of this project, vegetating stream banks through out the catchment. This was against a target of 200,000 plants. Suitable riparian planting can help in: erosion control and sediment reduction, habitat enhancement for native fish and interception of nutirents in subsurface and overland flow paths, all of which reduce the impact of diffuse pollution inputs into waterways.

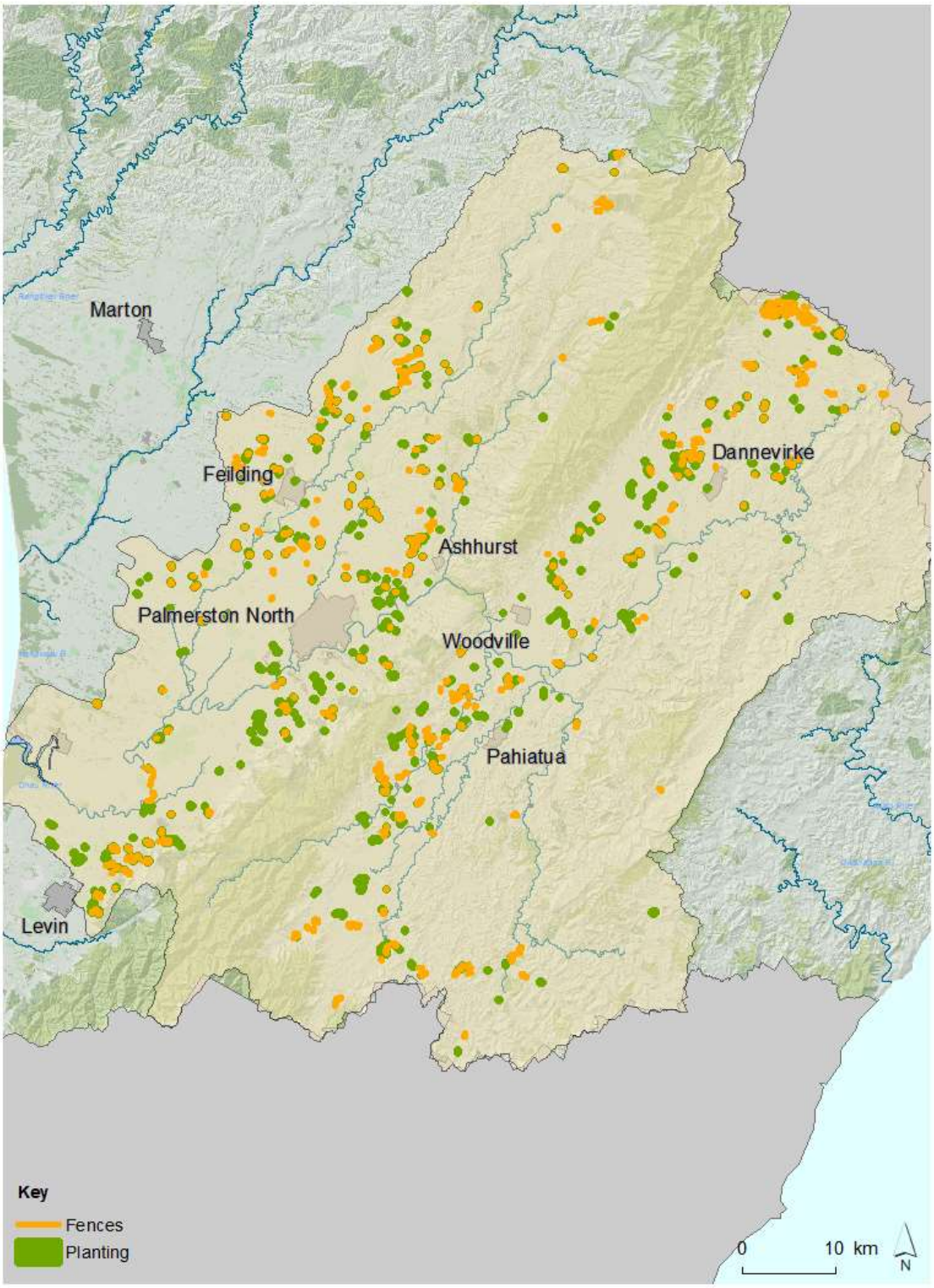
3. Fish passage remediations - 23 barriers to fish migration have been remediated, opening up approximately 61.7 km's of suitable habitat upstream of those barriers. By improving accessibility, a wider range of native fish species are able to access this habitat, which is likely to increase habitat suitable for spawning (thus increase fish populations).

4. Community Projects – 50 community led projects were completed against a target of 45. These projects engaged many school and kura groups, catchment care groups, individual landowners and community leaders. Some of these groups engaged technical expertise incuding water quality scientists, ecologists, farm consultants and facilitators.

5. Tokomaru waste water upgrade – part of this project was completed in year one. The Horowhenua District Council (HDC) purcased land for the irrigation of treated wasterwater to occur, however, the project ran over timeframes and the final proposed outcome of discharge to land was not reached within the five year time period. HDC are now working directly with MfE and are entering into an agreement with MfE to get a satisfactory outcome.

6. Iwi Management Plans – the aim was to have at least four plans completed at the end of the five years. Five iwi groups were sub-contracted at the start of the project and while all five groups worked on their environmental management plans, there were only four that had completed and submitted them to HRC by the end of the five yer period. Many of the wananga were unable to proceed during covid, which delayed one fo the projects. However, at least one of the Iwi have started implementing part of their plan.

7. Urban Streams – the aim of this project was to increase engagement with the Manawatū River from Palmerston North residents through urban stream restoration projects. These projects included the Urban Eels platform and continuation of planting, fencing and walkway development with in the city's Green Corridors areas. Palmerston North City Council (PNCC) were able to construct a foot bridge over the Turitea Strem to enable more access to the Green Corridor designated areas. This pathway is part of the Te Araroa walkway, but is also popular with local residents. Several community planting days have also happened during the five years of this project.



Map 1: Location of fencing and planting projects completed under the Manawatū FIF project. Note: some fencing jobs may be 'hiding' under the larger planting polygons/ symbols.

Project completion date:	30 June 2023

SECTION 3: Evaluation of financials

Please confirm the final cost of the project against the estimated costs detailed in your Work Programme. Include details of any funding received from other sources.

Funding information	Estimated total	Actual total
(A) Recipient's cash contribution to the project	$1,962,085.00	$2,072,511.75
(B) Freshwater Improvement Fund contribution	$2,928,998.00	$2,390,065.88
(C) Other funding sources	$2,355,667.00	$3,913,114.14
Total cost of project *(A+B+C)*	**$7,246,750.00**	**$8,375,691.77**

In-kind contributions received

If applicable, include details of in-kind contributions received. Where value is unknown, please provide a short narrative.	**In-kind contributions** *excluding GST*
Professional services and goods *calculate professional services using the actual hourly rate*	$1,896,471.11[1]
Use/donation of equipment, etc.	$0.00
Facilities provided	$0.00
Community volunteers/staff time *calculate at a rate of $30 per hour*	$150,000[2]
Other	$0.00
Total	**$2,046,471.11**

[1] This is HRC staff time (22,186 hours) over the five years of this project.
[2] 50 community led projects completed but volunteer hours were not recorded. It is estimated at least 100 hours were spent on each project.

SECTION 4: PROJECT PROGRESS / Evaluation of project objectives

Copy the agreed objectives and key performance indicators (KPI's) from your Work Programme. Describe the actual performance of the project in relation to the achievement of the planned project objectives. Insert more rows if necessary.

Evaluation of project objectives

Objective *The tangible results your project is trying to achieve.*	**Key performance indicators (KPIs)** *The key benefits of the project and how they will be achieved.*	**How did you monitor and evaluate the achievement of this objective?** *How did you measure your progress to demonstrate that the objective has been achieved?*	**Baseline information** *Provide the baseline information for this objective (where you started).*	**Current situation** *Describe the current situation.*	**Outcome** *What is the benefit from this objective being met? How does this contribute to the purpose of your project?*
By 2023, 250km of stream fencing will be undertaken to exclude stock and improve aquatic health in the Manawatū Catchment.	250km of stream fencing is undertaken in the Manawatū Catchment.	All stream fencing projects were measured, photos taken and recorded. The location and lengths were digitised using GIS.	Currently large reaches of the Manawatū catchment are unfenced. Sheep and beef farming makes up the majority of the land use in the Manawatū Catchment.	The land use within the Manawatū Catchment has not changed. Sheep and Beef farming contributes 49% of the land use followed by dairy at 17% and native forest at 14%. There is still a lot of waterways unfenced within the catchment.	A total fencing length of 303.45 km has been funded over the five years of the project against a target of 250 km. Mores stock are being excluded from waterways reducing the total input of nutrients and *E.coli* into the catchments waterways.
By 2023, the banks along the Manawatū Catchment will be planted with 200,000	200,000 riparian plants are planted in the Manawatū Catchment.	All planting projects are recorded including the location, number of plants. Photos are taken and areas	Some places have minimal vegetation and in some areas, banks are highly erodible.	More vegetation is now in place but will take many years to mature. There is still a large	427,807 native riparian plants have been planted within the Manawatū Catchment against a target of 200,000. Riparian

native plants to create a riparian buffer.		of plantings digitised using GIS		majority of waterways un-vegetated.	vegetation enhances habitat for aquatic life, including fish. Riparian plants intercept some subsurface flow utilising nutrients before entering the waterways. Vegetation on the stream banks also help with erosion control.
By 2023, at least 20 barriers to fish passage will be remedied throughout the Manawatū Catchment.	Removal of a minimum of 20 fish barriers by 2023.	Barriers were assessed prior to remediation and some post remediation monitoring undertaken, however it can take a few years for outcomes to be seen through recruitment of fish back into some areas. Fish barrier locations were recorded and the habitat above the barrier was measured using desktop methods.	Assessment and prioritisation will occur prior to remediation. Those barriers having the greatest impact will be prioritised for remediation.	Barriers to fish migration are continually being found and recorded through the Jobs For Nature fish passage project and remediations are prioritised based on several values important to fish passage.	23 fish barriers have been remediated over the life of the project making 61.7 km of habitat more accessible.
By 2023, at least 45 community projects will be funded through a Community Fund.	Guidelines for Community fund developed and fund advertised by September 2018.	Horizons staff worked closely with the majority of the community project leads to ensure the work was completed. Final project reports were completed for each of the projects completed and submitted as deliverables for this project. A total of 50 community led projects	Some community groups are active but there is currently no dedicated funding from Horizons towards community projects.	The Manawatū River Catchment Collective is now operating as an umbrella organisation supporting 12 individual catchment care groups within the catchment. Funding through MPI has supported specific projects for the group and has made sharing	The sharing of knowledge and access to expertise has been enabled through this project. This reaches a different range of people, who would engage with council on a one on one basis. The benefit is increasing awareness

		have been completed through this funding.		of knowledge and resources possible. There is no dedicated fund through HRC to support catchment care groups outside of the fencing and planting programme.	of water quality, tools to have a positive impact on water quality outcomes across the catchment, and a positive engagement experience with HRC.
By 2023, Tokomaru WWTP direct discharge to water is discharged to land.	Wastewater is discharged to land.	The commencement of irrigation of Tokomaru wastewater to land.	Currently 100% of Tokomaru wastewater is discharged to water.	The land was purchased for the irrigation to occur in year 1 of the project, however, the project did not complete subsequent milestones in the timeframes proposed and the wastewater is still being discharged to water.	Horowhenua District Council is now entering into an agreement with MfE to continue the project outside the timeframes of this project.
Increased iwi engagement in management and monitoring of the Manawatū awa.	Completion of at least four iwi management plans. Implementation of some of the actions identified in the management plans.	Completion of at least four iwi management plans and the commencement of projects identified as priorities within the management plan.	No iwi management plans currently exist.	Four iwi environmental management plans now exist and some implementation has commenced.	This project has multiple benefits for iwi and Horizons including development of resources, identification and prioritisation of issues specific to rohe. The development of the plans also allows for their inclusion within the freshwater planning process.

Increase engagement with the Manawatū River from Palmerston North residents.	Completion of the urban eel's project. Extension of the Turitea and Mangaone Stream fencing, planting and walkways.	Urban eel's platform and signage completed. Stream fencing completed and digitised. Number of plants in the ground recorded.	Currently there is no place/facility for the public to engage with aquatic life in their natural habitat within the PNCC boundaries. Large areas of waterways exist without native riparian vegetation.	The Urban Eels platform is now one of the city's most well-known and visited attractions, situated on a popular walk and cycle track between Palmerston North and Linton. New sections of the stream have been planted and existing areas of vegetation have been added to and enhanced through the introduction of canopy and secondary plantings.	The walkways and Urban Eels platform are an attraction within the city for residence and for visitors, including those using the Te Araroa walkway. The engagement with the waterways within the city has been enabled to grow through this project.

SECTION 5: Evaluation of benefits

Ecosystem services are the benefits people obtain from ecosystems. Provide an update on the ecosystem service categories that have been enhanced or improved through the delivery of your project. Insert more rows if necessary.

Environmental, social, cultural and economic benefits

Ecosystem service	Description	Measure	Source of measure	Benefits realised since the project began
Food *e.g. mahinga kai, fisheries, wild food, crops*	Fish pass improvements and riparian fencing and planting will increase the available habitat for native fish (including whitebait species) and enhance native fish and trout populations. These benefits are likely to be realised over the longer term.	No specific monitoring will be undertaken for these projects. The fish pass designs that have be installed have been monitored in other catchments, so we know what fixes work. In addition, the benefits of riparian vegetation and habitat complexity for fish species is well researched and publicised, so does not require further operational measures.	Number of barriers remediated, amount of habitat opened upstream of barrier remediation and number of riparian plants that have been planted.	Over the life of the project, 23 barriers have been remediated (target of 20), improving access to 61.7km of habitat. Over the life of the project 427,807 riparian plants have been planted in the Manawatū Catchment.
Freshwater *e.g. for drinking, irrigation, cooling*	The reduced *E.coli* in rivers from stream fencing may make the water more suitable and culturally acceptable for contact recreation purposes. Water quality monitoring in-river will track the changes in bacteria levels over time and these are expected to occur in the medium term through the cumulative impact of targeted stream fencing programmes.	Measured through the number of metres of fencing that is completed as part of the project. Water quality monitoring data is collected as part of the State of the Environment monitoring programme that Horizons delivers.	Recording of fencing is completed through Horizons environmental grant programme. All fencing that is part funded is recorded in HRC's freshwater fences database.	The reduced *E.coli* in rivers from stream fencing may make the water more suitable and culturally acceptable for contact recreation purposes. Water quality will track the changes in bacteria levels over time and these benefits are expected to occur in the medium term (through the cumulative impact of targeted stream fencing programmes).

Carbon sequestration and storage *e.g., C-sequestration, influence of vegetation on rainfall*	The planting of 200,000 native plants will contribute to carbon sequestration as the plants grow. The level of carbon sequestration could likely be modelled based on numbers of plants and predicted growth rates. These benefits are likely to be realised over the long term.	Measured through the number of riparian plants that are planted as a part of the project.	Number of plants planted each year is recorded by Horizons staff in the freshwater database. All planting is viewed once the plants are in the ground and signed off by staff.	Over the life of the project, 427,807 plants have been planted in the Manawatū Catchment (target of 200,000). Locations are recorded as NZTM grid reference.
Moderation of extreme events *e.g., storm protection and flood prevention*	Riparian planting and stream fencing will contribute additional stream bank stability providing more protection against stream bank erosion during floods. These benefits are likely to be realised over the longer term.	The benefits of riparian vegetation in stabilising stream banks is well researched and publicised. Therefore, this does not require resources to be spent in this catchment to monitor this. Number of plants and area planted will be recorded.	The number of riparian plants planted each year is recorded in Horizons freshwater database. All planting is viewed once the plants are in the ground and signed off by HRC staff.	Benefits will be realised in years to come. Wider riparian margins and retired wetland areas allow flood waters to spread over larger areas, reducing damage to paddocks and infrastructure in some cases. Over the life of the project, 427,807 riparian plants have been planted and 303.45 kilometres of stream fencing completed in the Manawatū Catchment.
Erosion prevention and maintenance of soil fertility *e.g. soil retention/prevention of land or asset erosion*	The riparian planting and stream fencing will contribute additional stream bank stability, providing more protection against stream bank erosion during floods. These benefits are likely to be realised over the longer term.	The benefits of riparian vegetation in stabilising stream banks is well researched and publicised. Therefore, this does not require resources to be spent within this catchment to monitoring this. Number of plants and area planted will be recorded.	The number of riparian plants planted each year is recorded in Horizons freshwater database. All planting is viewed once the plants are in the ground and signed off by HRC staff.	Benefits will be realised in the medium to long term. Over the life of the project 427,807 riparian plants have been planted and 303.45 kilometres of stream fencing completed in the Manawatū Catchment.

Habitats for species *e.g. taonga indicators, native or migratory species, nursery habitat*	This project includes a targeted programme to repair four barriers to fish passage per year. This will open up new habitat for native fish. The stream fencing and riparian planting programme will also improve habitats for native fish. These benefits are likely to be realised over the short, medium and long term.	Measured through the metres of stream habitat that are opened up as a result of remediating the fish barriers, and the metres of stream fencing that are undertaken as a part of the project. The benefits of riparian vegetation and habitat complexity for fish species is well researched and publicised to not require resources to be spend in this catchment.	The length of habitable stream is measured via a desk top exercise. This determines the length of stream opened up as a result of remediating barriers to fish passage. The length of stream fencing and number of riparian plants planted is also recorded.	Over the life of the project, 61.7 kms of water ways have been made more accessible to migratory fish species through the remediation of 23 instream barriers. Over the life of the project 427,807 riparian plants have been planted and 303.45 kilometres of stream fencing completed in the Manawatū Catchment. Benefits from fencing is immediate, with stock being excluded and benefits from increased riparian vegetation will occur over the medium to long term.
Recreation and tourism *e.g. fishing, swimming, tramping*	The fencing, planting, and community projects will enhance the areas 'clean green' image. These benefits are likely to be realised over the short, medium and long term.	Horizons will continue to undertake State of the Environment monitoring throughout the Manawatū catchment. This information can be used to monitor any changes in the suitability of rivers for contact recreation. However, the duration of the project means that the ability to detect changes in the data is likely to be limited.	The regions' State of the Environment report 2023 can be found here; https://www.horizons.govt.nz/managing-natural-resources/state-of-our-environment Popular swim spots are monitored annually on a weekly basis during the swimming season November – March inclusive.	Greater engagement with our waterways is already being realised through the community grant projects and the opening of He Ara Kotahi (the walkway that connects the city, Massey University and Linton along the banks of the Manawatū River). The Turitea pedestrian bridge is part of this walkway and the urban eel's observation platform is connected via this walkway. Suitability for swimming is publicised on the Horizons website and LAWA:

				https://www.lawa.org.nz/explore-data/manawat%C5%AB-whanganui-region/river-quality/manawat%C5%AB/ .
Spiritual experience and/or sense of place *e.g. wahi tapu, wai tapu, karakia and/or species with spiritual / religious value*	This project sets out to increase engagement of iwi/hapū within the Awa through the mātauranga māori and cultural health monitoring project, ongoing collaboration and potentially through community project applications. The key indicators of this will be via dialogue and feedback from iwi representatives. These benefits are likely to be realised over the short, medium and long term.			

SECTION 6: Evaluation of significant risks and issues

Provide details on significant project risks and issues still outstanding at the end of the project. Confirm how these will be managed, the action(s) needed to resolve each and who will be responsible for their ongoing monitoring. Insert more rows if necessary.

Risks and issues register

Risk or issue *List any issue or risk outstanding at project close.*	**Consequences**	**Strategy to mitigate / action(s) required**	**Who is responsible**
On-going management of stream fencing and riparian planting completed via the funding.	Only short term gains realised if fences and planted areas are not maintained on an on-going basis.	All fencing and planting projects have application and claim forms completed as a part of the landowners receiving the grants for completed works. These forms set out the requirements for landowners to maintain the fencing and planting for its intended purpose. These provide Horizons with a mechanism to ensure that works are maintained in the manner that they were intended for.	Landowners – Horizons to follow up if required.
HDC and the ability to complete the land irrigation project within the timeframe of the Manawatū FIF project.	Land purchase occurred, however, wastewater is still being discharged to water as the consenting element of the project hasn't proceeded as fast as first envisaged.	HDC are now directly engaging with MfE, with the aim of entering into a project to allow for the project to be completed outside of the timeframes for the Manawatū FIF. The overall outcome is still likely to be achieved, however, this will be over a longer time period.	HDC.

SECTION 7: Project outcomes

The following outcomes are linked directly to the purpose of the Freshwater Improvement Fund. Describe how your project has contributed to achievement of these outcomes.

Fund outcomes	
Capability and capacity *If applicable, explain how your project developed freshwater management capability and/or capacity of iwi/hapū, the community, local government, or industry.*	Over the five years of the project, 50 community projects have been completed (many of these involving schools and kura). These included riparian planting and water quality monitoring. Five Iwi worked on environmental management plans, identifying values and concerns for their rohe, understanding of Te Mana o te Wai and how to give effect to freshwater management as well as other purposes and priorities of each Iwi. Implementation of these plans has started, building on capability within the groups and this has the opportunity to progress into the future and build capacity to address values identified.
Mātauranga Māori *If applicable, explain how your project increased the application of mātauranga Māori in freshwater management.*	The iwi environmental management plans have allowed for the application of Mātauranga Maori through the implementation and visions of the plans. Individual Iwi groups have been able to weave mātauranga into nation-wide topics such as Te Mana o te wai on a local Iwi level.
Collaboration and participation in managing freshwater *If applicable, explain how your project established or enhanced collaborative management of freshwater. Consider how the project enabled parties to establish a collective understanding of desired outcomes and how to achieve them.*	The application to the Freshwater Improvement Fund was a collaborative effort supported by the Manawatu River Leaders Forum. Having the Forum in place enabled the members to come together quickly and identify projects that could benefit a wide swathe of the catchment. The works identified and completed benefitted water quality and mauri of the Manawatū catchment while meeting the criteria of this fund. The continuation of the Manawatū Accord (and the forum) allows this collaboration to continue beyond the FIF project. Some of the individual projects have allowed for collaborative efforts. For example, within the fish passage improvement project, Horizons have paired up with asset owners (including district councils, NZTA, Transpower and landowners) to fix barriers (improving fish passage). This project has also raised opportunities for education and awareness. The works completed for the stream fencing and riparian planting projects required co-funding and areas of land retried from landowners. These projects involved working in collaboration with the landowners. Landowners gained a greater understanding of water quality issues and potential solutions. While the Horizons team members gained a greater understanding of the pressures within the farming sector, which may prevent or slowdown uptake of such measures.
Applied research *Did your project include an applied research component? If yes, then describe how this contributed to an improved understanding of the impacts of freshwater interventions and their outcomes.*	N/a

SECTION 8: Monitoring and Evaluation

Describe any change in water quality since the project began. How will you ensure the improved water quality of the water body will endure after project completion?

Changes in water quality values are a representation of all activities occurring in the catchment. While riparian fencing and planting work will have positive benefits, the scale of the works completed via this project, in comparison to the whole catchment, implies that the works will not be able to be quantified through Horizons water quality monitoring. There are other projects being undertaken concurrently within the catchment, such as the Sustainable land Use Initiative (SLUI) and some projects that are not co funded through Horizons programmes. SLUI looks to improve water quality outcomes by addressing hill country erosion and some riparian work. All these programmes cumulatively will result in water quality improvements.

The maintenance of the stream fencing and riparian planting sits with the landowner and is part of the agreement that is signed (co-funding arrangement). This is via a condition of the funding that states the work is to be maintained in a manner for the purpose it was intended. Central governments Essential Freshwater package includes national environmental standards, new stock exclusion regulations and amendments to the Resource Management Act. These stock exclusion regulations will go a long way to ensure those fences erected and part funded through this FIF project will be maintained into the future.

In March 2023, Horizons released the latest report on State and Trends of Water Quality in the Manawatū catchment, for all records to 30 June 2021, which was reviewed by an independent water quality scientist. The analysis looks at compulsory water quality attributes identified in the National Policy Statement for Freshwater Management (NPS-FM) 2020, these being, nutrients (nitrogen and phosphorous), chlorophyll a, macroinvertebrate indicators, sediment, *E.coli* and dissolved oxygen. Trend analysis used data for 5, 10, 20 and 30 year periods. The report can be found here: https://www.manawaturiver.co.nz/wp-content/uploads/2023/03/State-and-Trends-of-water-quality-in-the-Manawatu-Catchment_final.pdf

Change request register

*Provide information about changes approved over the life of the project e.g., significant changes to project activities (do **not** include activities that were carried over financial years).*

If you have had more than three change requests, press the Tab key on your keyboard to add more rows to the table below.

Change request date	Reason for request	Impact on project

SECTION 9: Key data / statistics

Provide key statistics/data on what your project achieved (only provide data for the categories relevant to the parts of your project funded by the Freshwater Improvement Fund). Please use quantitative information where possible.

Stock exclusion *Total length (km) of fence erected to exclude stock.*	303.45 kilometres of stream fencing completed.
Riparian planting *Total number of plants planted.*	427,807 native riparian plants planted.
Pest control *Hectares (ha) or squared metres (m^2) treated for weeds or animal pests (if more than one species list separately).*	Some pest control was undertaken as part of community projects and through the urban stream programme. However, these parameters were not measured or reported.
Other physical interventions *Number and type of other physical interventions completed (e.g., sediment traps / fish passes).*	23 fish passage remediations. 1 eel observation platform. 1 pedestrian bridge within green corridors planting areas.
Community awareness and engagement *Number of knowledge and skill sharing initiatives provided over period of project (includes wānanga, education events, community planting, or other volunteer days).*	50 community led projects completed which involved public planting days and community events such as plastic pollution surveys. 4 Iwi management plans created involving many wananga. Three Manawatū River festivals held (two in Palmerston North next to the Manawatū River, and one in Foxton next to the Foxton Loop).
Water quality *Detail any water quality monitoring that has been undertaken as part of the project/describe the findings of these activities (includes cultural monitoring).*	Some water quality monitoring undertaken via community led projects. Water quality monitoring is undertaken by Horizons across the catchment as part of the SOE monitoring (56 sites), summer swim spot monitoring (26 sites) and monitoring of impact sites (around point source discharges, 13 sites).
Other outcomes *Provide information on any additional outcomes not covered above.*	

SECTION 10: Successes and Key Learnings

Describe the areas of the project that worked well, why they worked, and the outcomes of the successes.

Key successes *Describe the areas of the project that worked well, why they worked, and the outcomes of the successes.*	The uptake of funding for stream fencing and riparian planting projects was high, meaning the targets were easily achieved over the life of the project. These projects were successful because Horizons has been working with landowners in the catchment for a long time now. The availability of funding has been published since at least 2010 and more frequently when the Clean-up Fund project commenced in 2012. The introduction of stock exclusion regulations has also played a part in the success of this project too. The Manawatū River Catchment Collective was established during the life of this project which enabled groups to combine resources, share learnings and get expert advice on specialist subjects. The community projects programme resulted in positive outcomes for those involved. Some of this is because of the previous work and funding available through the Clean-up Fund and relationships that had been formed through that earlier work. Having Horizons freshwater staff working alongside project leads to ensure timeframes were met played a big role in the success of this project. The number of community projects completed exceeded targets. The Urban Streams project created some great outcomes (both tangible and intangible) and the relationship formed between PNCC and HRC through the Manawatū River Leaders Accord is probably attributable to these good outcomes. The completion of four Iwi Environmental Management plans was also a success given the challenges Covid created for Iwi in holding wananga. The development of these plans will enable them to be fed through into the freshwater planning process that is currently underway.
Key lessons learned *Describe what worked well and what didn't work well. Provide recommendations on what you might do differently next time or would like to have seen done.*	Having already established relationships and experience of working in the catchment helps a lot towards implementing the projects and achieving targets within the timeframes of the project. Reporting on behalf of other agencies can be challenging and time consuming, especially when there are staff changes within the life of the project. The auditing of this project is very involved and time consuming. The freshwater projects at Horizons are also audited according to our annual plan targets (which are very similar). It would have been good if some of this audit could contribute in a way towards any future FIF project audits. The annual reports are due right in the middle of the planting season, the busiest time of year for the Freshwater team (putting added pressure on staff). Ideally, these projects would also provide for dedicated support staff to help with reporting. This is a learning for applications to external funding in the future.

Endurance of project *A successful project is one that produces long-term sustainable outcomes. How will you ensure the outcomes will endure? What are the 'next steps' for the project after completion?*	The existence of the Manawatū River Leaders Accord helps by providing a common goal for its members. The forum is a means by which members are held to account in their commitments and actions toward this goal. The application to the Freshwater Improvement Fund was a combined effort of the Accord members and projects aimed to include as many sector groups represented in the Accord as possible. The existence of the Accord will ensure the project outcomes endure and will be built on into the future. Because a lot of the projects are part funded (e.g. stream fencing and riparian planting) there is essentially a shared ownership of the work and therefore a greater likelihood they will be maintained into the future. The relationships formed with landowners and stake holders through the implementation of the project has strengthened over the five years and allows conversations to occur more openly and future work to occur more easily. The fish passage work will continue through the Jobs for Nature funded programme in the short term and with the introduction of legislation through the NPS – FW, the continuation of stream fencing excluding stock from waterways will allow for fish passage into the future.
Additional Information *Please provide any additional information that you want the Ministry to be aware of.*	

SECTION 11: Conclusions

Provide final conclusions and any additional information you would like to share.

The funding provided through the Manawatū Awa Freshwater Improvement Project has allowed for greater community engagement and involvement in freshwater management than would have been able to occur solely through Horizons (ratepayers) funding. This involvement has increased awareness of freshwater management and allowed for a faster rate of implementation of works within the catchment (both by speeding up existing programmes and the establishment of new programmes specifically for the catchment i.e. fish passage work and community led projects). This additional work will help the community on its journey towards making the regions rivers more swimmable as we move towards the targets set by Council and Central Government and aid in the development of future freshwater planning processes.

Feedback on the Freshwater Improvement Fund

Please provide feedback on how you have found the processes.

Highlight the number corresponding with the extent to which you agree with each statement.

	Very poor	*Poor*	*Satisfactory*	*Good*	*Very good*
How do you rate the quality of advice you received from the Ministry in relation to the Freshwater Improvement Fund (consider the application, project planning, and reporting processes)?	1	2	3	4	5
Comment					
How do you rate the timeliness of Ministry processes in relation to your project (consider processes post deed signing e.g., receiving payments)?	1	2	3	4	5
Comment					

Additional feedback

Do you have any other feedback or recommendations on how the Ministry for the Environment can improve its funds?

SECTION 12: PROJECT CLOSURE REPORT DECLARATION

Declaration

As a duly authorised representative of the organisation:

- I declare that to the best of my knowledge, the information contained in all sections of this Project Closure Report, or supplied in support of our Project Closure Report, is complete, true and correct.
- I declare that I have the authority to sign this Project Closure Report and to provide this information.
- I understand that information presented to the Minister for the Environment and Ministry for the Environment is subject to disclosure under the Official Information Act 1982.

Name	Lucy Ferguson	
Position	Freshwater Coordinator – Horizons Regional Council	
Signature *By typing your name in the space provided you are electronically signing this Project Closure Report.*	*Lucy Ferguson*	Date 4/10/2023