

Our People





Foreword

The Kaipara Moana is the largest natural harbour in the Southern Hemisphere, and a place of global significance.

As Aotearoa's largest harbour system, the Kaipara Moana includes 6,000 km² of catchment across Auckland and Northland regions, and over 8,000 km of waterways flowing into the harbour.

The Kaipara Moana has deep environmental values, with some the rarest ecosystems in New Zealand, including sand-dune, seagrass, freshwater and estuarine wetland ecosystems. As the breeding ground for New Zealand's snapper fishery, and home to many taonga species, the Kaipara Moana also has major economic, cultural and recreational value.

However, high sediment levels have put this at risk. Decades of deforestation and land-use intensification have led to a seven-fold increase in sediment washing off the land and into the Moana.

In October 2020, the Ministry for the Environment, Ngā Maunga Whakahii o Kaipara, Te Rūnanga o Ngāti Whātua, Te Uri o Hau, Northland Regional Council and Auckland Council signed a Memorandum of Understanding to establish Kaipara Moana Remediation, a decade-long programme to protect and restore the mauri of the Kaipara Moana.

KMR's long-term aspiration is to halve sediment flows into the harbour. The projects KMR invests in - to restore wetlands, fence off rivers and streams, plant trees and regenerate forest on erosion prone land - also bring other benefits including thriving rural communities, enhanced connection to local waterways, greater protection for valued species, and resilience to extreme weather.

KMR's mahi is so much bigger than our in-house team - action right across the catchment is needed to restore the Kaipara Moana.

KMR is now working with around half of the pastoral landowners in the catchment to take action to reduce sediment flows from the land.

We acknowledge the hard work of all of our landowners and the many local businesses and suppliers that support KMR projects.

These stories are from the people of the Kaipara Moana - their hopes, aspirations and reasons for contributing to KMR. We hope you are inspired by their stories - come and join us!

Justine Daw

Pou Tātaki

Kaipara Moana Remediation



A globally and nationally important harbour

The Kaipara Moana catchment spans both Northland and Auckland.

600,000 hectares

2
regions

~3,500
sub-catchments

7
major river systems

~92,000
micro-catchments

9
(planting) eco-districts

16,200 kms
of river - and stream-banks



These stories showcase the people taking action in KMR projects across the catchment.



Ian Cawkwell

Landowner's mission to regenerate ex-forestry land

Bringing Back the Natives

Ian Cawkwell is doing something for the environment that very few people would.

Not only is Ian buying ex-forestry land post-harvest, he is putting it back into pasture – a far cry from his career constructing gold mines around the world. And along the way he is fencing off waterways, gullies and bush blocks to look after the land and play his part in looking after the Kaipara Moana. This is the very essence of the Kaipara Moana Remediation kaupapa, which is why he has teamed up with KMR to replant parts of his 79ha beef unit with natives.

“What KMR is providing for landowners like myself is great and I would encourage other farmers in the Kaipara catchment to get on board and take advantage of the opportunity,” says Ian.

A Kaipara local, Ian grew up in the area with his current property part of his stomping ground as a youngster. “I floundered in the Kaipara Harbour. I mulleted in the Kaipara and I love the Kaipara. I stomped around here as a kid and remember the creeks full of crayfish and eels.”

Ian has fenced the length of his creek and he is well underway with a planting programme on both sides of the waterway.

The natives already in the ground are growing really well and Ian has numerous other pockets of land he plans to fence off to allow natives to come away.

He has invested heavily in fencing gear and kit and is doing all the fencing himself. Once complete, Ian he will have completed three kilometres of six-wire fencing and he can't wait to see his protected natives flourishing throughout his land.

“I am all for KMR. This is a chance to partner up and clean up the environment and split the costs. With KMR contributing financially it is a winner.

“What I am doing with KMR gives me enjoyment and takes me back to my childhood on the farm when we would plant blocks of natives. If it wasn't for KMR I would be doing this anyway but this gives me even more motivation and allows me to do it more quickly.”

To find out more or get in touch with KMR, email us at hono@kmr.org.nz



Peter Wilson

KMR piloting biodegradable nursery pots – PolBionix

“Kiwi innovation is accelerating environmental benefits from the Kaipara Moana Remediation programme.”

A new bio-based biodegradable nursery container has been developed, which will offer an alternative to the estimated 350 million plastic pots produced by New Zealand nurseries annually.

Wilson and Ross collaborated with Scion, a Crown Research Institute, on development of the pots. Creator of the product, Peter Wilson, says PolBionix is a bio-based biodegradable garden pot ideal for native seedlings. Peter's passion for native rehabilitation and revegetation began when he first started working with Te Uri o Hau and Te Ārai Native Nursery in 2016.

Now the founder is generously donating 5,000 pots to Te Ārai Nursery, 5,000 to KMR and 20,000 to Auckland Council for use on the KMR programme.

Peter says he is pleased to be supporting a harbour restoration programme as significant as KMR, a sentiment held by KMR Pou Tātaki Justine Daw. She believes the trial is an opportunity for bioplastics to deplasticise the KMR supply chain over time.

“The KMR team and our partners are working hard to improve environmental outcomes for the Kaipara Moana and this is another step in that journey. I am really pleased that an Uri-led nursery is leading the way with this,” says Justine.

The bio-degradable pots can last 12 months above ground before biodegrading, with the biodegrading process starting as soon as soil is added. When planted directly in the ground, the pot provides fertiliser for the plant as the pot biodegrades.

PolBionix pots have an estimated 70 per cent lower carbon footprint than traditional plastic pots which helps in the fight against climate change and is good for the planet.

The pots are made from bio-polymers and a bio-filler, with the bio-polymers made from sustainably grown sugarcane, cassava and corn. “What that means is PolBionix biodegrades in mild environments, like in soil and under home composting conditions, and because PolBionix biodegrades and does not disintegrate there are no residual micro-plastics,” says Peter.

“PolBionix is the result of four years of research in collaboration with Crown research institute Scion, and funding support from Callaghan Innovation and Auckland Council's Waste Minimisation Fund. I am really excited to be rolling the pots out with Te Ārai Nursery, KMR and Auckland Council.”



Hayley and Geoff Clayton

Kaipara Hills Navigator Project

Hayley and Geoff Clayton are determined to boost the environmental outcomes of their property.

The Claytons have aligned themselves with the Kaipara Moana Remediation Programme as a 'Navigator' project, implementing a massive ecological restoration plan.

The plan charts a course over several years to exclude stock from rivers and streams, retire some of the farm's steepest land, and undertake restoration planting to reduce sediment losses into the Kaipara Moana.

As a first step, the couple have undertaken large scale fencing of gullies, waterways, wetlands and highly erodible hillsides.

They planted out 15,000 natives in partnership with KMR in 2023, in addition to 2,000 mānuka generously donated by Comvita as part of the New Zealand company's support for cyclone-affected landowners following Cyclone Gabrielle in February 2023.

The Claytons had previously worked with KMR and project partners, The Forest Bridge Trust, to plant 6,000 natives in 2022. KMR also funded a substantial amount of fencing in 2022.

The couple appreciate the immense support they have received from KMR and The Forest Bridge Trust, and are grateful for the generosity of KMR's third-party commercial co-investor Comvita to plant on the worst affected of the slip faces.

"Following Cyclone Gabrielle, which was an incredibly stressful and devastating event, KMR were there to not only reinstate fencing that we had lost but provide support and funding for how we could address and remedy the massive number of landslides we had suffered."

Despite the storm damage, Hayley and Geoff say their game plan was always to retire marginal hillsides and they are grateful that the KMR Navigator project is helping fast-track that plan.

To find out more about planting on erodible hillsides, email KMR on hono@kmr.org.nz



Fonterra Partnership

KMR and Fonterra partnership delivers real sustainable gains

A partnership between Fonterra and KMR is paying dividends with hundreds of Northland and Auckland dairy farmers in the Kaipara Moana catchment working hard to improve the health of the harbour.

Fonterra Farm Source Northland's Regional Head Mike Borrie says it is a pleasure partnering with KMR.

"It feels like we are making good progress in ensuring KMR funding grants are reaching local Fonterra dairy farmers to make a real difference on farm and support them to reduce sediment flowing to the Kaipara Harbour," says Mr Borrie.

Nestlé is the largest food and beverage supplier in the world, and Fonterra's largest customer. In August 2023, Nestlé announced it would no longer offset embedded carbon emissions in its supply chain.

As a result, Fonterra will soon need to ensure that the milk product ingredients it supplies to Nestlé are already carbon-neutral.

In response, in December 2023, Fonterra announced a farm-level carbon emissions reduction target. Overall, it is estimated that around 8% of Fonterra farmer emissions can be offset via new tree planting on farm, including around wetlands, rivers and streams, and on erosion-prone land.

Such planting not only offsets on-farm emissions, but also reduces sediment loss, improves biodiversity and pollination services, and protects and restores precious waterways and species on farm. Through Fonterra, KMR is working with 291 dairy farmers - the majority of Fonterra farmers in the catchment.

In 2024, KMR will focus on supporting planting that also helps Fonterra farmers to achieve on-farm carbon reduction goals. "Planting trees through KMR projects will help dairy farmers to meet tougher environmental standards set in offshore markets" says Pou Tātaki Justine Daw.

To find out more about taking action under Fonterra Tiaki Plans, get in touch with your Sustainable Dairy Advisor or email KMR at hono@kmr.org.nz



20 KMR Field Advisors are working directly with landowners to develop sediment reduction plans and unlock KMR funding.



KMR and NZARM Collaboration

Growing a cohort of future freshwater farm planners

In November 2022, Kaipara Moana Remediation (KMR) signed a Memorandum of Understanding with the New Zealand Association of Resource Management (NZARM) to strengthen training and employment outcomes in the Kaipara Moana catchment.

Through this collaboration, KMR piloted the development and roll-out of two national training courses to support our Field Advisors and help them to obtain formal qualifications as Freshwater Farm Planners in the future. Both courses integrated Te Ao Māori and Western science approaches and demonstrated complementary ways of understanding erosion risk in the landscape and potential pathways for mitigation.

Living our values as a Jobs for Nature programme, KMR hosted one of these courses - a two-day wānanga at Te Ātiu Creek, Tāporapora in July 2023.

Around 25 KMR Field Advisors and a number of KMR programme partners came together for the practical training on wetlands and soil erosion risk management, interwoven with mātauranga Māori approaches.

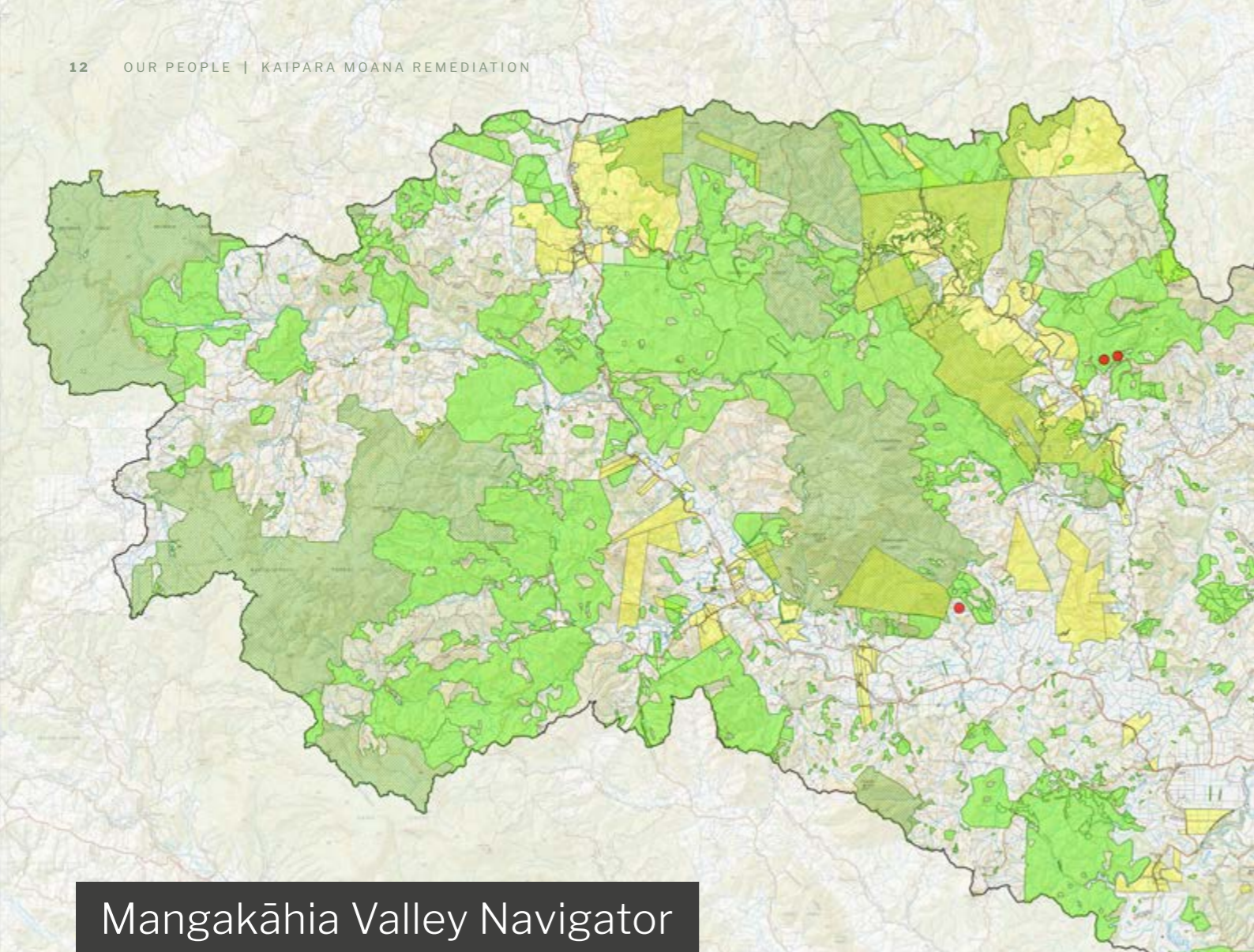
The training involved practical learning and assessment as well as teaching out in the field to complement group work and presentations. While the course was aimed at beginner and intermediate rural professionals, it also added specific Tai Tokerau and Auckland context for KMR Field Advisors working across the seven major river systems and nine eco-districts in the 600,000-hectare (6,000km²) Kaipara Moana catchment.

“The KMR kaupapa is to invest in local people to develop and sustain meaningful, nature-based employment, and support people who whakapapa to the Kaipara returning home to work on the project.

Our partnership with NZARM will be pivotal in this,” says KMR Pou Tātaki Justine Daw.

Matt Highway, CEO of NZARM, said “It is great to see the partnership with KMR and NZARM start to deliver ‘on the ground’ results. Everyone was positive, excited to learn and it’s great to see people beginning to understand the real work that goes into land management. We look forward to scaling such events across the country”.

“Building the skillsets of current resource management advisors and capacity to support landowners to take on-farm action to protect waterways is key to New Zealand’s future,” NZARM President Nicola McHaffie says.



Mangakāhia Valley Navigator

Reconnecting Northland Partnership

Kaipara Moana Remediation invests in Navigator Projects to demonstrate and champion best practice in reducing sediment losses from the land, and support leaders around the Kaipara Moana catchment to share learnings with their community, sector or iwi/hapū.

Across the catchment, KMR has 13 Navigator projects contracted or at various stages of development.

One of the KMR Navigator Projects centres on the Mangakāhia Valley, with an initial focus on reviewing and updating a 2021 stocktake of lands where sediment remediation could occur.

The project will engage landowners, mana whenua/marae and community groups to understand their aspirations and support them to take action.

A major focus of the Mangakāhia project is to assist and encourage landowners in the river system to engage with the KMR Programme and achieve large scale socio-ecological benefits for the community as well as the natural environment.

Reconnecting Northland, a non-profit organisation that supports remote communities to regenerate forests and wetlands, is leading the project. Reconnecting Northland has been working with local leaders and community members to develop a 'connectivity plan' for Mangakāhia. To develop the plan, Awatea Kake will act as a Project Coordinator to support the Mangakāhia Valley community.

Awatea's role is to oversee the project and coordinate activities that will bring the community together behind a common purpose and action and assist in prioritising the range of possible actions across the river system.

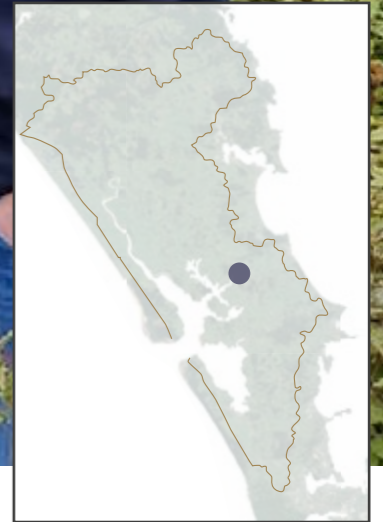
In 2024, the project plans to host three community hui to give background on cultural context and history with tangata whenua and initiate the project in accordance with tikanga.

To find out more or get in touch with the project leaders, email KMR on: hono@kmr.org.nz



Phil, Vern and Terry Wearmouth

Kauri Park Nursery – Kaiwaka



Everyone at Kauri Park are on a mission from Mother Nature herself.

Brothers Phil, Vern and Terry Wearmouth – self-described environmentalists – believe Kauri Park has only one client – Mother Nature. It is a belief which resonates strongly with their drive for sustainability while also underpinning their fast-expanding native plant nursery, a great synergy with the work they are doing as a preferred supplier of native plants to the Kaipara Moana Remediation Programme.

The Wearmouth brothers have deep roots in the Kaipara going back four generations of family members who have always worked the land. As youngsters they were encouraged and helped by their father John to grow sizeable plots of vegetables. Growing is in their blood.

And having already grown and planted 200,000 native plants for KMR, success for the team is the successful outcome of your plantings, arresting erosion and improving water quality down-stream – a perfect fit for their partnership with KMR. They believe the Kaipara Moana catchment as a whole is a nursery – a nursery for the land, the harbour and for all the whānau and children living in the catchment.

“It’s okay to make money out of the environment so you can feed people but we want to get trees planted to preserve life because if the land is grieving so are the people. So in that sense KMR shares the same vision as us in that we are in this for the good of the environment. We are passionate about the environment,” say the eco-vitalists.

Kauri Park is already the largest supplier of native plants in New Zealand, employing 100 locals. “We spend six months growing and six months putting plants into the ecosystem. Because we have really short windows, we get things done properly and without losing the quality in the plants. The Kauri Park mission is to help New Zealand become an ecology economy, with ecology leading the economy.

With several more years of KMR work to be done, the team at Kauri Park are looking forward to playing their part in colouring that Kaipara Moana canvas.

To find out more about KMR's accredited suppliers, visit our website at: kmr.org.nz/working-together/



Partnership with QEII

KMR and QEII work in collaboration to support landowners.

Kaipara Moana Remediation and the Queen Elizabeth II National Trust (QEII) are working in partnership to 'lock in' the biodiversity benefits of fencing and planting waterways through KMR grants.

On a beautiful Saturday morning on the 5th of November 2022, KMR joined 40 landowners from around the South Kaipara catchment area to explore strategies for conservation and remediation.

After a quick feed, and lots of kōrero, there was a short hīkoi around the dune wetlands at Lake Karaka, a land covenant-protected with QEII National Trust. It was a great opportunity to walk the talk, immersed in nature and acknowledging the massive potential to promote conservation, pest management and landscape remediation in an integrated way. Local Kaumātua Elon Bycroft, with a lifetime of local experience, delivered a carload of free trees to give away to attendees.

He shared some of the history of the dune lakes, his days of harvesting mānuka for firewood, and a long history of planting thousands of trees all around South Head and Ōtakanini Tōpū. We spoke at length about his mokopuna, the role of rangatahi as local kaitiaki, and the coming together of worldviews for the healing of land and people.

This kind of face-to-face conversation with landowners, drawing on the insights provided by technical mapping, is a great way to build relationships and trust, exploring on-farm challenges, and working out together how KMR can help reduce sediment on a farm-by-farm basis.

As just one example of a project where KMR and QEII are supporting real gains for nature, Mike Greenwood has taken some significant steps to protect important wetlands on his 58 hectare dairy farm near Wellsford.

In a collaborative project, Mike has already fenced most of the water catchment (Waitapu stream) on his property in a previous project and was looking to complete the final stretches and then protect it for future generations. Stock proofing all of the waterways and creating biodiversity corridors inside all fenced areas was a priority for Mike.

This collaborative project was supported by both KMR and QEII and completed over a further two years resulting in an additional 5km+ of fencing and a total of 50,000 plants in the ground.



Liz Connelly and Whānau

KMR's Whenua Whānui Fund (WWF) aims to support groups to create projects that reduce sedimentation and improve water quality within the Kaipara Moana Catchment.

The WWF is open to all collectives including iwi/hapū, marae, landcare groups, catchment groups, kaitiaki groups, schools, trusts administering land with multiple ownership or land with fish and game purposes, and reserve boards - to clarify aspirations for their land and waterways, and develop projects to make progress towards those goals.

WWF supports projects that achieve one or more of the following objectives:

- Mobilise local community participation in local solutions.
- Build kotahitanga, enabling communities to work together.

- Upskill local tangata through training and employment Increase utility of land that is currently not productive or marginally commercial.
- Raise awareness and provide learning opportunities for environmental protection of Kaipara Moana.
- Incorporate Mātauranga Māori into restoration efforts.

In the past two years, KMR has engaged with over 100 groups, with 54 WWF projects completed, in train or in development.

As just one example, the Connelly whānau has a family-owned land block (Kōareare) in the Ōruawhoro Peninsula. The property has been used for farming and a source of kai for generations. Liz Connelly who is a rongoā practitioner is focused on integrating permaculture and syntropic agroforestry.

The whānau is at its early stages of creating a food forest and māra kai/market garden, while also growing a flourishing block of taonga rongoā species. Being part of a community means there is an opportunity to support whānau, marae and kura.

In 2023, just over 6,000 trees went into the ground with KMR support, with the next step being to talk with neighbours about a plan for restoring the entire length of Kōareare Creek.



Penny Smart and Hal Harding

Aoroa Farms Navigator project

Penny Smart and Hal Harding are the epitome of farmers doing right by the environment.

They have always taken a strong interest in looking after the land and resting areas of their 480-hectare (320ha effective) Te Kōpuru farm. Many years ago, they were one of the inaugural members of the Integrated Kaipara Harbour Management Group (IKHMG) and became a Flagship farm, planting around four hectares of native with the assistance of the group.

Three years ago, 20ha of mature pine was sold off the farm and 15ha replanted in a 50/50 mānuka and eucalyptus split.

Now they are leading the charge - and leading by example - in the area to encourage other farmers to work with the Kaipara Moana Remediation programme.

In fact, since collaborating with KMR in 2023, they planted over 47,000 native flax, shrubs and trees on 10ha to protect and restore their wetlands - and have more to go! That means that around 150ha of Aoroa Farms is now mainly in mature, regenerating or recently planted natives. Penny and Hal are clearly helping chart the way for others by becoming KMR 'Navigators'.

Their KMR Navigator project will significantly extend protection and restoration of the wetlands across the property, also supporting rare and hard-to-spot matuku hūrepo (bittern) as well as a native orchid.

Penny and Hal's dairy farm is a mix of rolling Te Kōpuru sand hills and Kaipara flats, in the Northern Wairoa sub-catchment of the Kaipara Moana catchment and in the Kaipara plant eco-district.

The couple have worked hard over the decades to exclude stock and undertake planting on the steeper areas and wetlands. In total, the couple of 20ha of wetlands, with the largest an impressive 15ha - a beautiful area to view. "We feel it is a real privilege to be part of the KMR Navigator project. The KMR crew are great to work with - the team are doing really well in scaling up the programme at pace. Biodiversity and sediment reduction is so necessary in the Kaipara.

"We will have additional planting in years to come, including planting more canopy trees (tī kōuka or cabbage tree, kōwhai, taraire, karaka, kahikatea, houpara, karo among other natives), now we have a good amount of 'nurse' trees in the ground."

The farm is a once-a-day split calving dairy unit milking 680 cows with a strong focus on the natural system, prioritising soil health and adopting biological practices as much as possible. And with so many trees in the ground, Penny and Hal's focus is on looking after the trees.

With the Navigator project, they plan to regularly invite all community - local and non-local - to visit and assist, in the ongoing planting, releasing and management of the wetlands on the farm.

They also hope to initiate biodiversity monitoring and research opportunities in years to come.

"Along with sediment retention, we hope to progress towards a healthy and thriving biodiversity within the wetlands and all parts of the farm.

"We would love the whole Northern Wairoa catchment on board with KMR because biodiversity and sediment reduction are so necessary in Kaipara for enhancing the land, the wetlands and the Kaipara Harbour.

"Ultimately, we intend to have an environmentally sustainable property, leaving a legacy we and future generations can be proud of," the pair say.

To find out more or get in touch with the Navigator project leaders, email KMR on hono@kmr.org.nz





KMR is now working across the full landscape, including investing in projects to plant trees and regenerate forest on erosion-prone land.



Katie Forno

KMR Field Advisor – The Forest Bridge Trust



Katie Forno believes the Kaipara Moana Remediation Programme will contribute to cleaner freshwater, healthier ecosystems, and more awareness around sustainable farming practices.

Three years into working with KMR, Katie is enjoying her role and is happy to be a part of a unique initiative to restore the health and the mauri of the Kaipara Harbour.

After growing up in Māhurangi and spending a decade living and working in different parts of Aotearoa and travelling overseas, Katie now lives in Matakana Valley with her whānau. Katie whakapapa's to Tōrere on the East Cape.

"It's a kaupapa borne from the tangata of the Kaipara putting their pou in the ground and saying something needs to change. The Moana is suffering and we need to work together to help it."

"It's about all people of the Kaipara – tangata whenua, landowners, councils, NGO's, schools, and normal everyday people joining together in a restoration project that will be generational." As for her role as a KMR Field Advisor?

"We help landowners to define and accomplish their aspirations for their properties, specifically by facilitating fencing and planting. It is important to me because I feel like there is so much pressure on our environment and water is life."

"Yet, so much of our fresh water and subsequently, our Moana, is polluted and struggling. On the other hand, we need to eat, and farmers need to earn a living. My hope is that I can help landowners to help the earth and that it makes a difference to both."

The Forest Bridge Trust, where Katie works, helps connect farmers and landowners with funding - often secured from multiple funding sources - to fence off significant ecological sites such as native bush and wetlands.

Katie is an accredited Field Advisor for the KMR Programme and helps provide specialist advice to support KMR's landowner grant scheme. A key part of the role is to target the reduction of sediment entering the Kaipara Moana through projects to retire and plant up waterways, regenerate native bush on steep land and afforest erodible hill country.



Schools Getting Involved

Youngsters take action to protect the Kaipara Moana

Generational involvement for generational change.

Children across the Kaipara are learning the benefits of looking after the environment for the good of their future.

A number of schools across the Kaipara Moana catchment have teamed up to plant hundreds of native trees and grasses on the banks of their local streams. The initiative is part of the Kaipara Moana Remediation's Whenua Whānui Fund to support groups to reduce sediment flows into the Kaipara Moana.

Across a series of planting days in 2023, KMR was joined by a number of schools across the Kaipara Moana catchment to plant 1000s of native plants. As an example, the KMR team, Te Uri o Hau, EnviroSchools, Whitebait Connection and local volunteers were joined by Tinopai, Paparua and Maungatūroto primary schools to plant on local land, over two days in August 2023.

KMR Community and Hapū Engagement Advisor Griffin Hope says the efforts of the students was awesome despite battling mud and kikuyu which made digging holes harder than normal. The kids put in a huge effort with their enthusiasm and did a beautiful job of putting 550 plants in the ground.

"The area looks amazing. It will be something they can see flourish over the years and take pride in their efforts as the natives become established in that area."

EnviroSchools is a nationwide programme supported by the Toimata Foundation, founding partner Te Mauri Tau, and a large network of regional partners.

The EnviroSchools' kaupapa is about creating a healthy, peaceful, sustainable world through learning and taking action together. Early childhood centres and schools commit to a long-term sustainability journey, where tamariki/students connect with and explore the environment, then plan, design and act in their local places in collaboration with their communities.



"This kind of mahi is really important to do as a community as it teaches our children the importance of caring for the environment," says Griffin. With the help of KMR Field Advisor Shona Oliver, teachers and parents, year eight students at Taupaki Primary School are also playing their part in protecting the Kaipara Harbour by planting 450 native trees in the wetland behind the West Auckland School.

"By putting the right plants in our water ways, it is really going to help the health of the immediate environment. It will help hold the banks and hopefully all the grasses and native plants will create shading and the great habitat we are after," says Shona.

Taupaki Primary School Deputy Principal Mary Fursdon says it is positive to be part of KMR's multi-year programme investing in projects with the long-term aim of halving sediment flows into the Kaipara Moana.

Auckland Regional Coordinator for the Whitebait Connection, Briar Broad, who is involved in the Parakai Primary School project, believes hands-on experience in nature is the key to inspiring and engaging our tamariki to become kaitiaki of the beautiful environment they live in.

To find out more about KMR's Whenua Whānui Fund which supported these projects, visit www.kmr.org.nz

“ The kids put in a huge effort with their enthusiasm and did a beautiful job of putting 550 plants in the ground. **”**



Tinopai Fishing Competition

KMR community involvement

KMR Pou Tātaki Justine Daw says her team is proud to have sponsored the 2024 Tinopai Fishing Competition for the first time.

The fishing competition is a fundraiser for Tinopai School and is one of the Kaipara's most spectacular fish and fundraising events.

"The event funds are going towards to help expand the learning of our tamariki," says Erana Fenton, Tinopai School Board Chair. "Providing tamariki with additional educational opportunities will help raise awareness of the need for us all to play our part in helping improve the mauri of the Kaipara Moana".

"Erana and her team did an amazing job in making it such a lovely day and our team enjoyed being part of it.

It was great seeing all the children having a go at the sprat competition because the Kaipara Moana is so important, environmentally and culturally" says Justine.

It also has unique national - and economic - importance as the 'nursery' for much of New Zealand's snapper fishery. Snapper is New Zealand's top commercial inshore fisheries catch, creating high-value export revenues and contributing close to \$70m to the economy and over 550 jobs every year.

Decades of siltation and sedimentation from the land have put the harbour and the snapper fishery at risk, which is why KMR is working hard to work with landowners and groups to protect and restore the harbour, by fencing off and planting waterways and erodible hillsides, restoring wetlands and regenerating native bush, says Justine.

“All waterways are precious, but the Kaipara Moana is really special – not only is it environmentally and culturally important, it also has unique national importance as the 'nursery' for most of New Zealand's snapper fishery.



Brandon and Kiri Edwards

Helena Bay Navigator Project

Brandon and Kiri Edwards are passionate about their land and sharing the natural beauty and spirituality of it with others. Huruiki is their whenua and the whenua of wider iwi and hapū.

The views from the maunga are as impressive as its history. It is surrounded by natural springs, some of which feed into the Kaipara Moana and from which kohu is drawn to the water, often cloaking the area in mist.

Most recently there has been a beautiful waiata, 'Huruiki, we stand with you', composed by te whānau Mānihera. A video of the waiata was shared for the first time at Healing our Spirit Worldwide Conference 2023 in Vancouver in September, a conference at which Brandon and Kiri presented on restoration of their whenua.

Ngāherehere o Huruiki is the whānau's reforestation project aimed at restoring the native forest and unique ecosystem of Huruiki, enhancing the mauri (life force) within the forest, addressing biodiversity degradation and improving water quality.

The project has planted 60,000 native trees over 20ha to date, with an aim to plant more native trees over an additional 100ha. Kaipara Moana Remediation (KMR) worked with the Edwards to support a 2023 project to plant 5,500 trees and complete 400m of fencing on the land.

The project included restoring native forests, controlling pests, improving water quality and reconnecting whānau and hapū with their maunga. A key focus was involving wider whānau and hapū in the project.

"I grew up around here - at Puhipuhi and Hikurangi - and my tribal connections are here through Ngāti Hau and Ngāti Wai. I had my eye on it from a very young age. Somehow, some way, some time, I would get my maunga back because Huruiki is the jewel in the crown and a draw to both sides of the whakapapa," says Brandon.

To Brandon and Kiri, their journey is about the whole natural world, where they fit in and what a positive difference they can make to their people, to Huruiki, their immediate and wider environment – all of which will benefit the Kaipara Moana on an ongoing basis.



A typical landscape in the Kaipara Moana catchment.



Johnny and Jordan Hildreth

Landowners – Woodhill Farm



The father and son team of Johnny and Jordan Hildreth have a clear plan for protecting waterways, wetlands and steeper hillsides on their Woodhill Farm in Auckland.

They have teamed up with the Kaipara Moana Remediation programme to fence selected areas of their 200-hectare sheep and beef unit.

“In 2022, we planted 4,500 trees and put in 250 metres of new fence line in, while in late 2023 we put in a further 200m of fencing in readiness for the 2024 planting season. They have also mapped out a plan to retire areas of steeper, less-productive hillsides in 2024, ready for native planting from 2025 and beyond.

“With our KMR partnership we are focusing on medium-sized plantings and locking up gullies and waterways adjacent to the 45ha of native bush already fenced off, as well as regenerating bush on 16ha of a former pine tree block, where the Hildreths replanted with 10,000 mānuka after the harvest in 2019.”

The father/son partnership say the way their river flats keep flooding so frequently, there could be merit one day in putting some of that land back into kahikatea and other natives, as they once used to be.

They did exactly that with Auckland Council's 'Trees for Survival' programme in conjunction with one Auckland primary and an Auckland secondary school in 2017, when they planted natives along the banks of the Kaipara River which runs through the property. Those plants are now thriving and are clearly visible from State Highway 16.

Jordan says the KMR planting rates recommended for hillsides and slips of around 2,500-4,000 plants per ha, and up to 9000 plants per ha for wetlands and waterways makes good sense. Says Johnny: “If you have good people driving a programme like KMR it makes all the difference, especially for people like Jordan and I because we simply don't have the time and need KMR's help and advice.

Being in communication with people who are interested in the environment means problems are easily solved.” Jordan and Johnny say they are thrilled with the KMR programme and are looking forward to doing more work together.

To find out more about planting on erodible hillsides, email KMR on hono@kmr.org.nz



Whenua Whānui Fund

Waitere Powell Whānau

The Waitere Powell whānau are another Whenua Whānui Fund recipient, beginning work with KMR on their recently purchased 80ha Whakapara property in 2022.

Marcus Powell and Denise Wedding are co-founders of WithIN NATURE Charitable Trust, an organisation that works to foster cultural preservation, embrace sustainable practices and cultivate thriving ecosystems by educating rangatahi (youth).

They are working in collaboration with KMR to improve the land through regeneration. Their property will act as a demonstration site for further WithIN NATURE projects on other properties in the Kaipara Moana catchment.

Restoration goals of Marcus and Denise are:

- To protect and restore the natural biodiversity of the land and waterways through reintroduction of native flora and fauna.
- Minimise the impact of human activities on the environment.
- Establish and maintain riparian zones to protect waterways.
- Engage with the local community and Māori, to share knowledge, promote understanding and foster collaboration towards environmental sustainability.

The Waitere Powell whānau have already fenced much of their waterways and are establishing extensive food forests and gardens.

They have removed stock from most of the farm and have restricted them to small areas of pasture to produce animal products for fertility and whānau/community consumption.

There is a desire to bring back the rongoā species and use locally sourced plants from the local nursery. KMR was able to reflect these goals in the Sediment Reduction Plan that was developed for the project, with Whakapara Marae supporting the planting of over 3,000 stems sourced from a local nursery.

2024 will see WithIN NATURE helping multiple properties including Whakapara Marae and Maunu Gardens to name a few.



Anne-Fleur van Leeuwen

Kaipara Moana Research Leader

The Kaipara Moana and its estuaries form a significant ecosystem that is a meeting place between ocean and river water, and one which is deeply connected to the surrounding land and catchment.

Estuaries have a powerful filtering effect, which cleanses river water of sediments and nutrients prior to it entering the open ocean, helping ensure a thriving estuarine and marine ecosystem.

With KMR's backing and support from the University of Auckland, Anne-Fleur van Leeuwen has begun her PhD on the effects of river sediment and nutrient dispersal in the Kaipara Moana, focusing on the Hōteo river mouth and Ōruawharo estuary arm.

From February 2024, you might spot Anne-Fleur and colleagues collecting water, sediment, and zooplankton samples. These samples will be used together with existing data and satellite images to understand:

- Where riverine nutrients and sediments go under different tidal and weather conditions, including storms such as Cyclone Gabrielle
- How the sediment and nutrient concentrations change within the river plume and if river plume dynamics can be linked to zooplankton species and mangrove accretion.

Anne-Fleur's research will provide new knowledge to better understand which areas are affected by river sediments, and how this will change with climate change and on-land restoration efforts.

In future, with KMR's support, Anne-Fleur would like to present her research plans to the people of the Kaipara Moana.

To find out more or get in touch with the research project team, email KMR on hono@kmr.org.nz



James Parsons and Travis Pymm

Tangowāhine Navigator Project

Travis Pymm and James Parsons are among the first farmers in Tangowāhine Valley to partner with Kaipara Moana Remediation (KMR) to help reduce sedimentation and siltation flowing into the Kaipara Moana.

In fact, they are heading up one of the first KMR Navigator projects and are hoping to spread the word and encourage their neighbouring pastoral farmers in the valley to get on board to take advantage of the KMR funding opportunity and look after the land at the same time.

Navigator projects were introduced by KMR in 2023 as flagship projects to demonstrate and champion best practice in reducing sediment losses from the land, and share learnings with others in their community, iwi/hapū or sector.

KMR has engaged AgFirst Northland - represented by James - to bring the Tangowāhine Valley farmers together into a community catchment group and to help develop plans for farmers keen to access KMR funding support. Through the Navigator project, James, Travis and the team will provide leadership, technical advice and project co-ordination services to landowners in the Tangowāhine catchment.

James believes it is a great opportunity for locals to get behind a common purpose and coordinated action, to play their part in reducing erosion and sedimentation, while helping restore the health and mauri of Kaipara Moana.

Currently in their initial project with KMR, the pair have plans to continue retiring parts of their 600 hectare farm by fencing off waterways and wetlands. The planting of

native grasses and trees will be the second phase of work on a property that is home to and 500 cattle and 2,000 sheep courtesy of Matauri Angus and Ashgrove Coopworth and Sufutex studs.

Although they faced delays from the chronic wet winter of 2023, the team have already managed to fence off 2km and are ramping up that activity in the summer of 2023-2024. By taking the lead, they hope to encourage neighbouring farmers to get on board. "I feel fencing off waterways and planting natives is the right thing to do. I also see two immediate benefits".

"It gives us more paddock subdivision and better grazing management. In some places we have put fences 20 metres back from the stream banks to create a more direct fence line". "Our vision is to get a community of interest going. There are 25 to 30 pastoral farmers in Tangowāhine, and it would be great to get them all on board with KMR.



Participation brings the opportunity to have up to 50% of your sediment remediation work (including fencing off waterways), while also protecting your waterways and helping the environment," says James.

His ultimate would be to hold a handful of farm field days every year, learn from each other and chart the progress individual farmers are making year on year.

KMR reached a million trees in the ground or contracted to go in the ground in July 2023 - just 19 months into operations. Winter 2024 will continue to focus on native planting and waterways, and there are also new opportunities via KMR to take action in the hill country. James is keen for farmers to join in: "KMR can support a range of options to manage erodible hill country including continuous canopy and permanent forest cover using native species or selected exotic species (e.g. eucalypts or redwoods), as well as fencing and management to support

regeneration of native forest and space planting of poplars while maintaining some grazing".

James says 'For pastoral farmers, this presents a significant opportunity to rethink farm layouts with consideration to fence lines that need replacing, as well as take care of land affected by recent floods and storms'.

KMR is keen to use Navigator Projects as a way of drawing on local knowledge and expertise to support landowners and groups across the catchment who are keen to undertake larger-scale or innovative sediment reduction projects - and to share their experience with others in their community, iwi/hapū, or sector so that others can come on board too.

To find out more or get in touch with the Navigator project leaders, email KMR on hono@kmr.org.nz

“ There are 25 to 30 pastoral farmers in Tangowāhine, and it would be great to get them all on board with KMR.

Protecting and restoring the mauri of Kaipara Moana.



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