DECEMBER 2021 **COROMANDEL ZONE** KI UTA | **HEALTHY CATCHMENT** KITAI HEALTHY

HARBOUR



Kia ora

Lots has been happening across the Coromandel Zone (north from Tararu on the Thames Coast to Whiritoa on the east coast of the peninsula) since our last newsletter in May.

We've got new funding for landowners to fence off kauri, control of wilding pines is well underway, and we're gearing up for a busy summer on the water and land, with students helping staff with coastal water monitoring and integrated catchment management.

The purpose of these newsletters is to tell you about some of the work we are doing, or are involved in with others, to help improve our environment.

We encourage you to contact our team if you have a wetland, bush or stream enhancement project in mind, want to carry out river work or weed control, or need help to connect with your nearest environmental care group who strive to have our native bush predator free. Please also contact our team if you have an environmental project you want to share with our readers in the next newsletter.

Your Integrated Catchment Management Team is a wealth of knowledge, and we offer financial help for restoration works, soil, and stream management and animal and plant pest control.

Hei konā mai

Coromandel Zone Integrated Catchment Management Team

Thousands of wilding pines removed from reserve

More than 34,000 wilding pines have been removed from Black Jack Reserve in Kuaotunu. This control work is one of nine wilding pines community-led projects in the Waikato to receive funding from the Government's Jobs for Nature programme.

Kristina Pickford, a trustee of Kuaotunu Peninsula Trust, says the number of wilding pines removed from the 83-hectare site is testament to the threat they pose to the environment.

Kuaotunu Peninsula Trust successfully applied for Community Partnership Project funding of \$375,000 from the National Wilding Conifer Control Programme for the project, which is being administratively and operationally led by Waikato Regional Council. The funding is for work not just in the Black Jack Reserve but also for wilding pine control at Matarangi Bluff Reserve and tracts of land between Whauwhau Beach and Opito Bay.

"I see pines as a massive threat to biodiversity," says Kristina. "They are everywhere you go, covering New Zealand. The Coromandel is blessed with guite a lot of native bush, but take some time to look at the land; what is disturbing is the sheer scale of wilding pine infestations."

Wilding pines are a fast-spreading pest plant that, if left unchecked, will take over more than a guarter of New Zealand within 30 years. They are a threat to biodiversity and the primary sector because they can take over iconic landscapes, unique natural habitats and productive land, and also present a fire risk.

To get funding for this project, the trust worked with Rings Beach Wetland Group, Opito Bay Ratepayers Association and Project Kiwi Trust. The majority of large wildings in Black Jack Reserve had already been felled and the National Wilding Conifer Control Programme funding largely addressed the regrowth which presented a threat to the gains made.

A young local crew hand-pulled and hand sawed tens of thousands of young wilding pines at Black Jack Reserve, and are now working at Matarangi Bluff Reserve. Larger pines are being felled or poisoned, by specialist contractors.

Contractor Travis Boyd says it's been a great opportunity for his crew.

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BIODIVERSITY/BIOSECURITY

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They've acquired various new skills and qualifications – for example, certification for GrowSafe, chainsaw use and tree felling – which will open employment opportunities for them in the future.

"It's been quite impressive to watch. They've been crashing through the bush, pulling out and cutting the smaller pines. They've built confidence and muscle; they're a lot fitter than when we started. It is tough terrain and really hard work, but they've thrived – I am proud of them."

In 2020, the Government allocated funding of \$100 million over four years to expand the National Wilding Conifer Control Programme. This funding is managed by Biosecurity New Zealand, which is a business

management unit of the Ministry for Primary Industries. To date, around \$1.3 million has gone towards nine community projects in Coromandel and Taupō. Wilding pine control has been completed on Ahuahu/Great Mercury Island.

To find out more about the community projects, go to waikatoregion.govt. nz.wilding-pines.

Te Moata Retreat kauri protection



"When you stand in an established kauri grove, and are dwarfed by these giants, you really feel their presence and understand how tragic it would be to lose them," says Te Moata Retreat Centre conservation trustee Kuika Illingworth.

That's why the 344-hectare retreat, near Tairua, is doing all it can to help save its kauri from kauri dieback, which is caused by the microscopic soil-borne organism *Phytophthora agathidicida* (PA).

"Kauri are the kaitiaki of the forest here. When the past managers of the retreat found out about PA, they really pushed for kauri protection on the land and got funding to reroute our tracks as far as possible from our kauri groves.

"We're carrying on this work with help from Waikato Regional Council to develop a kauri protection plan. We're hoping to install barrel and crate boot cleaning stations at the start of two tracks that lead into our forest.

"Last year we received funding from the council's Small Scale Community Initiatives Fund for reusable boot covers so we can continue to go to the kauri cabin and prevent any spread of dirt. It's a beautiful bush hut only 25-minutes' walk away, but it's impossible to get there without going through Te Moata's biggest kauri stand."

Te Moata is a sanctuary for nature and people. The regenerating forest has been protected by a QEII covenant since 1987. It's home to Hochstetter's frogs and kiwi, among other native species, and includes three healthy streams and two distinct wetlands, along with the three kauri groves.

Kuika says it's private property but operates as a charitable trust which hosts a variety of community events, retreats and courses to help pay for the management of the property.

"Those who come can walk the tracks and book the bush huts knowing they will not have to share with strangers. They also get an understanding of the significance of kauri in this landscape.

"It is our hope that one day people will again be able to walk amongst the kauri, without fear of jeopardising the trees' survival."



100% funding to fence kauri

Waikato Regional Council has up to 100 per cent funding available to help landowners fence off bush containing kauri. Stopping soil movement around kauri is the best way to protect them, and stock and farm animals pose a high risk of carrying potentially contaminated soil on their hooves and coats.

To find out if you qualify for the funding, please contact our kauri dieback biosecurity officer, Hirini Rolleston, on **0800 800 401** or email hirini.rolleston@waikatoregion.govt.nz. There's limited budget available, so get in quick!

Community kauri plans

Waikato Regional Council is helping community groups to develop kauri protection plans specific to their needs.

The plans are based on applying the best practice principles of kauri hygiene and can cover aspects such as track building and maintenance, trap line and bait line management, and pest plant and animal removal.

If your community group is interested in developing its own kauri protection plan, please contact Benson Lockhart on **0800 800 401** or email **benson**. **lockhart@waikatoregion.govt.nz**.

Arthur Hinds Scholarship



A second-year ecology student from Coroglen is working with the Hauraki/ Coromandel catchment team this summer after winning the Arthur Hinds Scholarship.

Nikita Russell, who was the fifth generation of her family to attend Coroglen School, says she's excited to be given the chance to work with Waikato Regional Council staff and the Department of Conservation (DOC) in "the beautiful Coromandel Peninsula, where I spent my entire life".

The Arthur Hinds Scholarship, dedicated to the notable conservationist from Whenuakite who led one of New Zealand's most successful kiwi projects, is a joint scholarship by the council and DOC. The scholarship is available for students studying conservation or natural resource management related tertiary programmes.

"I'm so happy to have this opportunity to gain valuable experience working in a range of fields that I aim to have a career in, and it's so much more special to be able to do so in a place that I have a really strong connection with," says Nikita, who is studying at Otago University.

"While I did not know Arthur Hinds personally, his legacy is well known, and I was fortunate enough to go to Whenuakite School and Mercury Bay Area School alongside his grandchildren."

Nikita says her passion for the environment, land and resource management and conservation was developed growing up on her grandfather's farm in Coroglen, and from time spent camping, tramping and boating locally.

While at Mercury Bay Area School in 2019, Nikita completed a study on the water quality of Whitianga's tidal Moewai Stream, which featured in the *New Zealand Herald* and really sparked her chosen career path.

"Experience in fieldwork, data collection, analysis and report writing has been a significant part of my ecology studies so far and it's really great to further build these skills in a real-world situation."

Community funding

Waikato Regional Council has suported 11 projects in this year's round of its Environmental Initiatives Fund (EIF). The council's Integrated Catchment Management Committee approved total funding of about \$147,000 towards a range of environmental, restoration and educational initiatives across the region, including \$104,895 for seven projects in the Coromandel Peninsula. Earlier this year, \$200,000 was awarded from the Small Scale Community Initiatives Fund to 59 applicants for animal and plant pest control.

Coromandel projects to receive funding in the latest EIF round:

- Thames Coast Kiwi Care \$8500
 To help ensure best practice trapping by more than 50 volunteers.
 - Ngati Hei Trust \$8082

 To help pay for a dive survey of scallop populations following a two-year rahui on the eastern side of the Kuaotunu Peninsula.

Project Kiwi Trust \$27,276

To help purchase trapping and bait station materials to control rats, possums, mustelids and wasps.

 Mahakirau Forest Estate Society \$10,000

To help pay for contractors to continue predator control and undertake monitoring.

- Driving Creek Railway \$15,000
 To help pay for a kiwi care project on 38.72 hectares of land, including a predator control network and weed control.
- Mercury Bay Environmental Trust \$13,000

To fund the control of wilding pines on 62 hectares of land owned by the Backdrop Trust at the edge of Whitianga Harbour.

Karuna Falls Cooperative Society \$23,036

To help pay for a contractor to fell wilding pines on their property between Colville and Waikawau Bay.

Trapping turtles



Turtles may look like pretty cool pets, but they are in fact a serious pest animal when released in the wild. Volunteers have been trapping live red-eared slider turtles using a basking platform in storm water ponds at Cooks Beach. So far, they have caught 12 turtles, including a large female carrying eggs. It was originally thought turtles couldn't reproduce in the wild in New Zealand due to our cooler temperate climate.

YOUR COAST

Rocky reefs mapping

Our coasts are under more pressure than ever before due to our behaviours and a growing population. There's sedimentation from the land, physical disturbances, fishing, shellfish harvesting, and more people using the coastal marine area for recreational and economic purposes.

That's why, in the Coromandel Peninsula, Waikato Regional Council has contracted the University of Auckland to undertake a mapping exercise of the rocky subtidal habitats of the Mercury Islands.

By analysing multispectral satellite images (basically using bands of light and some fancy processing methods) and then ground truthing by dropping a camera underwater, we'll be able to see how healthy this subtidal habitat is. A dive team will also assess the biodiversity of plants and animals in this system.

Waikato Regional Council Coastal and Marine Science Team Leader Michael Townsend says getting an understanding of the current state of these habitats will provide a baseline from which changes can be assessed. The results will act as a barometer of the state of our coasts.



"What we do know is that in places there has been complex shifts from kelp forests to kina dominated barrens.

"Our systems are becoming out of balance. When predators such as the bigger crayfish and snapper are few or far removed, the kina thrive and end up eating all the kelp until there is nothing left but a slime layer over the rocks. And with less kelp, there is no habitat for other species and sadly the remaining kina are not in good condition either."

But it's not all doom and gloom, says Michael. "The good news is once we have this information, and if we see there is a problem, we can turn things around. We'll use this information to support marine spatial planning.

"Goat Island Marine Reserve at Leigh was severely degraded but the kelp has come back, macrophytes recovered and there's loads of fish again.

"This kind of work can be quite exciting because people make new discoveries all the time. Last year, scientists mapping the Hauraki Gulf seafloor found huge colonies of a tube worm up to 1.5 metres high and no one even knew they existed there."

Coastal monitoring

The summer environmental monitoring programme of Waikato region beaches has begun with help from 10 environmental science university students.

Every year, Waikato Regional Council staff monitor coastal water quality, estuary benthic macrofauna (sediment-dwelling organisms), stream water quality, freshwater fish and water levels of key lakes and wetlands. They're helped during the peak monitoring period by students, employed from November to around March.

The testing is part of a council drive to gain better information about what's happening in the region's coastal waters. It also provides a community service, with the latest results for the coast, rivers and lakes available to the public on the LAWA website under *Can I Swim Here*? The number of faecal bacteria present in the water indicate the likelihood of contracting a disease from

many possible pathogens in the water such as bacteria or viruses.

Sophie Doyle, a third year Bachelor of Science student from the University of Waikato, is helping to monitor water quality at seven east coast beaches (Whitianga, Hot Water Beach, Tairua, Pauanui, Whangamatā and Whiritoa) and two west coast beaches (Sunset Beach and Ngarunui), testing to see whether faecal bacteria levels are okay for contact recreation such as swimming and surfing.

Sophie applied for the role as her passion lies with the taiao (environment) and she has an affinity with the ocean.

"As a rangatahi Māori, water is very significant, so I want to be in a space where I can learn about the water quality and what contaminants end up in it and eventually make a change.

"I like that for a good part of the week we are out by the sea and helping to keep everyone safe, and I am excited to learn more from those I work with and build my skillset."

Monitoring manager Ed Brown says the experience gained by students often helps them to successfully gain fulltime jobs the following year.

"Sometimes students have ended up with fulltime roles within our environmental monitoring teams or other parts of the regional council."



Coastcare

Kim and Alicia, pictured, are tending to spinifex, pīngao, knobby club rush and muehlenbeckia in the Mercury Bay community nursery.

Due to COVID-19 alert levels affecting the winter planting season, about 12,000 plants had to be kept back this year, to go into the dunes in the next planting season.

About 32,000 plants were planted at Whangapoua, Otama, Opito Bay, Kuaotunu, Wharekaho, Buffalo Beach, Cooks Beach, Onemana and Whangamatā – a big thanks to the family bubbles who came out and put time into helping with the last of the restoration plantings.

Coastcare groups are now gearing up to collect/harvest seeds from their beaches to eco-source stocks for future plantings. There is a narrow window for collection before the seeds are dispersed naturally



(or tumble away); if they become saturated with sea water they are no longer viable, and collecting seeds ensures a greater seed bank for future needs in case of severe coastal erosion.

The Coastcare Waikato programme involves local communities, iwi, the Department of Conservation, district councils and Waikato

Regional Council working together to restore, protect and look after our coasts and all the species that live and grow here.

Keen to play a part? Contact Thames-Coromandel District Council Coastal Restoration Coordinator Tanya Patrick at tanya.patrick@tcdc.govt.nz, or check out the Coastcare Waikato Facebook page.

Clean below, good to go



Waikato Regional Council will again be engaging a dive team to survey coastal marine areas around the Coromandel Peninsula to determine the presence and extent of marine pest species.

This biosecurity surveillance work will be undertaken in 2021/2022 and 2022/2023.

Marine pests are mainly spread by heavily fouled vessel hulls so the dive team will target pathways of boats and check vessels, marine structures (marinas, wharves, jetties and moorings), popular anchoring spots and mussel and oyster farms.

If infested vessels are found, owners may be asked to remove and antifoul them.

Previous surveys have shown the eastern side of the Coromandel to be free of marine pests, however, the west coast of the peninsula is not so good.

The natural spread of Mediterranean fanworm (*Sabella spallanzanii*) is continuing up the coast from the Coromandel Harbour. At the time of the last survey, in 2018/2019, fanworm was found as far north as Colville, up from Papa Aroha in the previous two years.

The council regularly checks for marine pests to see how much of a problem they are. Please help prevent their spread: make sure your hull has been checked, cleaned and antifouled before heading away.

Check out **marinepests.nz** for some of the pests we look out for.

Marine pests:

- pose a major threat to the ecological, cultural, economic and recreational values of the marine environment
- can out-compete, smother, prey on or otherwise adversely affect native species and habitats
- are extremely difficult and costly to eradicate or contain once established – prevention is far more effective
- are mostly introduced to coastal marine areas by 'hitchhiking' on incoming vessels, and can be spread via domestic vessel movements, called 'pathways'.

FLOOD PROTECTION

Protecting Tairua — Grahams Creek

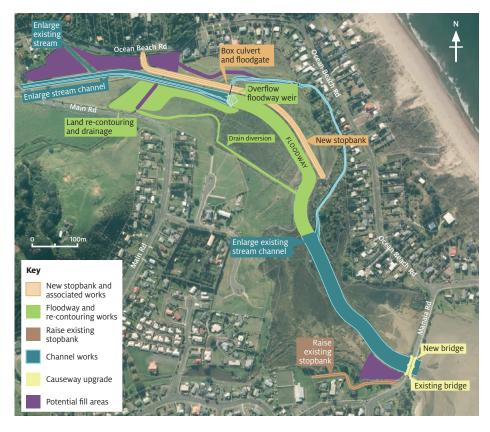
The Grahams Creek catchment, which runs through the town and into the Tairua Harbour, is susceptible to short duration but high intensity rain events causing flash flooding laden with sediment and debris in the streams and surrounding land with little or no warning. The presence of residential dwellings on the low-lying land adjacent to Grahams Stream means that many properties were subjected to damage and disruption from flood events.

As part of the Peninsula Project, Waikato Regional Council and Thames Coromandel District Council worked with the Grahams Creek community to develop a flood mitigation strategy to address the flood hazards. The scheme has been operational since 2016.

More than just a flood scheme

The community wanted a scheme that worked with the environment; they liked having a stream in their backyard. Therefore, a decision was made to keep the channel where it was, put in a self-regulating, fish-friendly floodgate and a fish hotel, translocate 4000 square metres of saltmarsh and plant 14,000 eco-sourced trees.

The scheme includes right and left bank stopbanks, a culvert and floodgate. To



increase flood capacity, the scheme works included stream channel enlargement, a stream diversion channel, a spillway and floodway, and a new drain.

Level of protection

The scheme provides flood reduction that varies from one in 50 years protection, along the left bank of the stream, to one in 100

years protection, with 500 millimetres (0.5 metres) freeboard, along the right bank.

Operation and maintenance

The main channel of Grahams Stream, the floodway and right bank drain are monitored and periodically maintained by the regional council to remove accumulated sediment and debris to ensure channel capacity and reduce risk to adjacent land.

The stopbanks, diversion culvert, spillways and overflow floodway are inspected annually for damage with any necessary repair work undertaken. The floodgate is inspected for debris and blockage removal to ensure reliable operation. Crest levels of the stopbanks are to be surveyed every 10 years and topped up if necessary.

Flood protection reduces the likelihood of floods impacting on our communities. It safeguards lives and property, enables use of land, and protects services such as water supply and power.

However, some people have no idea that flooding was an issue in the past, or even know they are protected by schemes.



River management



New coastal hazards information on council portal

Tsunami and historic shoreline data are among the new layers which have been added to the online Waikato Regional Hazards Portal.

Under the coastal hazards tab, the new information shows tsunami inundation and safe zones, and how the shorelines of the Waikato have changed since 1939.

The Waikato Regional Hazards Portal contains all the spatial natural hazard information available from Waikato Regional Council and some data from other organisations.

It's a handy tool that can be used by the public – and is particularly useful as a

resource when looking to buy property.

The hazards portal is basically an interactive map; for some natural hazards a user can zoom right down to individual property level, e.g. for flood hazard and coastal inundation information.

It also includes the Waikato Coastal Inundation Tool, where different levels of sea level rise can be selected to see how it might affect coastal areas and properties.

The Waikato Regional Hazards Portal was launched in 2018 and is continuously updated with new information and data.

Other new features recently added to the

hazards portal include:

- a liquefaction hazard mapping layer, which identifies liquefaction prone areas as required by an update to the Building Code
- a new emergency management tab with the Waikato Civil Defence and Emergency Management Group Public Information Map showing COVID-19 locations of interest, latest earthquakes over magnitude 3, state highway information, severe weather alerts, etc
- a new district councils' data tab.

Check out our hazards portal at waikato. govt.nz/regional-hazards-portal

River water level recorder to raise alarm of flooding

As you all know, flooding of the Tairua River in the Hikuai Valley is not an uncommon occurrence. The impacts can cause the closing of State Highway 25 and Hikuai Settlement Road, along with significant issues to property owners.

To provide more timely alerting on when flooding may occur, Waikato Regional Council has installed a recorder measuring the water level of Tairua River.

The recorder, at the Morrison Road bridge,

will provide near real time data river levels (uploaded every 15 to 30 minutes).

The water level data will be available from the council's Environmental Data Hub (waikatoregion.govt.nz/environmentalmaps-and-data) in the New Year.

Waikato Civil Defence Emergency Management Group, Waka Kotahi NZ Transport Agency and other essential services will be notified automatically by an alarm when the river will likely flood and is flooding. Anyone who has an interest in when the Tairua River may be about to flood can also sign up for a free text or call service from the council by making a request for service on the council's website, under the subject matter 'flooding and hazards'.

Once the recorder has been in place for some time, the accumulated data can be used to develop a flood forecasting model that could give more warning of an impending flood.

MARITIME SAFETY



Increased patrols

Waikato Regional Council's maritime services team will be boosting patrols in the Coromandel Peninsula this summer.

The increased patrols are in response to last summer when 73 infringement notices or formal warnings were issued across the peninsula, compared to 124 regionwide. Also, 10 per cent of recreational boaties were not wearing a lifejacket when it was a legal requirement.

Maritime officer Peter Head says despite uncertainty with COVID-19 restrictions, it was shaping up to be a busy summer.

"Last year was a bumper year and boat sales

have skyrocketed with the pandemic, so I'm expecting it to be even busier again.

"Judging by the activity we've already seen in Waikato lakes and Raglan when alert levels were raised, boaties are chomping at the bit to get amongst it. The country needs a holiday and Destination Coromandel has been doing some good marketing to raise our profile."

With more boaties out enjoying our waterways, and more people in the water, there is more risk to safety. To ensure our waterways are safe for everyone to enjoy, it is important that boaties know and follow the rules. Regional bylaws exist to ensure the safety of all water users and to reduce conflicts between the different water-based activities in an area. It is the role of the Harbourmaster's Office within Waikato Regional Council to enforce the local bylaw schedules and promote safe use of the region's waterways.

"If you break the rules, you're not just breaking the law – you could damage property and cause injury or loss of life," says Peter. "Stay vigilant and maintain an appropriate speed. We want to avoid any serious incidents this year."

For more information on navigation safety, visit waikatoregion.govt.nz/boatsafety. If

you see boaties acting inappropriately, you can report it by phoning 0800 800 401.

Golden Rules

- Always wear your lifejacket. It is recommended that everyone on board wears a lifejacket at all times. They must be worn on vessels 6 metres or less while moving and on all vessels at times of increased risk, including when crossing a bar.
- In coastal waters you must keep to 5 knots or less within 50 metres of a swimmer and 200 metres of the shore, structures and boats displaying a dive flag. This applies to all recreational vessels, including jet skis.
- Take two forms of waterproof communications ... if you can't be heard, you can't be helped!

Got your mate?

If you are new to boating or visiting a new waterway this summer, make sure you are familiar with the boating



safety code and the regional bylaws that apply to the local area before heading out. The MarineMate app is a handy tool packed with great features like tide times, boat ramp locations and local boating rules for the whole country and it is free to download.

WAYS WE CAN HELP

Call 07 866 0172 or 0800 800 401.

Activity	For assistance with	Ask for
Catchment management	Restoring a wetland, stream or forest area? Want to reduce erosion, runoff and improve water quality? Did you know there is financial assistance, and we can draw up a programme of works specifically for you?	Catchment management officer
Rivers or flooding	Eroding stream, in-stream blockages? Issues with vegetation choking a waterway? Our river staff can help.	River management officer
Pest plants	Issues with pest plants? Not sure how to control a pesky weed? Just need some advice?	Biosecurity pest plant officer
Maritime safety	Moorings, safety on the water, jet ski registrations, concerns about others behaviour on the water.	Maritime officers

Talk to a councillor			
Thames-Coromandel constituent councillor			
Denis Tegg	021 285 3743		
Ngā Tai ki Uta councillor and deputy chair			
Kataraina Hodge	027 450 8905		
River and Catchment Management Committee co-chair			
Stu Husband	027 233 0030		

