

CONSTRUCTION UPDATE

Ecological discoveries and relocation programme

The NX2 ecology team in partnership with Hōkai Nuku, have been searching and collecting a variety of species in the project area to ensure 'at risk' or 'threatened' species are relocated to safe new homes.

In October 2016, the NX2 ecology team began investigating the project's ecological habitats, to find out what species have been living in the project area. This work involved, identifying and measuring native flora and fauna, investigating stream ecology and mapping habitats where native species could be living.

Since the investigations, the team have been working closely with Auckland Council and the Department of Conservation, to source wildlife permits and to prepare predator-free sites for relocation.

Over the past few months, the ecology team have been out, day and night, in search of native species, specifically land snails, copper skink, forest gecko, Hochstetter's Frog and long tail bats. The team have been busy installing artificial cover objects, affectionately known as "lizard hotels" to collect reptiles, setting nets and fishing in streams, spotlighting for gecko at night-time, and climbing trees at dawn and dusk in search of bat roosts.

During the fishing, three species of native fish were captured and relocated, including two large banded Kokopu, one longfin eel and five shortfin eels. A significant number of Kōura (native crayfish) were also found in local streams within the Mahurangi Catchment. These Kōura (a total of 638) were safely relocated downstream. A number of gecko have also been found and safely captured, and we are pleased to report that several of the gecko has since given birth to twins!

The team will continue to undertake their ecology work, staying several steps ahead of the construction team.



NX2 freshwater ecologist Liza Kabrle catching Kōura



Shortfin eel caught and relocated



A Mokomoko (forest gecko) found during a night-time search

Logging works in the Moir Hill area

Logging works are now well underway in the commercial pine forest area at the northern end of Moir Hill Road. Approximately 24 hectares of pine forest have been cleared to establish a pathway to construct the new motorway. The team have been working at a steady pace felling around 600 trees per day. Logging trucks have been transporting logs to Northport in Whangarei, Ports of Auckland



One of the project's skid sites in the forestry area



Moir Hill logging works

for export, or delivering them locally to be used as pulp. Trucks will continue to move

logs off-site via Moir Hill Road through to early June 2017.



Road Safety Message

One of the project's key site access points is located off Moir Hill Road, in the forestry area where the logging works are currently taking place. Construction vehicles and logging trucks are entering/exiting Moir Hill Road from State Highway 1, an intersection which is recognised by the project and local community as a high risk crash zone.

NX2 has a Site Specific Management Plan in place, which sets out the traffic control measures in place to safely manage construction vehicles. Some of the measures in place include; reduced speed limits along Moir Hill Road; a 'stop-go' traffic management system at a particularly narrow section of the road and a 'left-in, left-out' only rule for trucks entering/exiting Moir Hill Road.

Health and safety is paramount to the project and we want to prevent any person from being injured or harmed during construction. We are working with Auckland Transport and the NZ Transport Agency, to ensure the appropriate traffic control measures are in place, to protect the public and the construction team. We ask that you please take note of the traffic controls in place, drive to the conditions, and take extra care if you are using the Moir Hill Road/ State Highway 1 intersection.

Working with Auckland Council

Auckland Council is one of the project's key stakeholders. Throughout the construction of the new motorway we will be working closely with Auckland Council, making sure we're compliant with the project's designation and resource consent conditions. Auckland Council specialists will also be undertaking regular monitoring and compliance checks throughout construction.



The NX2 team leads Auckland Council staff on a site induction

NX2's partnership with Hōkai Nuku – Kaitiakitanga

NX2 continues to work in close partnership with Hōkai Nuku Kaitiaki (guardian).

Hōkai Nuku is the authorised voice of four Iwi and Hapū mana whenua – Ngāti Manuhiri, Ngāti Mauku/Ngāti Kauae of Te Uri o Hau, Ngāti Rango of Kaipara and Ngāti Whātua.

As part of the ecological search and relocation programme, Hōkai Nuku have been working alongside the NX2 ecologists to ensure tikanga (protocols), kaitiakitanga (obligation to protect and enhance mauri) and mana whenua (occupation of tribal land) values are upheld.

The Kaitiaki team have participated in the relocation of the freshwater fish species as well as the monitoring for presence of

Pekapeka (long tailed bats), Pupurangi (land snails), Pepeketaua (Hochstetter's Frog), as well as the salvage and relocation of Mokomoko (forest geckos). The Kaitiaki team have also been involved in the project's pest management procedures.

Hōkai Nuku and the Kaitiaki team will continue to ensure ngā taonga tuku iho (precious resources) are protected and the effects of the project on ngā taonga tuku iho are minimised. Hōkai Nuku Kaitiaki Manager, Marion Leth (Ngāti Rango) says, "Our focus is to ensure our whenua, awa, ngā taonga tuku iho remains for our next generation, as our tupuna have protected our taonga before us. It is an exciting time to be a part of such a large scale project and having our Kaitiaki and whanau actively involved from the beginning."

Warkworth to Wellsford: indicative route available

The NZ Transport Agency recently released the indicative route for the Warkworth to Wellsford project, the second section of the Ara Tūhono Pūhoi to Wellsford Road of National Significance. The indicative route travels west of Warkworth and east of both Wellsford and Te Hana, connecting back into the existing State Highway 1 north of Mangawhai Road.

Over the coming months we will be working closely with the NZ Transport Agency to understand how our designs for the northern section of Pūhoi to Warkworth motorway, will interact with the southern end of the indicative route for Warkworth to Wellsford.

Further information on the indicative route for the Warkworth to Wellsford project can be found on the NZ Transport Agency's website nzta.govt.nz/warkworth-wellsford

Any questions about the indicative route should be directed to the Warkworth to Wellsford Project Team.

Phone: 0508 927 2935

Email: warkworth-wellsford@nzta.govt.nz

Kauri Dieback Prevention

NX2 is committed to preventing the introduction of Kauri Dieback Disease into the project area.

Kauri Dieback is a deadly fungus-like disease that is killing kauri trees. The disease lives in soil and can easily be spread from one place to another, on footwear, equipment, machinery and vehicles. There is currently no evidence of Kauri Dieback in the project area and NX2 plans to keep it that way. The team has worked closely with Auckland Council and other key stakeholders to develop a Kauri Dieback Biosecurity Plan for the project, which sets out the actions we'll be taking to manage the risk of Kauri Dieback during construction. Wash stations have been set up and staff inductions are taking place, to ensure all staff working on the project understand and comply with the project's 'wash-down' protocols and procedures. NX2 will be using the broad spectrum



NX2 vehicle wash-down in progress



NX2 construction sign at Carran Rd - Kauri protection area

DID YOU KNOW?

- Kauri Dieback is a fungus-like disease spread via microscopic spores that are carried in soil.
- Only a small amount of infected soil is enough to transfer the disease and can kill Kauri trees of any age.
- There is currently no cure and if a tree does become infected it will most likely die.
- The best way to prevent the spread of Kauri Dieback is to: use cleaning stations at track entrances/exits; stay on track pathways and well away from exposed Kauri roots; clean footwear, tyres and equipment before and after visiting Kauri forests.

Further information about Kauri Dieback can be found on the [Auckland Council](#) and [Keep Kauri Standing](#) websites.

disinfectant Sterigene, which is non-toxic, non-corrosive, biodegradable and environmentally friendly.

new and innovative ideas in the design and construction of safe, high quality roading infrastructure projects, within a PPP framework.

After project managing stage 1 of the deep water port at Marsden Point in 2000, I'm happy to be back in the area delivering the Pūhoi to Warkworth motorway that will encourage economic development in the north.

We expect to have over 500 people working on the 5 year project at peak, and where possible, we want to employ local people and engage with local businesses – to benefit the local economy.

Safety is our number one priority and we will be working very hard to make sure the public and our workers stay safe from any harm during construction.

Working alongside the community will be critical to our success. When I was appointed to the role, my wife and I decided to relocate to Warkworth so we could be part of the local community.

Meet the Team

Alan Orange – NX2 Project Director



Our Project Director Alan Orange, joins NX2 after successfully leading the MacKays to Peka Peka project on the Kapiti Coast. Here's what Alan has to say about joining the project:

I'm excited about returning to the Auckland region. I have particularly fond memories of enjoying the beaches around Waiwera and Wenderholm when our children were small.

After more than 43 years' experience working in engineering and construction I look forward to delivering a public private partnership (PPP) project and in particular, drawing on the experience of Fletcher Construction and our joint venture partner, Acciona of Spain. Acciona bring

Contact us

NX2 is a team of dedicated professionals experienced in working with communities, who are on hand to work with you and answer any questions you may have. You can contact us 24/7 in case of emergencies and concerns via our freephone number 0508 P2WK INFO (0508 7295 4636), or by emailing us at info@nx2group.com.

For up to date project information please visit our website nx2group.com

What's happening next?

There's plenty to be done in the coming months before the end of the project's first 'dry season'. Below is a summary of the work that needs to be completed before major earthwork activities take place, later this year:

- Logging works in the forestry area will continue, as well as vegetation and fencing work in the designation.
- Construction of the project's key site access points and access tracks.
- Trial embankments in the northern section of the route to test the strength and settlement of soil layers when excavated and built up into an embankment.
- Installation of temporary and permanent culverts to allow water to continue to flow beneath roads and structures.
- Waterbore drilling and testing will continue alongside geotechnical investigations.
- Construction of NX2's main project office on Wyllie Road, to be completed June 2017.

Major earthworks will start in the next dry season, late September/early October 2017.



Preparation begins for a trial embankment off Wyllie Rd.

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