



Friends of Oakley Creek

Te Auaunga

April Update, 2011

Vol. 4, Issue 1

Our thoughts and support go out to all of those affected by the Christchurch earthquake.

SH20 Waterview Connection Update

Friends of Oakley Creek participated in the recent motorway hearings at the Environment Court. We continued to work in close collaboration with a number of other community organisations throughout the process, but ran our own case, with committee member, Heather Docherty, doing an excellent job of representing our concerns. This included extensive cross-examining of all relevant expert witnesses from the NZ Transport Authority (NZTA) and Auckland Council, as well as presenting our final 'representation'.

Funding from the Ministry for the Environment's Environmental Legal Assistance fund (ELA) enabled our collective of community organisations to engage expert witnesses to support our submissions - Shona Myers (Ecology), Bronwyn Rhynd (Stormwater) and Melean Absolum (Landscape Architecture).

We made a number of significant gains, including the proposed condition on NZTA maintaining riparian plantings being increased from 2 years to 10 years. Also, an old dray / farm road on the west side of Oakley Creek has now been included as a heritage site to be protected during construction.

We were pleased to note that the Board of Inquiry (BOI) has requested that NZTA come up with another proposal for Construction Yard 7 (Waterview Glades), which is very close to the creek and has some 'topographical issues' to be addressed.

The BOI will be announcing its final decision in June. However, it is also looking at introducing another step, whereby it will issue an early indication as to whether it is likely to grant consent for the project. If so, it will also determine what issues should be provided for and how those might be achieved through modifications to the terms and conditions of the designation. Watch this space.



Photo: W. John

Waterview Connection - Heather taking a break from cross-examining NZTA experts at the Board of Inquiry hearings, with Peter McCurdy of the Star Mills Preservation Group.

Flood effects - Part 1: January deluge shows the importance of allowing space for the floodplain



Hendon Reserve acts as a wetland sponge, moderating the flow of runoff - slowing it down and trapping silt. It would do a better job if it was replanted with native wetland species. The current SH20 plans will turn much of this area into temporary construction yards and motorway, which will have a considerable impact on the natural stormwater processes. Photos: W. John

Take an art break - Take a look ... at two projects that were influenced by and in support of Oakley Creek by local artist, Zoe Nash at http://www.zoenash.co.nz/gallery/albert/courtyard_before.htm If you use the right arrow at the bottom it gives more detail, and then goes on to the 'Limbo Land' exhibition that Zoe did a few years back in relation to the proposed motorway - with proceeds from the sale of the 'bagged and tagged' postcards coming to Friends of Oakley Creek.

Kaipatiki Nature for Neighbourhoods at Oakley Creek - support available

There are still places for people to participate in the Kaipatiki Nature for Neighbourhoods programme along Oakley Creek. As described in the last newsletter, this programme provides assistance to property owners who wish to restore their stream margins. To participate or to find out more information, contact Kaipatiki Project's Natural Heritage Co-ordinator, Jackie Knight, restoration@kaipatiki.org.nz and copy your email to info@oakleycreek.org.nz or contact Wendy John, ph 815 3101.

Dates for your diary ...

Community Tree Planting - Sunday 1st May, 10.00 am until noon.
Meet west of the Plane Tree Bridge - follow the pink ribbon trail.
Wear sturdy footwear and bring gloves and spade if you have them.
Refreshments provided.

Gift Tree Planting - Sunday 12th June - see box below.

Community Tree Planting - Sunday 19th June 10.00 am - noon.

Annual General Meeting - Monday 20th June, 7.30 pm - mark your diaries, details coming soon!

See www.oakleycreek.org.nz or phone Wendy John on 815 3101 or 027 232 6454 for more information.

Watercourse Management Plan for Oakley Creek

Morphum Environment has completed the Watercourse Management Plan for four of Auckland City's main streams, including Oakley Creek. There is a brief summary on <http://www.morphum.com/index.asp?pageID=2145886978> and this links to a map of the catchment. The report notes that the "creek is of good ecological value and is an example of a relatively natural stream in the lower reaches" and that "the Oakley Creek Waterfall is a unique feature, adding to the interest in the waterway". Investigating and implementing fish passage up the waterfall is identified as the top priority for the site as well as improving the riparian vegetation on the waterfall margins.

A plan for an upgrade of the waterfall area has, in fact, been drawn up under the former Auckland City Council Special Local Initiative Project funding scheme (SLIPS), as a result of Friends of Oakley Creek submitting a proposal. We are currently liaising with Council staff and the new Albert/Eden Local Board re final details.

Also, see the article 'A helping hand for fishy travellers' below for more news about fish passages on Oakley Creek.

Need an inspiring gift idea?

Give a tree to plant on Oakley Creek



Just \$20 gives you:

- a **native tree** (choice of cabbage tree, manuka, pigeonwood or mahoe) to be planted on your behalf (or by you!) at Oakley Creek Te Auaunga (on Sunday 12th June 2011)
- an **attractive commemorative card** with the details of your gift
- **2011 Friends of Oakley Creek Te Auaunga Membership**

To order your tree(s), please send the following details to info@oakleycreek.org.nz or post to 4/65 Woodward Rd, Mt Albert, Auckland 1025:

- The number of tree(s) you would like to give for Oakley Creek for yourself /as a gift (select one).
- The commemorative card(s) to be sent to you / the recipient by post / email (select choices).
- Your name, address and email and the name, address and email of the recipient (if applicable).
- Tree Choice(s) (can be selected by recipient at a later date), and
- Further donation? \$__

Pay to 'Friends of Oakley Creek' - Kiwibank - A/c 38-9003-0978224-00 with emailed payment advice, or send a cheque to the address above.

Oakley Creek Te Auaunga Statistics

- from the Watercourse Management Plan

- Length of Surveyed Stream: 16.43 km open stream, 1.5 km piped
- Size of Catchment: 12,094,498 m²
- Wastewater Overflow Locations: Seven outfalls recorded as known WW or combined outfalls
- Natural Wetlands: Four
- Sewage Fungus at Outfall: Four identified locations. No sewage fungus was recorded at known WW outfalls.
- Fish: 11 species identified throughout the creek, including three exotics.

WW = Waste Water



Pukeko feeding.

Photo: W. John.

NZ plant ID quiz

The New Zealand Plant Conservation Network has created a challenging multichoice quiz to test your knowledge of some of the plants which grow in this country. There are three levels of difficulty. Have a go at http://nzpcn.org.nz/flora_quiz.asp

What do you think? Have your say!

The Government has released a proposed **National Policy Statement (NPS) on Indigenous Biodiversity** and is seeking your feedback on the proposal. Submissions close at **5:00pm, 2 May 2011**. Further information, including the proposed NPS, an explanation of the policies, the section 32 report and a submissions guide can be found on the Ministry for the Environment's website at www.mfe.govt.nz/npsbiodiversity.

Also, the **NPS on Fresh Water** was released recently. The Green Party is encouraging people to write to Nick Smith, urging him to sign this NPS into law. Here's the link: <http://www.greens.org.nz/ecards/we-need-clean-water-rules-now-send-e-card-minister-environment>

New Wesley Community Centre is designed with Oakley Creek in mind

Setting a great precedent, the new expansion of Wesley Community Centre features innovative on-site stormwater management. The Centre is on the corner of Sandringham Rd and Gifford Ave and borders Oakley Creek. Five rain gardens and two catchpit filters will treat runoff from the Centre's roof and carpark before it flows into the creek. There will also be educational signs describing how it all works. Thank you, Auckland Council!

Monitoring and Pest Control Update

Oakley Creek Possum Trapping on TV!

The TV 7 production, *Meet the Locals*, now has an episode on Oakley Creek, featuring committee member Alicia Warren, creator of our monitoring and pest control programme, and Mt Albert St Jude's Venturer trapping volunteer co-ordinator, Sam Polkinghorne. It is *Meet the Locals* Series 3, Episode 20. You can see this wonderful film online at <http://tvnz.co.nz/meet-the-locals/meet-locals-s2011-e20-video-4091651> - or find it via our *Facebook* page.



Pouako - Environmental Studies students from Te Whare Wānanga o Awanuiārangi studying the root structure of native seedlings at the Friends of Oakley Creek nursery.
Photo: W. John.

In the news ...

It was exciting to see the Oakley Creek Te Auaunga Walkway featured in the NZ Herald Weekender in December, as one of six places recommended for an 'after Christmas dinner' walk - and it was the only one to be illustrated with a photo, a lovely one of the waterfall. Thanks to member Sarah Ross, for making this happen.

Meanwhile, out in cyberspace, this website appeared over the summer: Anywhere Auckland - Episode 5 - Oakley Creek - <http://www.anywhereauckland.com/s1-e05.html> - which is a video guide to the Walkway.

In the last newsletter, we promoted another walking guide, www.kidschoicewalks.co.nz and the author has now visited and reported on the Oakley Creek Walkway. You will be pleased to know that it has been rated with a smiley face and graded with half an ice cream being needed after the walk!

And, then there is the TV coverage - details below ...



Photos: W. John

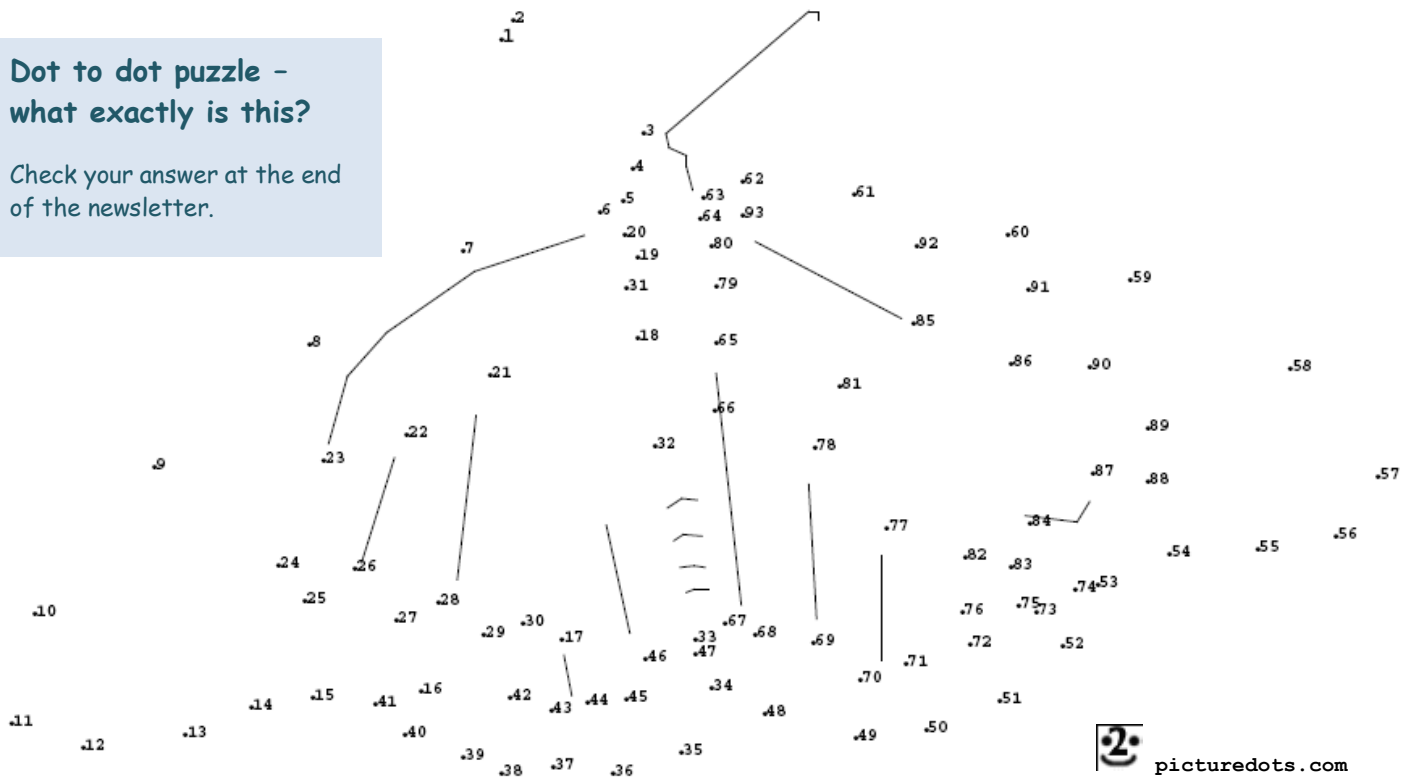
Volunteer photo gallery - so many hard workers!



Top from left: Topping up the rodent bait stations - John Dwyer and Jett Blake; Mt Albert St Jude's Venturers checking the mustelid and possum traps - Sam Polkinghorne and Christopher Stanton, Andrew Liese and Reuben Wilson; Second row from left: Hedgehog Monitoring & Rodent Baiting Team - Fe, Natalie, Lynne, Mitch, Uku, Ken and John; Rodent monitoring - Fe Williams and John Dwyer. Photos: W. John.

Dot to dot puzzle - what exactly is this?

Check your answer at the end of the newsletter.



A helping hand for fishy travellers

by **Catriona Stevenson, National Institute of Water and Atmosphere (NIWA)**

Over half of the 35 species of native freshwater fish currently recognised in New Zealand move between marine and freshwater environments in order to complete their lifecycle. Dams, weirs and culverts can be barriers to the upstream migration of these fish. Finding ways of assisting passage over these potential barriers is an ongoing area of research. Weirs that measure water levels represent a particular challenge, as fish passage needs to be assured without compromising the specific hydrological conditions required for accurate flow measurements.

NIWA is currently operating six temporary water level measurement sites on Oakley Creek, close to the location of the proposed Waterview Connection which will link Auckland's South-Western and North-Western motorways. These sites, which provide flow information to New Zealand Transport Agency consultants working on the project, will permit detection of any changes in the stream hydrology that may be caused by ground dewatering during the tunnelling phase of the construction. Operation of the sites to date has aimed to establish the pre-construction baseline hydrology of the stream.

Records from the New Zealand Freshwater Fish Database and previous electric fishing surveys of the fish fauna in Oakley Creek indicate that the creek supports a diverse range of native fish species including common smelt, common bullies, redfin bullies, giant bullies, inanga, banded kokopu, torrentfish, shortfin eels and longfin eels. Within these species there are different locomotory abilities, with some fish moving upstream by climbing and others favouring swimming.

Five of the six flow measurement sites that have been installed are upstream of a six metre high waterfall at Unitec. Passage upstream of the waterfall is limited to species with good climbing ability and surveys have indicated that only eels and banded kokopu are present above the falls. Providing passage for fish species that have the ability to climb over obstructions is easier than for fish that can only progress upstream by swimming. A continuous section of substrate that remains wetted under all flow conditions is all that fish with climbing ability require for passage over an instream structure. The moist marginal areas of a waterfall where mosses and tree roots grow are a good example of a natural climbing substrate. Climbing substrate can be provided artificially by using geotextiles and even ropes (such as those used to collect mussel spat). At flow measuring sites upstream of the Oakley Creek waterfall, a length of geotextile affixed to the downstream face at each of the structure was all that was required to assure upstream fish passage.

For the Carrington flow measuring weir, located downstream of the waterfall, a more complex solution was required as some of the fish species present can only progress upstream using the swimming mode. To assist fish passage at this site, a substrate ramp was purpose built and installed by Pete Pattinson of NIWA Auckland. In comparison to a smooth ramp, the rough substrate on the ramp (a commercially available product used in drainage) decreases the average velocity of water on the ramp, provides areas of low velocity for resting and increases water depth. This material allows fish to choose their swimming path up the ramp and gives both climbing and swimming fish the opportunity to 'skip' between low velocity resting areas. Trials carried out by Jacques Boubee and Cindy Baker of NIWA Hamilton showed that this substrate was more successful in providing passage for inanga than any of the five other types of substrate currently in use at fish passes that have been built around the country.



Pete Pattinson and Catriona Paterson installing the fish ladder at the Water Flow Monitoring Weir.

During installation of the Carrington substrate ramp, inanga were observed using the low velocity areas created by the ramp at high stream flows and it is anticipated that at lower flows, the substrate ramp will continue to assist fish passage over the weir. The relatively simple modifications made have therefore catered for the upstream migration of fish without compromising flow measurements, and the sites continue to provide robust baseline data for the Waterview project.



Weir - climbing shrimps and an elver or young eel. Apparently elvers lose their 'climbing' ability once they reach about 12 cm at around 5 g weight. You can also see a video clip of these travellers on our Facebook page -<http://www.facebook.com/group.php?gid=300424166687&v=wall>

Photos and Captions: W. John.

Karaka and Kereru

Karaka is Maori for orange. The Karaka tree (*Corynocarpus laevigatus*), is named for the large oval orange drupes that smother it in summer. An evergreen tree with large glossy leaves, karaka was a coastal and predominantly North Island plant. However, the fruit (kopi) is prized as a food by Maori and as a result has been spread throughout the country. Ironically, despite its use as a food source, the karaka kernel is extremely toxic, containing a compound, karakin, that causes convulsions and twisting of the limbs. While the orange flesh is edible, the kernel must be steamed or boiled then steeped in fresh water for many hours before it can be rendered edible.

Since New Zealand has no large endemic land mammals, prior to human arrival moa were the major disperser of karaka seed. Today, the kereru (*Hemiphaga novaeseelandia*) or the New Zealand wood pigeon is the only endemic bird species left that can swallow the large karaka berries. Because birds swallow fruit whole, and don't have teeth to damage the kernel, kereru remain unharmed by the toxin. The seed is excreted by the bird in a neat little pile of fertiliser enhancing the likelihood of germination. The impact of introduced pests with teeth, such as possums, has been devastating on our endemic trees. The role that kereru play in the regeneration of endemic trees such as karaka, puriri, taraire and tawa, is, thus, even more significant. When berries are unavailable, kowhai leaves become a nutritional mainstay for kereru. Kereru are known as kukupa in Northland, and on the Chatham Islands, the slightly larger form is the parea.



Kereru are highly noisy fliers, and males can often be seen doing acrobatic loops during breeding season. They are notoriously poor nest builders, with a nest being little more than an unlined loose weaving of sticks. As with many endemic species, kereru have slow breeding rates, and lay only one egg per nest. The chick is fed on a mixture of fruit pulp and 'pigeon milk' secreted by the parent's crop. Both parents help care for the offspring.

Though threatened by habitat destruction, and even poaching, kereru have been able to adapt to some extent to urban habitat. If you want kereru in your garden - plant a kereru kitchen: kowhai, puriri or karaka!

Above: Karaka foliage and kernels. Photos: A. Stanton
Left: One fat kereru! Photo: Toby Ross

Celebrating Forests for People

2011 is the United Nations (UN) International Year of Forests. This excerpt is from the UN's announcement:

'The United Nations General Assembly declared 2011 as the International Year of Forests to raise awareness on sustainable management, conservation and sustainable development of all types of forests. Welcome to the International Year of Forests, 2011 (Forests 2011) web site, a global platform to celebrate people's action to sustainably manage the world's forests:
www.un.org/en/events/iyof2011/

There, you will find information regarding events being organised throughout the International Year as well as interactive web tools and resources to promote dialogue on forests. Tell us how you plan to celebrate "forests for people" during 2011, so that we may show case your stories and initiatives through this website.'

A series of interesting facts about forests is continually cycling at the bottom of the major image on this UN web page. Have a look at them, then, join us in contributing to the growth and enhancement of the Oakley Creek 'forest'!



Wheki koru unfolding.

Photo: W. John.

Flood effects - Part 2: Plants - good and bad



Note the contrast: - this mostly bare stream bank is slumping (left) while the fern covered stream bank (right) holds up well to extreme flooding. The ferns have naturally recolonised as a result of changing the contracted maintenance regime of weedeating and spraying stream banks - and, thus providing a favourable environment for ferns.

Photos: W. John.



This garden escape swan plant is not numbered among our most serious weeds, but these ripe seed pods engulfed by the flood demonstrate how unwanted plants can readily spread downstream.

Photos: A. Stanton.

Oakley Creek wildlife encounters

Clockwise from top left: Centipede - found by Toby Ross, damselfly, puriri grub case, weta and fresh water mussel shell - washed up onto the side of the stream

Photos: W. John.



Weed Watch

This section of the newsletter features details about weeds that threaten the native plants along Oakley Creek. You can help by tackling these at the stream and in your garden, if present. In this issue:

Araujia sericifera syn. *A. hortorum*, Apocynaceae – Moth Plant, Moth Vine, Kapok Vine, Cruel Plant, White Bladderflower

Moth plant is yet another fast growing vine which smothers and kills our native vegetation. It is particularly problematic because it produces masses of wind dispersed seeds, like thistle down. New seedlings regularly appear in the gardens and parks of many parts of northern New Zealand and in Blenheim. Northland Regional Council notes that some people have trouble with moth plant smothering their television aerials!

A native of Paraguay, Uruguay, north east Argentina and southern Brazil, moth plant was introduced to New Zealand in the 1880s as an ornamental and possibly also because it was thought to trap codling moths. Note that it also traps bees and wasps, which are all attracted to the fragrant flowers. Moth plant grows to 6 metres, is long lived and the seed remains viable for at least five years.



Moth plant is distinctive as broken stems and fruit exude a white latex, which is caustic and smells unpleasant. The vine has dark green leaves which are shaped like an arrowhead, are greyish green on the underside and are arranged in opposite pairs. The leaves can become thickened, more oblong and develop wavy margins when growing in direct sun. The bell shaped flowers are pink to white, with 5 petals and are produced throughout summer and autumn. The large fruit resemble chokos, each of which contain hundreds of seeds. Moth plants have a short tap root plus weak rhizomatous roots.



Control: Stems should be cut near the ground with the upper part of the vine left to die on its host. Avoid skin contact with the caustic white sap. The roots should be dug out or the cut stems should be painted with herbicide. Any fruit should be cut off and

buried deeply or carefully disposed of at a landfill. Vigilant monitoring for new seedlings or missed plants needs to be undertaken each spring and early summer before fruit is set. Moth plant tolerates shade so ongoing monitoring of even well established native plantings is required.

Right: Unripe fruit split open to show dripping white latex. The seeds will be black when mature, with long fine hairs for dispersing in the wind.

Photos: A. Stanton.



Out and about

Photos: W. John.

Friends of Oakley Creek celebrated the year's achievements, with a sunny picnic at Harbutt Reserve in December ...



From left: Santa, Dorothy Maddock, Tessa Watson, Helen Mellsop and Melissa Marler enjoy the festive fare while Margi Watson gets ready to swing.

A Rocha also enjoyed a Christmas picnic at the waterfall, following a walk guided by Wendy John.



This Wesley Christmas Market stall was a joint effort by Friends of Oakley Creek, Waicare and Auckland Council, with the aim of educating the public about the importance of protecting streams and waterways - such as by disposing of rubbish and waste products appropriately.

Unitec Bridge was closed for repair in January when a poplar fell - but one person completely ignored the risk warnings!



A team from Conservation Volunteers New Zealand has helped out at the Cradock St Bridge site.



Summer fun at the waterfall.



WaiCare Health and Safety training at the Oakley Creek waterfall.

Photo: Taryn Pearce, local WaiCare Co-ordinator.



Graffiti busting at the bridge.

Did you know?

The old oak trees growing on the left bank of Oakley Creek, from the end of Cowley St to upstream of Great North Rd, were quite probably planted for their tannin-rich bark, to be used in leather production by the local Star Tannery, from 1879 to 1890. Our thanks to Peter McCurdy, for providing this information.

Dot to dot puzzle solution

Did you discover this monarch butterfly? The Monarch Butterfly Trust has a wonderful website, <http://www.monarch.org.nz>, which has lots of information about our New Zealand butterflies. The Trust is looking for assistance with their monarch tagging project, which hopes to find out about migration patterns and the apparent retreat of monarchs from our cities.

You too can make your own dot to dot puzzles from photos by using <http://www.picturedots.com/make/makePuzzle.html>

Photo: W. John.



We gratefully acknowledge the support of WWF-New Zealand, ASB Community Trust, Auckland Council and Community Organisation Grants Scheme (COGS).

Next Newsletter

News, articles, contributions and comments for the next newsletter are welcome and can be sent to info@oakleycreek.org.nz

New Members Welcome, Donations Too!

We would welcome more members (\$10.00) and/or donations towards the work we are doing to protect and restore our wonderful urban 'taonga' - Oakley Creek Te Auaunga.

Contributions can be made directly into our bank account:

Friends of Oakley Creek - Kiwibank - A/c 38-9003-0978224-00

or cheques, made out to 'Friends of Oakley Creek', can be sent to: 4/65 Woodward Road, Mt Albert, Auckland 1025.



Chairperson: Wendy John Treasurer: Alicia Warren Secretary: Richard Nightingale
Committee: Heather Docherty, Ross Ihaka, Dorothy Maddock, Helen Mellsop, Sarah Ross.

Newsletter Editor: Adrienne Stanton

Ph. 09 - 815 - 3101

info@oakleycreek.org.nz

www.oakleycreek.org.nz