

Friends of Waiwhetu Stream
Annual Report, 11 November 2019

Committee

This was our committee for the past year.

Chair: Merilyn Merrett
Deputy Chair: Michael Ellis
Secretary: Grant Webby

Henry Steele
Vera Green-Bargiacchi
Rachel Tallon

Rosemary Webby
Brendan Elks

Appointees

Teri Puketapu (Te Runanganui o Taranaki Whanui o Te Upoko a Te Ika)
Prue Lamason (Councillor, GWRC)
Lisa Bridson (Councillor, HCC)

This is my ninth annual report on our activities. Over the past 8.5 years Waiwhetu Stream has been transformed by volunteer labour, led by the Friends. Our purpose is to improve the ecological and amenity values of the stream and its corridor, and we have made good progress.

Waiwhetu Stream is about 9 km in length but more than 2 km of the stream through Naenae is channelised. There are about 600 residential properties bordering the stream as well as businesses and parks. My observation is that there are more people using the stream corridor than in the past and the picnic tables are used year round. We receive a lot of positive comments about the improvements we have made and how our efforts are appreciated.

We were finalists in the Community Awards section of the Keep New Zealand Beautiful annual Awards this year. Until we were notified about being a finalist, we did not know that we had been nominated.

The water quality remains in the GWRC 'poor' category; that means it is unsuitable for swimming or drinking.

In my report last year I commented on a deteriorated relationship with HCC because of stalled projects supposedly due to budget constraints and issues around the use of non-woven weed mat. Previous Mayor, Ray Wallace stepped in to help with some of the issues and I am pleased to say that this year the news is better.

I try to keep my report as brief as possible but we are involved in a wide range of activities in our efforts to rehabilitate Waiwhetu Stream and there are multiple agencies involved in its management. There always seems to be something new cropping up.

For those of you who are new to our AGM, I use an illustrated Power Point presentation in junction with my report to add interest.

My report summarises our activities over of the past year with contributions from project leaders.

1. Liaison between GWRC, HCC & FWS (Merilyn)

- a. Stream management meetings are organised by Mike Jensen from GW. These ‘coffee’ meetings, as I call them, were established in 2013 because there was so much we needed to find out about councils responsibilities for areas of management, as well as range of other unknowns to us. The meetings have been very useful not only for establishing good communication and relationships, but to ensure that management issues, especially around weed control are discussed, leading to good outcomes for the stream environment. Downers representatives often attend because they are a key component of management and incidentally, are quite engaged with our projects and very impressed with what we have achieved. The meetings have also been an opportunity to discuss new ideas and find solutions to any problems that arise. Initially we met every month but as time went on they reduced to twice a year.

There has been a hiatus since May last year because of some issues then, but they resumed last week.

- b. At his request, and in response to some issues raised at our AGM last year, there were three meetings with the previous Mayor, Ray Wallace, one in November attended by Andrew Campbell-Stokes and me, one in December with Riba and me and then In February he hosted our first committee meeting of the year in the Mayoral Chambers so he could meet the entire committee and express his support of our activities. He complimented us about the improvements and our work along Waiwhetu Stream.

2. Longer-term planning

With the encouragement of Ray Wallace in November last year, and building on the strategic plan initiatives developed in 2018, we prepared a five-year plan setting out some longer-term objectives. These and their current progress are as follows:

- a. Five new picnic tables at nominated locations with one installed each year
A new picnic table was recently installed near the northern Te Whiti Park footbridge
- b. Installation of three signs marking historic locations
These are currently in draft form and the stands have been ordered.
- c. Distance markers continued from Wainui Rd to Tilbury St

In September, six new distance markers were installed at bridges from Wainui Rd to Tilbury Street, continuing from those installed about 9 years ago from Port Rd to Bell Rd.

- d. Sculpture on stream bank using 2014 HCC Community Award money
This is in-progress and the photo shows the site. More on this next year.
- e. Fish passage improvements at the St Ronans weir

Work on some form of permanent improvements to the weir and fish passage is still being discussed with GW.

- f. A path and footbridge linking Riverside Dr central from Rossiter Ave and Riverside Dr nth
There has been no progress with this although originally it was planned for installation 2017. It would be good to see some action on this project.
- g. Continue to support the Naenae concrete channel naturalisation below Rata St
Naenae Nature Trust has made very good progress with this area and planting is likely to be completed next year.
- h. Document FWS rehabilitation of Waiwhetu Stream
Not yet started. A possible title is 'yesterday, today, tomorrow'
- i. Safe crossing for pedestrians across Wainui Rd to Riverside Drive South
There has been no progress with this and again we would like to see something being discussed. This is a dangerous road to cross and is very busy seemingly all day. A safe halfway area with barriers would be a good start.

We are very pleased that progress has been made with some of these initiatives especially as many have been in the pipeline for more than five yrs, and some have proved not excessively expensive. Progress with the recent picnic table, the distance markers, historical signage stands, and getting appropriate permissions for the sculpture is thanks to Riba, the HCC Community Ranger.

3. Rishworth Reserve forest creation project (Vivien Pohl & Henry)

It has been a successful year with good plant growth. Although much of the site has been planted about 160 plants were added this year, focussing along the stream edge and gap filling elsewhere.

Efforts are concentrated on releasing, weeding and mulching. Although manual weeding is preferred reliance has been put on some spot spraying this year. There seems to be an increase in ivy and climbing asparagus seedlings; both of which are fast-growing, problem climbing weeds. Convolvulus is also a problem that is difficult to eradicate. Some weed species have decreased significantly in areas where the trees have grown taller and provided a canopy and shade. Work still needs doing along part of the stream edge to source suitable natives to replace the non-native grasses.

The 'dead flax' area at the front entrance has recently been weed-eated and sprayed in preparation for planting in 2020. 10 lemonwood were planted there this winter.

It has been a year without much volunteer assistance although the Taylor family have helped on numerous occasions and plan to bring a Scout group at the end of this month. A person referred by WINZ spent four sessions digging out onion weed along the stream edge area.

Sadly, Vivien has had to withdraw for health and family reasons after 7 years in which she has been responsible for choosing suitable native plant species, growing-on thousands of plants as well as doing much of the planting, and she has contributed to weeding and spraying.

Hutt City Council has provided support especially in with equipment, weed killer, mulch and some plants.

4. Plantings (Merilyn)

Plantings along the stream banks were delayed again this year because HCC did not support the use of non-woven polypropylene weed mat. Using it has proved essential for plant survival and weed management, and my weed management report has not been accepted.

As a consequence of uncertainties around the use of weed mat, the number of plants requested for this year was significantly reduced. Moreover, it is likely reduced numbers will continue so that more of the stream budget is available for maintenance.

In total about 1270 plants were planted this year bringing the overall total to >30 000 plants along about 5.7 km of stream banks.

Two main plantings took place; one at the southern end of Hamerton St, Naenae and the other along Hayward Tce. Smaller plantings were done around the Te Whiti Park footbridge and behind houses along Cleary St. The latter was at the request of a property owner who wanted to look out at plants rather than weeds. This planting was an extension of previous plantings along this stretch.

Most of the plants were provided by HCC but we also received about 70 from the MIRO nursery and 50 from Wellington Forest & Bird nursery. Plants from F & B have allowed planting of less common species that are not readily available commercially. Native plant species diversity along Waiwhetu Stream is about 85 species.

We thank all sources of plants and are grateful for their contribution.

A group of four from Wellington Electricity helped with infill planting along lower Hinemoa St and in the inanga spawning area.

We also supported a group of local residents with planting along the edge of Awamutu Stream in a small reserve in Awamutu Grove.

We thank all the volunteers who helped with planting; we appreciate their support. Thanks also to Riba from HCC who organised plant deliveries and helped with planting.

5. Weed mat trial

Regarding the weed mat issue, representatives from the Greater Wellington Flood Management Group, in support of us continuing use the non-woven weed mat, presented to the Hutt Valley Flood Management Sub Committee later in May this year. We were informed that they proposed that the non-woven weed mat continue to be used until a similarly effective alternative was available. It was subsequently suggested that a trial be conducted with other mattings currently available.

The Hayward Tce planting was identified as being suitable for the matting trial. This comprised putting down five types of matting along 10 m of stream bank for each. In addition, there was a section that was pre-treated with a seed germination suppressant spray and a control (do nothing post planting). The five matting types used were jute, wool, coconut fibre, an Eco mat and non-woven polypropylene. The purpose of the trial was to test the effectiveness of each type for weed control, and the ease of laying the matting was considered.

Chris Cosslett has been employed to undertake the monitoring and the first was done on 22 October, 11 weeks after the mat laying.

A brief summary of the results showed that three treatments had low numbers of small weeds on the surface; jute, wool and the non-woven polypropylene. Weeds were growing in small pockets of accumulated soil on the non-woven matting but with the jute and wool, the weeds were rooted into the mats themselves. The wool matting appeared moist and Chris predicts weed growth on the surface to be quite vigorous in future. The jute showed signs of rapid deterioration, with large patches of the upper layer having eroded away, exposing the woven core layer beneath.

The Eco mat and coconut fibre had prolific weed growth (mainly buttercup) underneath the matting, suggesting that both of these admit sufficient light to the soil surface to permit germination and growth.

Most of the suppressant-sprayed area was completely bare whereas there was between 45 to 80% weed cover in the control area. The trial will be re-monitored again in about three months.

6. Waitui Cres deconstruction project

An area of public land opposite Waitui Cres was earmarked for planting in 2020 because it was essentially a weedy, overgrown eyesore. The initial observation showed the area was cloaked with the climbers honeysuckle and *Muehlenbeckia australis*. Clearing began in August by volunteers from Wellington Electricity and has been continued by a small number of volunteers, especially Franz; a man on a mission! My sister Karen has also helped me from time to time. Although we expected to clear weeds, we had no idea of the extent of dumping of domestic and garden waste hidden under the growth. A very large volume of various items has been removed, including a collapsed shed, car body parts, an old formica dining table top, a microwave, and including the proverbial kitchen sink! Tonnes of broken up concrete including some very large pieces has been removed along with multiple sheets of corrugated iron. Franz has taken metal object to recyclers, rather than have it put in the landfill.

Downers have been employed to remove rotten and unwanted trees and branches including a very large willow.

Amazing progress has been made to date. The plan to plant the area in 2020 is definitely achievable.

7. Stream corridor rubbish collection (Henry)

Henry has been organising monthly clean-up of the Waiwhetu Stream corridor since October 2011 with bridge to bridge teams now collecting from Naenae Park in the north to Hutt Park in the south each month from February to December. Awamutu Stream, which emerges near Woburn railway station and discharges

into Waiwhetu Stream at Hutt Park, is also a source of rubbish and this has been removed on occasions this year especially in the Woburn station area.

Generally there are 22 volunteers each month and this year 300 hours were given to keeping the stream and its banks free of rubbish. Including rubbish collected from Awamutu Stream, a total of 254, 50 litre bags of rubbish was prevented from reaching and polluting the harbour.

As can be seen by the graph, the number of bags of rubbish collected annually has remained similar over the years. Major infestations of rubbish in the lower reaches appear to coincide with serious weather events, high tides and strong southerlies. From this it is surmised that excessive rubbish is being swept up Waiwhetu Stream from Hutt River and the harbour. In terms of items collected, plastic in the form of bottles, shopping bags and polystyrene makes up much of the rubbish together with coffee cups, plastic straws, takeaways and glass alcoholic drink bottles. Larger items are regularly removed from the stream bed. Noted this year are traffic cones, a mattress, carpet, armchair, pig's head and 4-seater children's swing but fewer car tyres than usual.

In August a group of students from the Kimi Ora special needs school helped pick up rubbish opposite Waiwhetu marae, supervised by Rachel.

Appreciation goes to the 8 team leaders supported by nearly 40 volunteers and special thanks are given for their help and dedication.

8. Cape pondweed

Franz has continued regular patrols of the stream for vagrant Cape pondweed plants. He removed only 2 this year and the graph shows the decline in Cape pondweed. We are very grateful to Franz being committed to regular patrols, and for providing data. Maybe next year we can safely say that this pest plant has been eradicated?

Other invasive aquatic and semi-aquatic plants that grow along the edges of the stream such as willow weed, *Veronica* and *Mimulus* are being managed regularly by GWRC. This preventative management is working well by reducing weed invasion of the stream channel.

9. Citizen science activities

a. Macro-invertebrate surveys (Rosemary and Grant)

A small team of enthusiastic volunteers undertake regular 3-monthly macro-invertebrate surveys of Waiwhetu Stream at a site just downstream from Birdwood Rd. These surveys are a means of monitoring the health of the stream, which continues to hover between poor and fair based on a NIWA index. Unfortunately the number of insect species present and the health index score has dropped since the January monitoring, possibly because of weed clearance from the stream. Monitoring will continue to see if there is any recovery when aquatic plant cover re-grows.

b. Fish monitoring (Grant and Rosemary)

Since the installation of a floating fish ramp at the St Ronans Ave weir in February 2018, we have continued to monitor the fish population downstream and upstream of the weir using equipment supplied

by GWRC. Regular surveys are conducted in November and February. These continue to show some inanga (whitebait) being able to swim up the 800 mm high weir although we observed last summer that it was an almighty struggle if stream flows are too high. It is still not known whether inanga are able to negotiate the floating ramp.

In April we participated in a fish identification workshop run by Mountains to Sea Wellington in which we installed fish monitoring nets in the stream downstream of the Birdwood Rd Bridge. Apart from the expected inanga, the key discovery was a small number of giant bullies.

We had an article published in the June 2019 edition of Forest and Bird magazine describing inanga swimming up the back face of the St Ronans Ave weir.

Rishworth Monitoring

We are hoping to get some baseline monitoring under way at Rishworth Reserve but more on this next year.

10. Submissions (Michael)

On behalf of the Friends, Michael made a submission to HCC about the impacts of Plan Change 43 with regards to intensification, specifically on Waiwhetu Stream. Intensification and increased areas of impermeable surfaces increases stormwater runoff that is piped directly into waterways and contributes to and increases the risk of flooding. Conversely, reduced rainwater into groundwater increases the risk of the stream drying up in summer, as has happened twice in the last few years. Key requested changes to Plan Change 43 were:

- a. All new developments should have regard to existing infrastructure and waterways so that there is no increased demand on these
- b. Design guide should apply to all new developments and include water retention and permeable surfaces as compulsory features of all new builds
- c. No new development within 1 and 50 year flood extent and no new development in river corridors.

Michael has also given two oral presentations to support the submission.

Just last week the independent Commissioners report was released and it would appear that our submission contributed to the following recommendations:

Stormwater neutrality: The maximum peak stormwater flow in a 10 yr and 100 yr flood event from the site is no greater than it was pre-development.

Amendment 46: Require rainwater tanks and a minimum area of permeable surface to assist with the management of stormwater runoff created by the development.

Amendment 47: Require comprehensive residential developments to be stormwater neutral and encourage comprehensive residential development to contribute to the maintenance or improvement of water quality.

Amendment 60: The site coverage must not exceed 40%.

Amendment 64: Construction or alteration of a building – a minimum of 30% permeable surfaces.

It has been noted that onsite stormwater management is a requirement for most developments.

This has been a positive outcome for Waiwhetu Stream.

11. Stream advocacy meetings with Wellington Water (Grant)

- a. Water quality – Stream water quality is impacted by illegal cross-connections of wastewater and stormwater pipes, cracked pipes in the aging sewer network and illegal flushing of contaminants into the stormwater system. We continue to meet with Wellington Water on a 6-monthly basis to discuss these matters and hear about progress on tracing and rectifying sources of contamination affecting the stream. We would like to acknowledge the efforts of Diana Isaac and her team at WW in this work
- b. Seaview WWTP temporary discharge consents – We continue to be involved in consultation regarding HCC's resource consent application for a new temporary discharge outfall to the Hutt River estuary. The Regional Natural Resources Plan has now been confirmed so that we are expecting public notification of a consent hearing and call for submissions. We plan to make another submission.

12. Walkover

In March we had the annual walkover, although there had been a hiatus in this event over the past couple of years. There was a good turnout and the weather was fine. Our first stop was the concrete channel naturalisation project in Naenae, down from Rata St followed by a quick look at the lower end of the concrete channel where an earlier, more expensive naturalisation project was trialled.

From there we were stopped for a look at a green engineering trial below Tilbury St and then progressed to the St Ronans weir where Councillor Prue Lamason formally unveiled the mosaic around the inner walls of the picnic table. Rachel Silver, the artist was present. From there we looked briefly at the Clearly St plantings and monitoring site and then progressed to lower Hinemoa St and a short walk to Wainui Rd to talk about possible safe pedestrian crossing options. One that particularly appealed to me was a see-through tunnel under the bridge along the lines of Kelly Tarltons. From there we travelled down to Bell Rd to look at the carvings on what were pink granite coconut rolling stones at Griffins biscuit factory.

The last stop was Port Rd where Steve Kamo talked about the new rock wall being built.

The walkover was featured in the Hutt at Heart newsletter.

13. Weeding, planting, maintenance and structures plan

Andrew Campbell-Stokes who first initiated this document in 2014, updated it in November last year. It gives a broad overview of various elements and also shows photos of changes over the past 4 years. There are a few copies here for you to look at later.

12. Other events/issues

Conservation Showcase

We participated in this public event in September organised by GWRC and HCC to celebrate the 50th anniversary of Conservation Week and to promote the work of environmental groups within the region. We set up a display of photos showing progressive improvements along the stream corridor and provided an activity for kids which illustrated what bugs, birds and plants can be found along the stream. Several people signed up to participate in future activities.

Fishing

People have been whitebaiting in the stream and have reported this in the past. Recently we were contacted via our website by a concerned resident about people whitebaiting.

The Waiwhetu Stream corridor is classified as a reserve and HCC Parks and Reserves Bylaw 6.1 b states:

No person may: remove, destroy, injure, disturb, shoot, snare, trap, or otherwise interfere with any animal in a reserve...

Considering most of the native baby fish included under the word whitebait are threatened species, we wonder whether there needs to be better information available or perhaps some signage.

Encroachment

The Waitui project however opened a can of worms in some ways because we discovered that the bordering property has seriously encroached onto public land and a dodgy-looking garage as well as their driveway are on public land.

The reserve area bordering the stream upstream from the Waitui project behind 142-150 Riverside Dr has not been accessible to the public because of a barrier arm at the downstream end, and an illegal 3m length of fence at the upstream end. We are working with GW and HCC to make this accessible for walkers.

There are other areas where property owners have attempted to deter access by planting on the stream berms, for example Cleary St but interestingly, our plantings along the stream edge over the past few years has not only encouraged people to walk along there, but locals seem to have stopped dumping their garden waste outside their fence.

Dumping

There are a small number of people who persist in dumping their grass clippings on to plantings or along the edge of the stream. Again, these have been reported but it hasn't stopped.

Volunteer hours

This year volunteers have contributed more than 2,040 hours, slightly fewer than last year because of the reduced number of plantings. However, this is a significant contribution by the community and a reflection of the value placed on the stream and its corridor. Since 2011 the total number of volunteer hours is about 16 300.

Acknowledgements

The success of our community group and its activities over the past year is the result of the interest, time and commitment of the many volunteers who have helped with our activities and for this, as Chair, I say thank you.

I would like to thank Michael for chairing tonight, and our monthly meetings, Grant for doing a great job as Secretary and for organising the AGM, and the rest of the committee for their contribution and commitment to the success of the 'Friends'. Brendan, who represented the Naenae Nature Trust Rata St planting and naturalisation project stepped down from the Committee in August because of increased family commitments.

I would also like to acknowledge non-committee people who have made a significant contribution:

Barbara for planting and maintaining along Wyndrum Ave, helped more recently by Matthew; Roy for helping with a range of activities including looking after both sides of the stream between Birdwood Rd and Te Whiti Park and Franz for his work at Waitui and Cape pondweed patrols.

We would especially like to acknowledge Vivien who has been a main driver of the success of Rishworth Reserve.

Merilyn
Chair