Creating a native forest

In July 2012 Friends of Waiwhetu Stream (FWS) sent a proposal to Hutt City Council (HCC) to seek support for creating a podocarp-dominated native forest on undeveloped public land at the end of Rishworth St, Lower Hutt.

Background

Prior to the 8.2 earthquake in 1855 along the West Wairarapa Fault, the vegetation of the Lower Hutt valley floor was a combination of flax in swampy areas and in drier areas dense podocarp forest comprising trees such as kahikatea (*Dacrycarpus dacrydioides*), totara (*Podocarpus totara*), rimu (*Dacrydium cupressinum*), pukatea (*Laurelia novae-zelandiae*), rata (*Metrosideros robusta*) and tawa (*Beilschmiedia tawa*).

The earthquake uplifted the eastern side of the lower Hutt valley by 1.8 m creating enough 'fall' to drain many swamps, and also reduced the depth of Waiwhetu Stream.

After the earthquake, previously uninhabitable swamp areas became suitable for development and settlement. The original podocarp forest was felled and used for timber as well as clearing land for agriculture, market gardening and other activities associated with settlement.

The clearance of native forest was so extensive that no native forest remains on the valley floor of Lower Hutt.

Vision for developing a patch of native forest

Committee member Henry Steele brought the Rishworth area to the attention of the FWS committee in 2011. The site is over half a hectare of undeveloped public land along the eastern bank of Waiwhetu Stream at the end of Rishworth St. It is 190m long and approx. 37 m wide.

Rishworth Reserve boundaries shown in red

The site was previously an area of industrial use and had substantial quantities of building materials and other debris littering much of the site; however the litter was barely visible under rampant weed growth.

During a vegetation survey in 2012 it was found that most of the area was dominated by introduced weedy plants and trees with extensive and dense areas of blackberry and climbers; much of the area was inaccessible because of this. Of the 74 vascular plant species recorded during the survey, most were introduced weedy species. Four naturally-occurring native herbaceous species were located along the stream edge. Several previously planted native trees were located but were overwhelmed by rampant exotic weeds.

Two of the naturally occurring herbaceous plants found along the edge of Waiwhetu Stream during the plant survey; *Leptinella dioica* and *Triglochin striata*

After approval from HCC was given, FWS started developing the area in September 2012 and although it was quite late for planting, some clearing was done for kahikatea, flax and a small numbers of other native species donated by MIRO (Mainland Island Restoration Organisation) plant nursery.

Vivien Pohl, who has a lot of experience with growing and planting native species, became actively involved with the project and over the years has supplied the majority of native plants for the reserve, numbering in the thousands. Other contributors of plants are MIRO, Wellington Forest & Bird nursery and HCC.

A great deal of effort has gone into removing weeds, willows, poplars and rubbish from the site and supported by HCC. A loop track has been developed through the area and earlier plantings have become well-established.

Planting, weeding and mulching has been undertaken by volunteers on Wednesday mornings and on other days when conditions are suitable. There have also been a number of community groups that have had working bees to help, which has been much appreciated by the small number of regular volunteers.

Volunteers helpers shifting mulch, Rishworth Reserve

Progress with the vision as at 2018

A small number of volunteers have done an incredible job of creating the early stage of a native forest. Almost the entire area has been cleared of weeds and planted. At least 6 000 natives have been planted including all the podocarp species.

The growth of plantings has been extraordinary and overall plant losses have been minimal. Native birds are already being observed in the reserve but in the future there will be a food supply of podocarp fruits for kereru. Perhaps one day they will nest there!

The area was officially recognized as Rishworth Reserve by HCC in 2017.

Planting 2015

Growth by 2018

Planting 2015

Same planting 2018

Concrete post base used to edge path 2015

Same area 2018

A nesting pukeko at Rishworth Reserve

Very large puffballs often appear at Rishworth Reserve