

# Bue green networks\*





### Awakeri Wetlands

Auckland Council is transforming what was once flood prone, flat, peaty, rural land into new, family-friendly communities, connected by shared cycle and pathways, educational, recreational and open green spaces, and healthy waterways that support revitalised natural habitats. The 3km urban wetland will make the area safer from flooding and will filter stormwater, improving water quality into the nearby Manukau Harbour as well as creating a habitat for native bird, lizard and fish species. The environment has been enhanced by the planting of over 150,000 eco-sourced plants and trees, and reintroducing two previously extinct plant species back into the area.

## Hobsonville Point

This development is considered a flagship for sustainable development, illustrating how good urban design and affordable housing has resulted in high levels of resident and community satisfaction. Key aspects of the development include low impact design, resulting in increased amenity, reduced water consumption and opportunities for improved ecology. See <a href="Future Cities">Future Cities</a> to learn more about the sustainable outcomes of the Hobsonville Point development.

## Long Bay

Situated within the sensitive landscape of Long Bay Regional Park and Long Bay Okura Marine Reserve, as well as Vaughan's Creek and Awaruku Stream, the fundamental principle underlying the Long Bay development was to build a new urban environment that struck the right balance between an efficient use of land, whilst maintaining and enhancing the natural environment. This has resulted in the streets being designed as an integral part of a treatment train, where stormwater flows through a series of treatment methods, such as rain gardens which are an integral part of the landscaping, before flowing into the wider environment.

#### Greenslade Reserve

The enhancement of the Greenlade Reserve will create an urban wetland to connect the community to the environment and reduce the risk of the flooding in the town centre. It forms part of Te Ara Awataha, a new greenway for Northcote. A greenway forms a network of parks, public spaces and quiet streets that provide a safe and healthy environment for people, plants and wildlife. The Te Ara Awataha greenway follows the path of the former Awataha Stream, which is being restored and daylighted for everyone to enjoy. Hundreds of new trees will be planted, creating a healthy, natural environment for Northcote residents and visitors.

# Te Auanga /Oakley Creek

The Te Auaunga project restored 1.5 kilometres of Te Auaunga (Oakley Creek) through the Walmsley and Underwood reserves in Mt Roskill. It daylighted seven piped stormwater tributaries, restored eight hectares of open space with native vegetation, and treats the water quality of the contributing catchment. Shared pathways and pedestrian bridges, community orchards, an outdoor classroom, and community fale and atea space were created, together with a first of its kind play space Te Mara Huapara, which uses ngā taonga tākaro to interpret the environmental and cultural narratives of the site. Collaborative design was undertaken with mana whenua, the local community, Local Boards, Housing New Zealand, schools, local artists, and the Auckland Council 'family'.

#### Taiaotea Creek

Taiaotea Creek on Auckland's North Shore is one of the first Auckland Council daylighting projects to be funded by developers as offset mitigation. The amenity and ecology of the reserve were extensively enhanced through the naturalisation of 240 metres of concrete-lined channel into planted stream, and the transformation of a sediment-filled pond into a wetland. A stone weir, which was a "fish barrier", was also removed to allow the migration of eels and whitebait species banded kōkopu and inanga, with a winding boardwalk constructed over the wetland to connect the community with nature.

## Waiatarua wetlands

Waiatarua Wetlands are New Zealand's largest urban wetlands. Originally a tributary of the Tāmaki River it was sealed off by a lava flow from the Maungarei / Mount Wellington eruption, resulting in the formation of a lake with swamp surrounding its margins. In 1987, restoration plantings began for stormwater management and to create an ecological habitat. The wetlands are now habitat for many native birds including pāpango (New Zealand scaup), kuruwhengi (Australasian shoveler). tētē moroiti (grey teal), poaka (pied stilt), and matuku (white-faced heron).

#### Puhinui Stream

Te Whakaoranga o te Puhinui, in collaboration between Waiohua Iwi, Eke Panuku has won international recognition at this year's Asia Pacific International Federation of Landscape Architects awards. The project is part of Panuku's "Transform Manukau" programme and responds directly to the unique character of Te Puhinui, addressing current issues related to population growth, urban development, ecological degradation, climate adaptation, social deprivation and building capacity and capability. See <u>Tuia Pito Ora New Zealand Institute of Landscape Architects</u> to find out more.

#### **Taniwha Reserve**

An urban wetland and associated stormwater upgrades are being completed within the Taniwha Reserve that will connect the community to the natural environment and reduce the risk of flooding. The project will also improve the water quality of Ōmaru Creek and create new pedestrian and cycling routes connecting the reserve to local neighbourhoods. The Taniwha Reserve upgrade is part of the wider regeneration of Tāmaki and associated state housing areas.

# Project Twin Streams

With the original purpose of mitigating the inundation of properties, this project has transformed streams within the Henderson area into ecological green blue networks frequently used for cycling and walking. At the heart of Project Twin Streams is an approach that puts local people at the centre of thinking and action. Initiated in 2003, the project has purchased 81 flood prone properties and created 9.3 km of cycleways over 6 tracks. Approximately 900,000 native plants have been planted by the community and contractors across a number of stream catchments, including Waikumete Stream, Te Wai o Pareira (Henderson Creek), Opanuku, Oratia, Waimoko, Paremuka and Swanson streams, and 125 art projects completed. Visit Project Twin Streams for more information.

