PLANTING AND VEGETATION GUIDANCE – ECOLOGICAL ENVIRONMENTS

Ecological environments are areas where indigenous biodiversity, ecosystems and habitats exist. These could be forests, scrublands, wetlands, coastal dune systems or rivers and streams. Vegetation is a core element of these environments, and a thorough understanding of the existing vegetation and the role it plays will ensure any proposed plantings or modifications to these environments can be successfully completed and add value to these areas.

Key outcomes

- enrichment of land from a Maori perspective – Ta ao Maori
- restored or enhanced ecosystems and biodiversity
- improve the quality of water systems
- provide habitat for native fauna
- educational opportunities
- stormwater treatment and detainment for surrounding areas
- provide protected areas for rare and endangered fauna to be released
- species conservation, reintroduction and recovery
- connected systems
- resilience – enduring unique landscapes

Typical issues

- lack of understanding around the importance of ecosystem connections and the effect they have on ecosystem functioning
- loss of ecosystems and unique fauna through loss of habitat or destruction
- invasive species not managed, resulting in loss of habitat or food source for native fauna
- damage from development and intensification putting pressure on ecosystem functions
- restoration work is completed but there is no ongoing management, resources or investment in to the area. These are critical for the first couple of years if the area of planting is to be a success

Key considerations for these environments

- **Integrate with the wider context**. Identify vegetation patterns, connections and species in the surrounding landscape and ensure proposed planting will enhance the existing ecological, physical and cultural value of the site.
- **Pest and weed management**. Ensure a weed and pest management plan has been completed and actions have been taken to manage the pests and weeds on site prior to any planting. This is critical to the success of the new plants.
- **Use eco- sourced planting.** Use locally sourced plants and indigenous species that are appropriate to the ecological characteristics of the site.
- **Composition of plants**. Look to mimic nature by providing representative plant assemblages as they would occur naturally.

- **Seasonality and food**. Consider the seasonality of food sources that the proposed planting will provide, including nectar, berries and flowers, as well as the association insects have with different plants. Understand how these food sources could enhance the fauna populations in the area.

Plant hygiene. Ensure that invasive plant or animal species are not accidently introduced with nursery stock. For example, rainbow skink eggs, Argentine ants or weed seeds being introduced in soil from plant bags.

Barry Curtis Park, Manukau. A mix of native grasses and shrubs has been planted around the edges of stormwater ponds. These have been planted densely to minimise maintenance requirements. Barry Curtis Park, Manukau.

Judges Bay, Auckland. Day lighting the conveyance and treatment of stormwater with rain garden systems and swales promotes increased public awareness and knowledge of these systems.

Where ecosystems are being restored, consider the way planting could be used or arranged as a learning and educational tool.

Barry Curtis Park, Manukau. Revegetation and restoration of the stream corridors provides important stormwater treatment while views through the park and large open spaces are retained for recreational use.

Comans Track, Waitakere Ranges. A number of weed and pest management strategies are underway, including providing private landowners with equipment to place traps and bait for rats and stoats. Large skips are also supplied in various places to encourage residents to remove invasive weeds from their properties and dispose of them.