

Ngā Mahi a Wai Māori

Northland Water Storage and Use Project



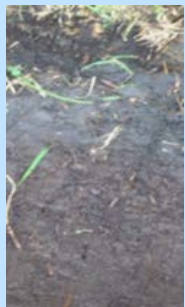


Kaipara Horticultural Soils

Soils suitable for horticulture in the North Kaipara Command Area include three types of sand (varying age, compaction and weathering), alluvial and estuarine flats and terraces, and peat.

With access to water for irrigation, a much greater range of vegetable, field, vine and tree crops could be grown on the Kaipara soils.

There are **four main groups** of soils within the North-Kaipara Command Area on which some form of commercial horticulture could be practiced providing there is access to irrigation water.

Profile	Description	Suitability
	<p>Very free-draining dune sand</p> <p>Pinaki sand (PN) and recently stabilised dune sand are very free draining, suffering a moisture deficit for large parts of the year, have low nutrient status but can be cultivated year-round.</p>	<p>Given shelter from salt- laden winds and access to water these soils are well suited to plants like avocado, which cannot tolerate a waterlogged rooting zone.</p>
	<p>Stable and free-draining older sand dune systems</p> <p>Red Hill sand (RLa), Red Hill sandy loam (RL) and more mature Tangitiki sandy loam and sand (TT) on consolidated dunes that have largely retained their rounded shape.</p>	<p>These are free-draining soils which are suited to crops like avocado which cannot tolerate a waterlogged rooting zone, can be worked year-round for market gardening and field crops, and are well suited to citrus, kiwifruit, persimmon and the like. Shelter from salt-laden winds is important to protect plants and prevent wind erosion.</p>
	<p>Sandy peat soils</p> <p>Parore peaty sand (PZ) and Kaipara peaty clay loam (KPy) occur in middle and upper sections of the floor of valleys draining from the coastal sands towards the inland rivers.</p>	<p>Their mix of sediment/sand and peat creates an ideal growing medium for vegetable production.</p>



Alluvial and Estuarine Soils

Mangakahia silt loam and clay loam (MF), Whakapara silt loam and clay loam (WF), Kaipara clay and clay loam (KP) and Kaipara peaty clay loam (KPy) have formed on river and estuarine sediments along the river systems within the command area.

While the Mangakahia and Whakapara soils are at risk from flooding, they are fertile soils suited to field crops. The Kaipara soils are largely protected from flooding and are already extensively used for kumara.

