

ECOLOGICAL FEATURES

What the Act says

Ecological features identified in the Waitakere Ranges Heritage Area Act 2008 relevant to Oratia / Waiatarua are:

- the naturally functioning streams that rise in the eastern foothills and contribute positively to downstream urban character, stormwater management, and flood protection.
- Terrestrial and aquatic ecosystems of prominent indigenous character that:
 - include large continuous areas of primary and regenerating lowland and coastal rainforest, wetland, and dune systems with intact ecological sequences;
 - have intrinsic value;
 - provide a diversity of habitats for indigenous flora and fauna;
 - provide opportunities for ecological restoration;
 - are of cultural, scientific, or educational interest;
 - have landscape qualities of regional and national significance; and
 - have natural scenic beauty.

Flora and Fauna

The natural environment features map and description of the map provides information on ecological features in the Oratia / Waiatarua area. This map includes information from the District Plan on significant and outstanding vegetation in the area and identifies bush protection areas, streamside restoration area and revegetation areas as identified in the Oratia Structure Plan. Protection and restoration of these areas would occur alongside subdivision of individual properties in the Structure Plan area.

The *Ecology of Waitakere's Rural Areas Report* (Kingett Mitchell Ltd, 2007) provides information on the forest composition in the Oratia / Waiatarua area. The main forest species in gullies and wetter sites of the Upper Oratia area are dense kanuka and secondary kauri-podocarp-broadleaf forest, kahikatea and broadleaved trees (puriri, karaka, kohekohe), interspersed with nikau and mamuku. On upper slopes and ridges where drier conditions are present, kauri, kanuka, tanekaha, totara and rewarewa predominate.

Further down the foothills undulating topography dominates with short steep slopes around catchment headwaters. Numerous watercourses intersect the catchment. A number of small (less than 2ha) indigenous broadleaf forest remnants, and a stand of mature secondary kauri-podocarp forest adjoins regional parkland adjacent to Scenic Drive. Patchy, regenerating kanuka forest and scrub mosaics cover a substantial portion of Cochrane, Kaurimu and Sharpe Stream catchments and provide connectivity with adjacent catchments including Big Muddy Creek and Upper Oratia.

The Upper Opanuku Stream Catchment is very steep and contains intact mature secondary kauri and kauri-podocarp forest in areas that were not cleared for grazing. In some parts easier terrain was cleared in the 1880s and cultivated. Forest in these areas are up to 120 years old. Kanuka is dominant in the canopy with rewarewa, kahikatea, kohuhu and tree ferns.

Forest surrounding Opanuku-Fairy Falls catchment headwaters has been identified as one of only three long-tailed bat day-roosting areas in the Waitakere Foothills.

Streams

The Oratia Stream Catchment covers an area of almost 30 square kilometres of Waitakere City. The stream originates in the Waitakere Ranges, from a maximum elevation of 390 metres and flows northwards through Oratia to the Henderson Creek and Waitemata Harbour.

The upper catchment of Oratia comprises the relatively steep, bush clad northern slopes of the Waitakere Ranges. This area is dissected with steep gullies. The middle reaches of the catchment consist of rolling ridges and valleys, where the soil tends to be poorly drained clay loams. The lower part of the catchment becomes gently rolling to flat alluvial terraces. The stream channel is cut well down into the surrounding landscape, with little flood plain area.

The lower reaches of the catchment fall towards a central basin focused upon West Coast Road with side valleys between Glengarry and Shaw Roads, and also between Carter and Parker Roads. Stream systems lie at the foot of all three main valleys, and the ridgelines that carry Glengarry, Carter and Parker Roads climb towards a main ridge along which Scenic Drive runs.

Streams in the Oratia area are shown on the streams map and include:

- Allen Swamp
- Oratia Stream
- Cantys Stream
- Cantwell Stream
- Cable Stream
- Sharpe Stream
- Malam Gully
- Potter Stream
- Cochrane Stream
- Sundae Stream
- Kaurimu Stream
- Bendall Creek

Streams in the Upper Opanuku area are shown on the streams map and include:

- Yates Gully
- Driving Stream
- Fairy Falls
- Todd Gully
- Stoney Creek
- Parekura Stream

The majority of the streams are small but subject to periodic high flows. Those in the lower reaches on the catchment act as a buffer between the urban fringe and the forested Ranges.

The Oratia / Waitatarua area is part of the Henderson Creek Catchment for Project Twin Streams (PTS). The main aim of PTS is to create a more sustainable catchment and improve water quality in Waitakere City. PTS focuses on restoring stream banks but also has a vision of working with local communities near streams. The project looks at use of land within the stream catchment, households becoming more sustainable and using cycle and walkways to reconnect communities which providing opportunities for recreation. The next steps for PTS involve innovative stormwater solutions and working on the sorts of human behaviour that cause pollution