The Park Environs

Critical topography

The Park (Pukekura/Brooklands/Maranui) is located in a system of valleys eroded from a plateau. The main valley lies almost north – south in orientation. In the boatshed area it diverges into two major watercourses, the greatest and most consistent flow being supplied by the arm which enters the Park via Goodwin Dell and has its source beyond Vogeltown Park.

The other arm has its source in the Upjohn/Kura St. area beyond Highlands Intermediate School and flows towards Pukekura down through the Maranui Gully past the Bowl of Brooklands and through Rhododendron Dell.

The boundaries

Both the western and eastern Boundaries are therefore defined by a relatively consistent plateau which is elevated by an escarpment of about 20 to 25 metres above the valley floor in a horse-shoe shape from Fillis St. to Victoria Rd. via Upjohn St. The escarpment between the two levels is consistently steep. Both Pukekura and Brooklands therefore each have very special and distinctive topographical characteristics the former is in a valley, the latter is mostly on a plateau.

The Racecourse and Highlands Intermediate School are located on the plateau along the eastern boundary and Victoria Rd. on the western.

Access carriageways

The carriageways providing access between the plateau and the valley floor in clockwise rotation are Horton Walk, Racecourse Walk, Racecourse/Bowl of Brooklands access road, Kaimata St. entrance via the main Bowl access, Brooklands Park Drive also via the main Bowl access and Scanlan Walk. All are relatively steep or have steep components. There are numerous pedestrian accesses.

Dells

The eastern escarpment is intersected by several dells. In order from Fillis St. these are: Kindergarten Gully accessed from Fillis St, King fern Dell accessed from the eastern side of the Sportsground, Stainton Dell accessed beside the Tea House, a small dell below the access road between the Racecourse and the Bowl at the lower end of the Maranui Gully and a dell almost as large as Stainton Dell just within the List St. entrance. Truby King Dell is an enigma in that it is dell-like by virtue of its surroundings being formed of majestic trees rather than land contours.

Springs

After a period of several days of almost incessant rain during my curatorship I located in the region of thirty springs (not surface run-off) originating from the eastern escarpment between the Kindergarten Gully in Fillis St. and the Pukekura Tennis Courts in Upjohn St. The aquifers of the Racecourse plateau are a vital source of water for the Park but have never been researched. It would surprise me if they were not being further threatened by extensive stabling extensions currently taking place at the Racecourse.

The sub-surface hydrology of the catchment and notably that of the Racecourse/Highlands plateau and its vital influence on the surface water flow through Park has not been critically examined to the best of my knowledge.

The water catchment

This extends beyond the Park boundaries and is roughly defined by a line drawn from the intersection of Gover and Rogan St. to List St., on to Kura St, along Upjohn and Hori, down Carrington St to Holsworthy Rd then down Victoria Rd to Gilbert St.

The entire catchment is drained through a sub-surface exit pipe 1.2m in diameter located just below the Waterwheel in the area of the Gilbert St entrance.

Prior to residential development of the Brooklands and Vogeltown areas in particular, the surface water absorbency and detention characteristics of the catchment were much greater than at present. Furthermore, all areas in the floor of the valley which now have level surfaces were originally swamps with high water detention capacity.

Therefore all water surfaces, in the Park are submerged swamps, and all firm level surfaces such as the Sportsground, Hatchery Lawn etc. are reclaimed swamps. There is scarcely a square metre of level surface in Pukekura that is natural and was not once a swamp. Brooklands has its share of the level plateau.

Human influence on water-flow patterns

Because large volumes of surface water now find their way into the lower regions very rapidly, flash flooding there is becoming progressively more serious. At the other extreme, but for the same reason in that a reduced volume of surface water is stored in the catchments for slow release during dry periods the flow rate is diminishing during summer and stagnation imminent unless major measures are taken to restore the balance.

The exit culvert at Gilbert St offers some revealing statistics in this context. When the western end of Gilbert St was formed to forge a link with lower Victoria Rd by filling in the valley through which the stream exited the Park, a 60cm culvert was adequate to handle maximum flow. However as the consequence of heavy rain on 15 July 2005 the culvert failed and water rapidly rose to the level of Gilbert St, overflowed down lower Victoria Rd gaining great velocity and seriously damaged properties on the far side of Carrington St on its journey to the Huatoki Stream.

The installation of the 1.2 m system was a very costly outcome.

The Main Lake was formed by closing off the valley during 1878.

Interestingly the spill was not channelled down the same valley but diverted into a lesser valley now called the Sunken Garden towards what is now the Sportsground. This involved hand-digging a channel about 100m long and 0.9mx0.9m in cross-section from the edge of the lake around the eastern and northern side of what is now Cannon Hill to what is now the Fountain Lake (1893) but there was an obstruction through which an unlined tunnel had to be dug.

The entrance to the tunnel is close to the Curator's Office but the exit is obscured behind the Pavilion. This made it a wet 'Scotsman's entry' to the Sportsground for ticketed events, popular with Boy's High School pupils 'in the know' I am told.

During my curator ship it was collapsed by a heavy vehicle passing over it en route to the Bandstand area. This was repaired by excavation and insertion of about three 1.2m diameter concrete pipes beneath the carriageway only. Boundary fence alterations have removed its attraction as a secret free entry tunnel for wily pupils but it is never-the-less a hidden treasure.

George Fuller Compiled for Friends of Pukekura Park. May 2009