D6. Urban Lake Management Areas Overlay

D6.1. Background

The Urban Lake Management Areas Overlay comprises Lake Pupuke and Western Springs Lake. Lake Pupuke is formed from an old volcano and is characterised by the absence of any streams, with the movement of groundwater as its main source of recharge and discharge. It is surrounded by residential and commercial development. Western Springs Lake derives its water source from groundwater flow, and has an outlet via a weir to Motions Creek. Western Springs Lake is surrounded by a public reserve.

Both lakes are important for their open-space, recreational and amenity values. The main impacts on the water quality of Lake Pupuke come from the contaminants in stormwater discharges into the lake, wastewater overflows and fertiliser runoff from surrounding private gardens and the public reserve. Western Springs has a lower water quality mainly due to contamination from faecal matter associated with the waterfowl population.

The rules for this overlay are located in <u>E3 Lakes, rivers, streams and wetlands, E7</u> <u>Taking, using, damming and diversion of water and drilling, E11 Land disturbance –</u> <u>Regional and E15 Vegetation management and biodiversity</u>.

D6.2. Objectives [rp]

- (1) Open-space, recreational and amenity values of urban lake management areas are maintained or enhanced.
- (2) Water quality of lakes in urban lake management areas is maintained where it is excellent or good and progressively improved where it is degraded to support ecosystem health, recreational and amenity values.
- (3) Margins of lakes in urban lake management areas are maintained or enhanced.

D6.3. Policies [rp]

- (1) Maintain or enhance open space, recreational and amenity values of the urban lake management areas by minimising structures in, on or over the bed of lakes, rivers, streams and wetlands.
- (2) Minimise discharges of contaminants to urban lake management areas.
- (3) Avoid significant disturbance of lake beds to minimise suspended sediment and nutrients in the water.
- (4) Recognise that stormwater maintains water levels in urban lake management areas, and support initiatives to treat these discharges.
- (5) Maintain and protect wetland vegetation in urban lake management areas by minimising as far as is practicable the disturbance from structures and vegetation clearance associated with infrastructure maintenance.

- (6) Provide for infrastructure in, on, under or over urban lake management areas only where there is a functional or operational need to be in that location or traverse the area and there is no or practicable alternative.
- (7) Avoid further modification of margins by reclamation and minimise shoreline protection works in urban lake management areas.