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## Part F Natural Resources

### Chapter 13 Sensitive land resources in the Shire

#### 13.1 Biodiversity (vegetation)

Figure 1 comprises biodiversity mapping provided by the NSW Office of Environment and Heritage. Vegetation has been used as a surrogate for biodiversity, as is common with sensitive land mapping. The same maps are provided within the Narrandera Local Environmental Plan 2012 (however the local environmental plan maps are to be utilised to identify particular properties).

Significant areas of vegetation within the Shire are not limited to the Murrumbidgee River corridor. The Colinroobie Hill ranges and nearby ranges have significant native vegetation stands, as do the Cypress Pine based State Forests.

The dominant tree species in the Shire are the White Cypress and the Red Gum. The most prevalent vegetation groupings in the Shire are:

- The Bimble Box woodland (Barellan to Binya and generally the Mirrool Creek area);
- The Dwyer's Red Gum, White Cypress Pine and Currawang shrubby bushland (Narrandera Range and Colinroobie Hills);
- The River Red Gum forest along the Murrumbidgee River, Yanco Creek and Bundidgerry Creek;
- The grey box, White Cypress Pine groups of the State Forests and Yanco Creek, and
- The Weeping Myall (Boree) open woodland and Riverina Plains Grasslands complex of the south west of the Shire near Yanco Creek and toward Coleambally.

Clause 6.1 of the LEP contains provisions for the impact assessment of development applications for land identified on the Natural Resource - Biodiversity maps, and provisions related to impact avoidance for that mapped land.

#### 13.2 Dry-land salinity

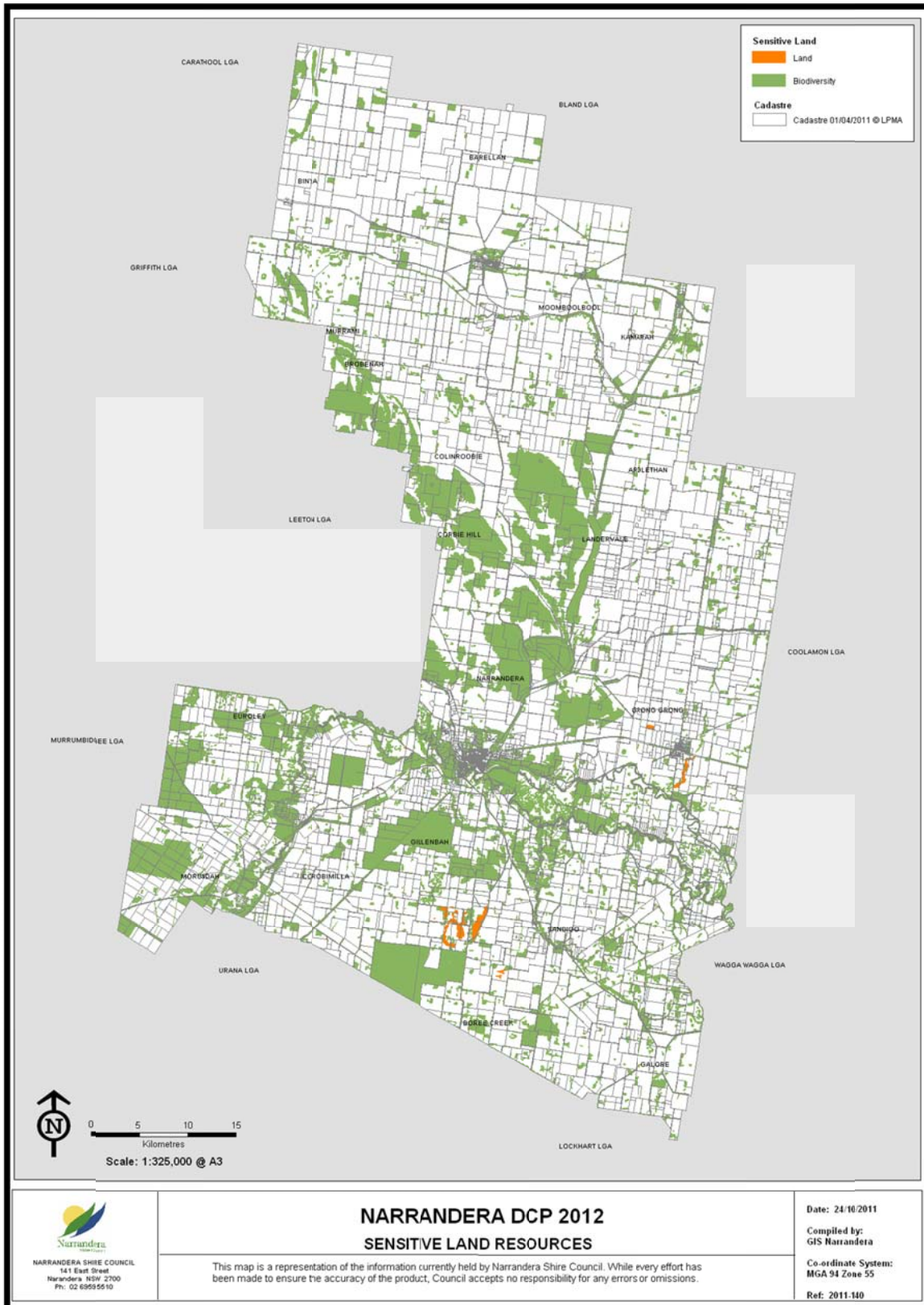
Figure 1 also shows land mapped by the NSW Office of Environment and Heritage as having active or potential affectation by dry-land salinity. Again the LEP maps should be referred to for property identification.

The mapping indicates an isolated area of salinity north-west of Grong Grong known locally as 'Hibbards salt patch', and a 2-3km stretch of Cowabbie Creek south of Grong Grong.

South of the river there is a substantial area of land in the Strontian Road locality (south west of Sandigo) which has undergone salinity processes in the past. This land has been under active rehabilitation through planting of Old Man Saltbush over the past 20 years or so.

Clause 6.4 of the LEP contains provisions to assess and minimise the impact of a development on salinity processes and vice versa.

Figure 1 Sensitive land resources – vegetation and salinity in the Shire



## Chapter 14 Sensitive water resources in the Shire

### 14.1 Riparian land and waterways

Waterways and riparian areas dominate the landscape of the southern areas of the Shire. The riparian area is the part of the landscape adjoining rivers and streams that has a direct influence on the water and aquatic ecosystems within them. It includes the stream banks and a strip of land of variable width along the banks.

The Murrumbidgee River runs the width of the Shire, east to west and is the dominant water feature. It is accompanied by remnant River Red Gum forest along the waterfront and within the flood plain areas. Significant stands of River Red Gum forest are located east of the Narrandera Township (the Common and Narrandera Crown Lands Recreation Reserve) and the new Regional Park west of the Township (formerly the Narrandera State Forest).

Yanco Creek is a major tributary of the Murrumbidgee and runs northward through the south-western part of the Shire. Colombo Creek, Woolshed Creek and Cuddell Creek are minor tributaries of Yanco Creek.

Sandy Creek is a tributary of the Murrumbidgee and runs northward through the south-eastern part of the Shire bordering the Sturt Highway for around 20km.

Old Man Creek is located east of Sandy Creek and runs north partly along the eastern border of the Shire and then to the Murrumbidgee. Little Sandy Creek is a minor tributary of Old Man Creek.

Bundiggerry Creek is a major tributary of the Murrumbidgee and has been modified along most of its length from the Berembed Weir to form a supply channel for Murrumbidgee Irrigation Ltd (MIL). Immediately east of the Narrandera Township Bundiggerry Creek forms the Lake Talbot recreational waterway, adjoining the MIL main channel. Lake Talbot is essentially a storage facility for MIL, but plays an important part in the life of Narrandera residents and visitors.

Cowabbie Creek runs south past Grong Grong village into Bundiggerry Creek and has a number of minor tributaries.

Mirrool Creek is the Shire's main northern creek and runs east west across the Shire, below the village of Barellan. The central part of the Shire features a number of elevated areas with localised creeks, but not to the same extent as the southern part of the Shire.

Figure 2 includes riparian and waterway mapping provided by the NSW Office of Environment and Heritage.

Clause 6.6 of LEP contains provisions for the impact assessment of development applications for areas identified on the Natural Resource - riparian and waterway maps, and provisions related to impact avoidance for those mapped areas.

## 14.2 Wetlands

Figure 2 includes wetland mapping provided by the NSW Office of Environment and Heritage.

Wetlands within the Shire are mainly located within the riparian corridors (see section 15.1 above) however north of the Narrandera township along the Barellan Road there are two significant wetland areas known as the Mejum Swamp and Lake Coolah. These areas of land are usually dry, however with the right balance of seasonal and above average rainfall the wetlands can rejuvenate substantially.

Clause 6.2 of the LEP contains provisions for the impact assessment of development applications for areas identified on the Natural Resource - wetlands maps, and provisions related to impact avoidance for those mapped areas.

## 14.3 Groundwater vulnerable land

Figure 2 includes groundwater vulnerable land mapping provided by the NSW Office of Environment and Heritage.

The groundwater vulnerable areas of the Shire extend generally along the corridors of the Murrumbidgee River, Bundidgerry Creek, Sandy Creek and Yanco Creek, and throughout the alluvial plains west of Yanco Creek towards Colleambally.

Clause 6.3 of the LEP contains provisions for the impact assessment of development applications for areas identified on the Natural Resource – groundwater vulnerable land maps, and provisions related to impact avoidance for those mapped areas.

Figure 2 Sensitive water resources in the Shire

