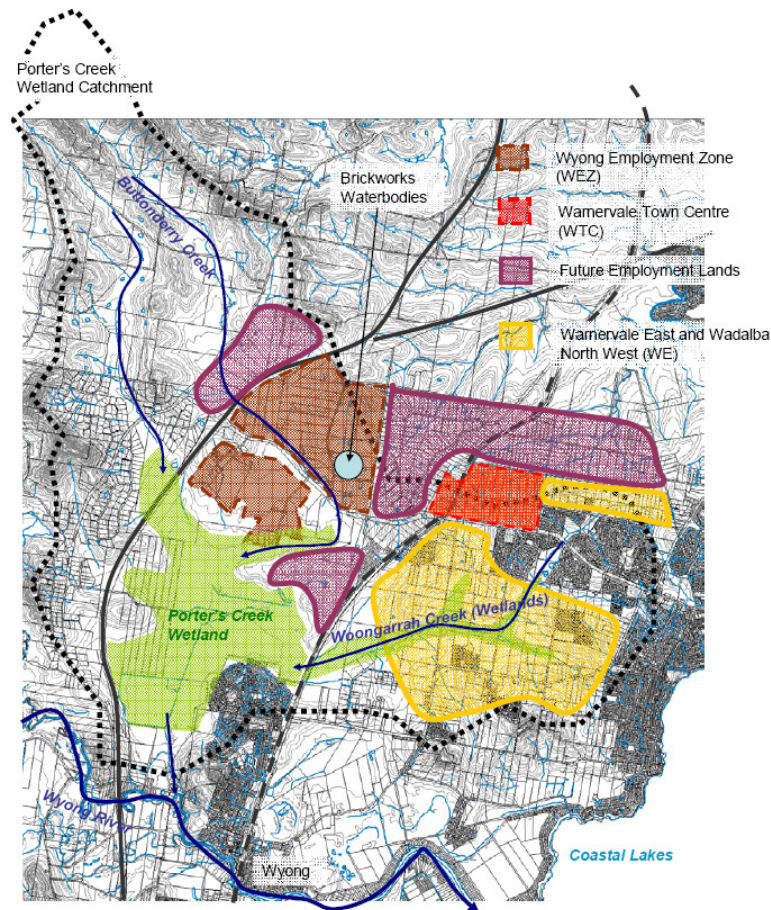


CASE STUDY: Integrated Water Cycle Management

10. Proposed Development in the Porters Creek Catchment

The Department of Infrastructure Planning and Natural Resources anticipates that the population of the Warnervale/Wyong District will increase by 29,000 in the next 30 years. Within the Porters Creek catchment a further 2000 hectares is targeted for employment generation (commercial and industrial), urban development and a town centre at Warnervale to meet the State's regional growth demands.



Planned developments in the Porters Creek Wetland Catchment
(Source: Ecological Engineering)

A major threat to the Porters Creek Wetland posed by these developments is the increased runoff generated from the decreased “water absorption” of the development areas because of the increase in impervious areas (i.e. roads, driveways, paving, roofs etc.). This results in a significant increase in low to medium flows after rainfall. Unless checked, additional flows will impact on water quality and the natural wetting and drying cycle of Porters Creek Wetland and its tributaries.

For this reason, future land releases in Wyong Shire will be guided by the principles of Integrated Water Cycle Management (IWCM) and Water Sensitive Urban Design (WSUD) to ensure that development minimise any impact on Porter's Creek Wetland and similar hydrologically sensitive ecosystems. *‘Any development should aim to promote sustainable and integrated management of land and water resources for the benefit of both present and future generations’.*

Stormwater harvesting and reuse is a key aspect of these guidelines.