

CASE STUDY: Integrated Water Cycle Management

Water, Wetlands, and Wattanobi Woollybutts

Media release, Prime Minister's Office, 2006, August 23

Harvesting Stormwater to protect the Porters Creek Wetland

... Australian Government funding of \$2.6 million toward a \$16 million investment will help protect a significant wetland area in NSW from stormwater that will flow from urban development in the catchment.

... The Porters Creek Wetland Stormwater Harvesting project will enable stormwater to be collected, treated and reused to maintain the natural cycles... The Porters Creek Wetland is widely recognised for its diversity of habitats and its contribution to the environmental flows of the Wyong River...



Porters Creek Wetland after significant rainfall.
(source: Wetland Web CD)



Foliage of woollybutt *Eucalyptus longifolia*.
(source: Wetland Web CD)



From Watanobbi Knoll looking out over the Porters Creek catchment.
(source: Wetland Web CD)

PORTERS CREEK WETLAND UNDER THREAT

Porters Creek Wetland is the largest remaining freshwater wetland on the NSW Central Coast. Water flowing in from its upper catchment is filtered by the swamp forest communities of the wetland before flowing into the Wyong River and Tuggerah Lake.

In recent times, Porters Creek Wetland has come under pressure from urban development. As suitable land in the Sydney region has become less available, the Central Coast has been identified as one of the few areas able to provide land for new housing and employment. Over the next 30 years, the population of Warnervale/Wyong is likely to more than double to an ultimate population of about 50,000.

How will Porters Creek Wetland survive this onslaught? The answer lies in careful catchment management. Surprisingly, this will have the added benefit of additional supplies of fresh water harvested from otherwise damaging stormwater runoff.



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CASE STUDY

This Study explores how best to manage the Porters Creek Wetland and its catchment to:

- withstand the potential impacts of expanded urban development
- continue its protection of the down stream catchment areas
- provide for new opportunities (e.g. water harvesting, relaxation, education)

We briefly survey the characteristics of the wetland, outline the principles of Integrated Water Cycle Management (IWCM) and Water Sensitive Urban Design (WSUD), and analyse how these principles might best be applied to the case of sustainable development in the Porters Creek Wetland catchment.



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