

### 3. The Catchments

A catchment is an area where water is collected by the natural landscape. In a catchment, rain will eventually flow to a dam, creek, river, lake or ocean, seep into the groundwater system, be used by vegetation and animals or evaporate.

Each dam, river and creek has its own catchment. Together, the combined catchment areas of the Central Coast region's drinking water system are about 727 square kilometres (Table 1).

Table 1: Gosford-Wyong Councils' Water Supply System  
(Source: Gosford Wyong Councils' Water Authority  
[http://www.gwcwater.nsw.gov.au/images/PDF/joint\\_water\\_supply\\_061103.pdf](http://www.gwcwater.nsw.gov.au/images/PDF/joint_water_supply_061103.pdf))

Catchment	Year built	Catchment area (km <sup>2</sup> )	Maximum capacity (ML)
Mooney Mooney Dam	1961	39	4,600
Mardi Dam	1962	4	7,400
Lower Wyong River Weir	1968	355	300
Lower Mangrove Creek Weir	1975	140	300
Ourimbah Creek Weir	1978	88	100
Mangrove Creek Dam	1978-82	101	190,000
<b>Totals</b>		<b>727</b>	<b>202, 700</b>

Managing and protecting our catchments is a key process for ensuring good water quality. Gosford and Wyong Councils have catchment policies which identify specific activities which can be carried out within each catchment area (see Figure 2).

Water supply extractions from weirs on the lower sections of Wyong River and Ourimbah Creek have no impact on the upper sections of the waterways but may reduce flushing in the lower saltwater sections during extended periods of low rainfall. In times of water shortage, water is released from Mangrove Dam into Wyong Creek to allow extractions to continue and to allow for environmental flows down stream. Possible impacts from this on Wyong Creek, such as unnaturally cool flows and introduction of new species of aquatic organisms, are monitored by the Water Supply Authority. The weirs also have the potential to block fish from swimming up and down stream, possibly affecting breeding. So, appropriate fish ladders have been put in place by the Water Supply Authority to overcome this.





Figure 2: The Central Coast water supply catchments  
 (Source: WaterPlan2050 (<http://www.gwcwater.nsw.gov.au/index.php/waterplan-2050>)  
 showing the planned Mardi-Mangrove Link  
 (<http://www.gwcwater.nsw.gov.au/index.php/mardi-mangrove-link>)

