

CASE STUDY: The History of Water Supply on the Central Coast

23. PostScript Is Mangrove Creek Dam located in a “rain shadow”?

ACTIVITY: Analysing the Distribution of Rainfall

Examine Table 5 showing rainfall data extracted from the Bureau of Meteorology records.

Table 5. Long Term Rainfall Records

Location				Years of Record		Mean annual rainfall total (mm)
No.	Name	Latitude °S	Longitude °E	Period	No. of years	
CD	Chichester Dam	32.24	151.68	1942-2007	65	1309.7
OF	Olney State Forest	33.10	151.25	1938-1967	28	1582.5
GD	Glen Davis	33.12	150.25	1940-1969	29	633.6
NH	Norah Head (Lt. Hs.)	33.28	151.58	1969-2004	35	1229.6
MM	Mangrove Mountain	33.29	151.21	1994-2007	13	1014.7
OA	Orange Airport	33.38	149.12	1968-2007	39	886.0
NA	Narara	33.39	151.33	1916-2007	90	1311.6
RI	Richmond (U.W.S.)	33.62	150.75	1881-2007	126	800.0
KA	Katoomba	33.71	150.31	1885-2007	121	1397.3

(Bureau of Meteorology)

For each of the locations listed in the Table identify each location on the Map below. Use the code for each location to label its position on the map.



Figure 9: Locations of some rainfall record sites (Modified from Bureau of Meteorology)

Now, using a good atlas or an online mapping program such as Google maps, try to identify the geographical features of each location.

OPEN-ENDED QUESTIONS:

1. Is there any evidence that Mangrove Creek dam is located in a “rain shadow” ?
2. In your opinion is this issue relevant to its current value as a storage dam?
Explain your answer.