

Perth water supply catchments rain report Nov 07

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For many articles on misreporting of rainfall and Govt misunderstanding of rainfall trends.
<http://www.warwickhughes.com/blog/?cat=5>

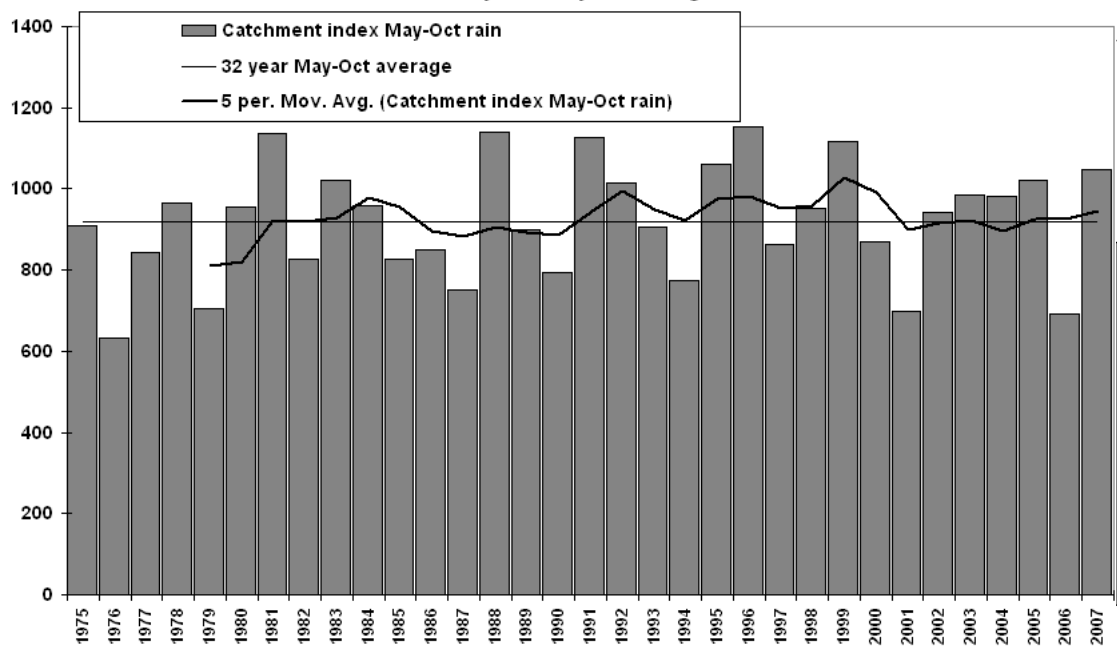
For the last five or six years the WA Govt and its various water Depts. have constantly warned us about “our drying climate”, the “25 year drought”, our “run of dry winters”, etc.

Our Premier stated in Parliament in May that rain in SW WA had stopped See Hansard for Question time in the WA Legislative Assembly, Thursday 17 May 2007. The Premier was deriding the opposition leader for having the temerity to mention the word “dam”, as in water storage dam.

Mr A.J. CARPENTER (WA Premier): “..It has stopped raining in the south west of Western Australia. The rain no longer falls from the sky in sufficient quantities to fill the dams to fill the pipes to fill the cups for people to drink...”

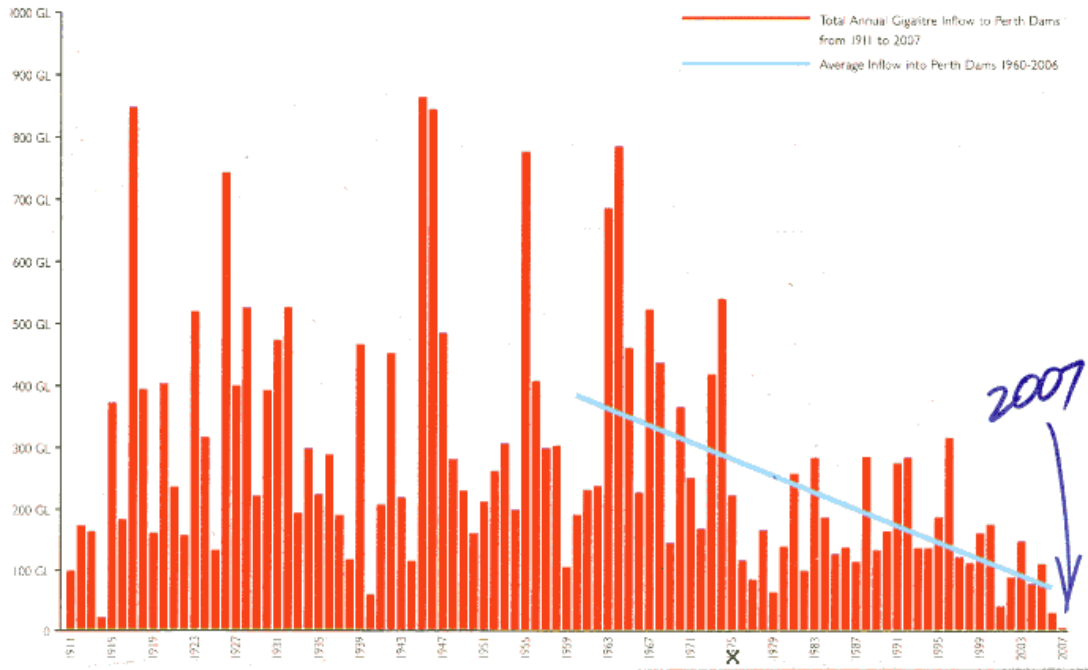
Now look at the reality of Perth catchments region rainfall since 1975, when natural climate variability shifted SW WA rainfall downward about 10% to a new more even rain regime.

Perth water supply dam catchment region May to Oct rainfall in mm, 1975 to 31 Oct 2007 with 5 year moving average, stations used Mundaring, Karnet, Dwellingup.
With May-Oct 32 year average



Remember that the Binningup (just north of Bunbury) desalination plant is proposed to cost over a \$Billion and will produce a miserly 45 GL of water per year at \$2 per kilo litre (\$1.20 at Kwinana)

Contrast the real life situation above with WA Govt Water Corporation propoganda as in this full page press advertisement below from May headed, **Why we can not rely on rain**, the blue line being the Govt opinion of the trend in rain superimposed on their highly questionable dam inflow graphic 1911-2007. I have marked 1975 with an X for comparison with the above graphic of Perth catchment rainfall.



Some calculations.

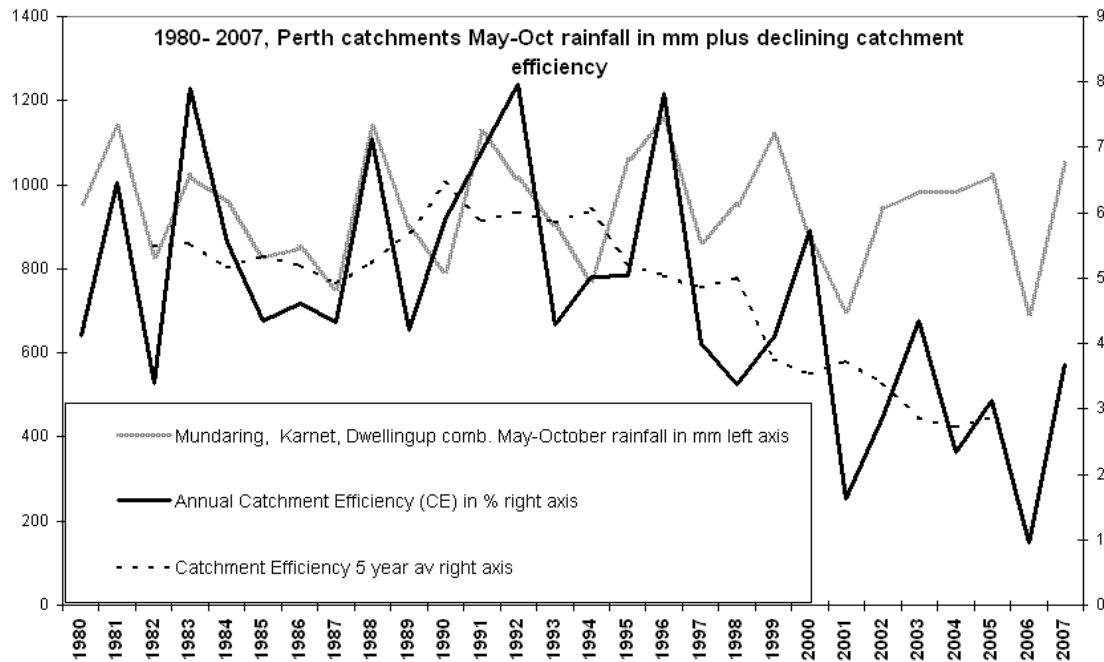
Perth dam catchments are approximately 3500 square kms, which means that 3500 GL of water falls free from Mother Nature into catchments for every metre of rain that falls.

Taking the average of the 32 years 1975-2006 which is 917 mm, 3209.5 GL has fallen free into catchments on average each May to October.

Yields are currently circa 3% meaning that dam inflows are typically 96.28 GL in recent times in an average rain year.

The same average rain in the mid 1990's when yields were 6%, see my graphic above, would have produced 192.5 GL inflow into dams.

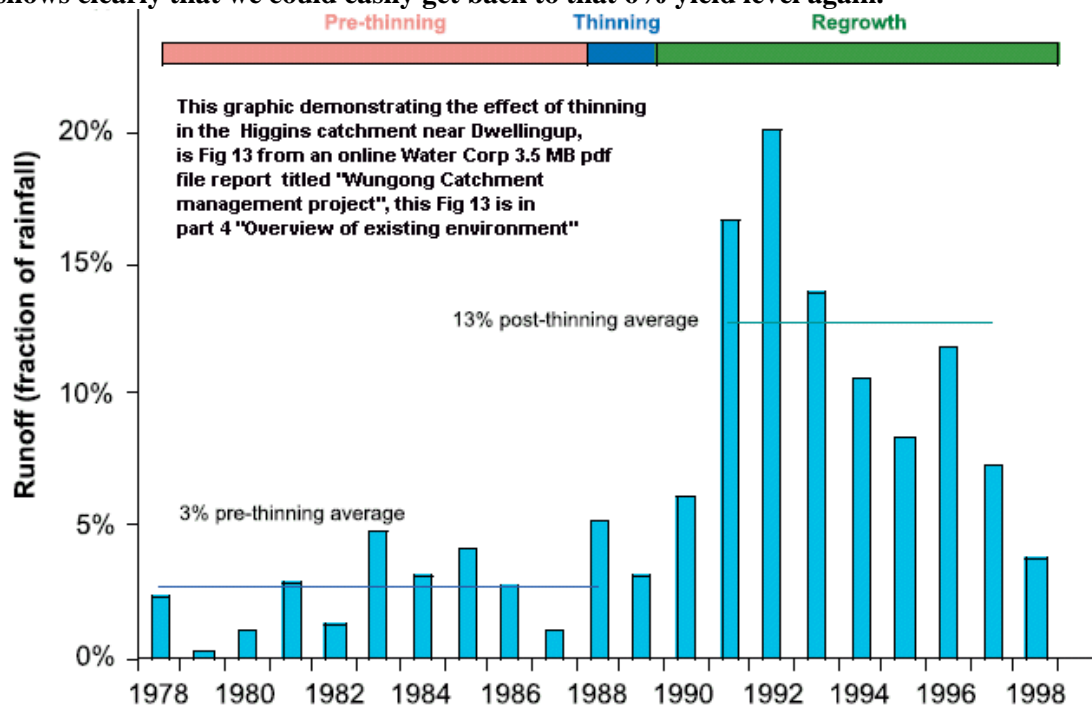
Graphic demonstrates the drastic fall off in catchment yield since the mid 1990's.



Clearly dam yields could be doubled and taken with the other easy options for improving natural water (see points 1, 2 and 3 below), these monstrously expensive, high environmental

impact, electricity consuming desalination factories, have simply been a colossal Govt mistake.

This Water Corporation graphic of the improvement possible by managing catchments shows clearly that we could easily get back to that 6% yield level again.



What the WA Govt should be doing in respect of Perth water supply policy

1. Over-ride Green objections and manage catchments as they were in the mid 1990's thus doubling dam inflows by an amount of water about equal to production from two desalination factories (=90 GL Per year). See graphic of declining catchment yields below.
2. Cut the Gngangara pines forthwith and increase underground water pumping potential by about 100 GL per year, (UWA figures from 2002).
3. Take on board the Agritech proposal to desalinate brackish Wellington dam water but augment it to 100 GL per year by adding similar brackish water from the Murray or Avon where hundreds of GL flow to the sea every year.
4. After commencing 1, 2 and 3 above, abandon plans to build the Binningup seawater desalination factory and save taxpayers over a \$Billion.
5. The Kwinana desal plant should be mothballed.
6. Stop lying to the public about rainfall.
7. Save the public more \$Millions by instructing their Water Corporation to cease pointless media advertising. Get rid of many staff involved in desalination (more \$Millions saved), just keep a watching brief on desalination. Instruct Water Corporation to get on with their job of harvesting available free natural water at the lowest cost possible for the benefit of the WA public.

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