

2006 Drought Summary

22 November 2006

So how dry has it been this year?

Murray system inflows (excluding Menindee and Snowy) this water year (1 June to 31 October 2006) have been 550 GL. This level of inflow is significantly less than anything previously experienced in our 115 years of records as shown below:

	2006	1982	1902	1914	1967	1940	1944	1938	2002	1997	1994
June	108	222	220	199	111	202	289	212	291	202	393
July	134	171	223	264	154	210	405	287	414	224	434
August	108	185	125	247	273	283	238	320	311	324	412
September	123	241	179	220	328	323	195	433	413	730	327
October	77	173	253	139	355	250	197	231	247	266	360
	550	992	1000	1069	1221	1268	1324	1483	1676	1746	1926

Probability of Occurrence

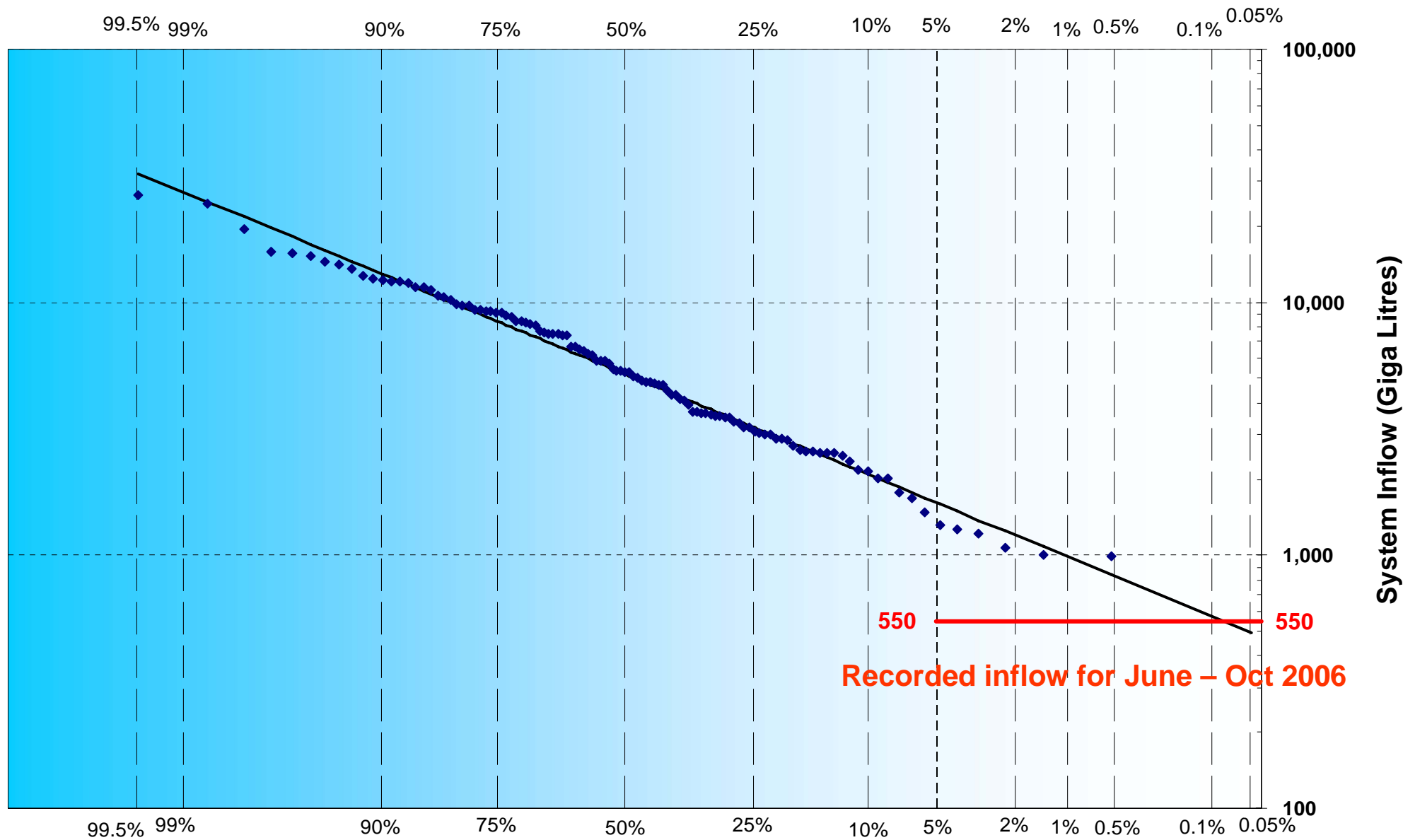
Mathematicians may argue about methods used to determine the probability of occurrence of extreme wet or extreme dry years.

However, the most common method used to determine extreme floods is to plot the data on a log-normal probability scale and determine the “line of best fit”.

This method is often used for planning developments on flood plains where it is common to require floors of buildings to be above the “one in one hundred year flood level”. Levees are often designed to provide one in twenty year, one in fifty year or one in one hundred year security.

Using this same methodology and based on 115 years of record, the probability of occurrence of the current extreme dry inflow sequence in the Murray system is more typical of a one in one thousand year event than it is a one in one hundred year event as shown in Figure 1.

Probability distribution of inflows to the River Murray System (Excluding Snowy Hydro & Meninee Lakes inflow)



◆ Total Murray System Inflows (Excluding Snowy Releases & Menindee Lakes Inflow) - GL - period Jun - Oct