

# Memorandum

To: MWDS, Area Managers, MPE, MCP, MSA, MWSH, MSU (Carl Walters), SWMWG, SIRTEC, GBCMA

From: Monitoring & Drainage Coordinator

Subject: Surface Drain water quality performance against targets – 2006/2007 final

Date: 10 August 2007

## PURPOSE

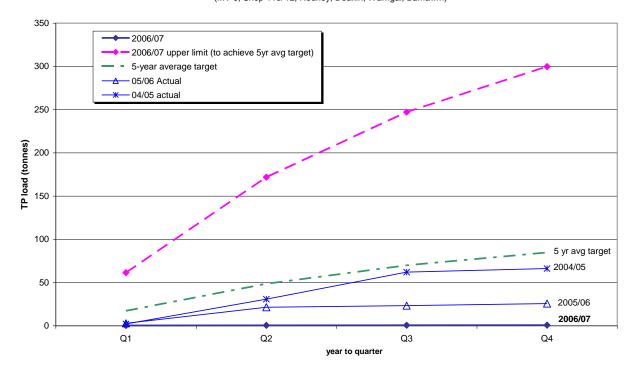
To inform you of the total phosphorus exports from surface drains across G-MW's area for the period July 2006 to June 2007.

### BACKGROUND

A method has been developed for reporting on the performance of surface drains throughout the year in relation to water quality objectives, specifically Total Phosphorus (TP) loads exported. It has been applied in the Shepparton Irrigation Region, where the Goulburn-Broken and Campaspe Water Quality Strategies set targets for TP reduction, and in the Torrumbarry area, where the Loddon Murray L&WM Strategy/Loddon Water Quality Strategy sets targets. Progress against targets has been measured by considering 5-year average loads for all drains except Barr Creek, for which the details have yet to be determined.

#### DISCUSSION

From July 2006 to June 2007 the following performance has been measured against the annual targets – phosphorus export from SIR drains was less than 1% of the long term target:



Shepparton Irrigation Region Drains Total Phosphorus export 2006/07 (MV 6, Shep 11& 12, Rodney, Deakin, Warrigal, Barnawm)

Irrigation Area (drains <sup>1</sup> )	Target annual TP load for 2006/07 (kg) <sup>2</sup>	Measured TP outfall to June 2007 (kg)	TP outfall as % of annual target <sup>3</sup>	Annual flow to June 2007 (ML)
Central Goulburn (Deakin, Rodney, Warrigal)	166,840	333	0.2%	2,310
Murray Valley (Dr 6)	50,950	382	0.7%	486
Rochester (Lockington-Bamawm)	44,015	6.2	0.01%	33
Shepparton (Dr 11 & 12)	37,925	13.3	0.04%	32
SIR sub-total	299,730	735	0.2%	2,861
Torrumbarry (Barr Ck)	10,000	247	2.5%	319

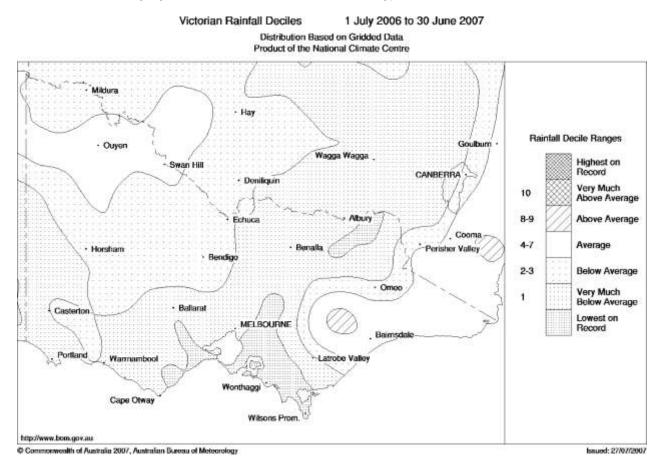
Notes:

1. Only drains with flow and TP monitoring are reported against.

2. Being below target means performance is better than expected (ie. less nutrient export).

3. All *annual* targets are more than double the long-term *strategy* target because loads in recent years have been very low which results in the 5-year average being well below target.

Rainfall during this same period has been below to well below average (40% to 80% of mean), as shown in the following figure from the Bureau of Meteorology.



#### In summary, all areas were at record levels below target phosphorus export rates.

#### RECOMMENDATION

To note.

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