



SALTWATCH 2008

BLACKWOOD CATCHMENT SALINITY SNAPSHOT

RIBBONS OF BLUE/WATERWATCH

The longest river in the Southwest of WA the Blackwood stretches over 330kms through a catchment area of 28000 square kilometres, discharging around 740 GL of water annually. Soils, topography, vegetation, rainfall and land use vary dramatically. Annual rainfall ranges from 1400mm on the coast to only 350mm inland.

WAPRES is the proud sponsor of the Blackwood Waterwatch program which is also funded through South West Catchments Council. WAPRES (formerly Bunnings) initiated the Blackwood Program in 1991 as a commitment to community. The Blackwood Program is an integral part of a National network of Ribbons of Blue/ Waterwatch organisations who work closely with many community, government, school and stakeholder groups to ensure continued monitoring and care of our precious waterways.

Every June in WA we conduct an annual snapshot of salinity conditions through the Blackwood and its tributaries, selecting locations indicative of the bigger picture. This gives a helpful overview of changes across the catchment and highlights areas in need of investigation and assistance.

Electrical Conductivity is a measurement of dissolved salts which conduct electrical charge. The following guide indicates sample ratings:

Approx Range Conductivity uS/cm (microsiemens per cm)	Status
0-800	Fresh
800-1800	Marginal
1800-5000	Brackish
>5000	Saline

The 2008 results indicate the entire spectrum of salinity ranging from Hyper Saline in the Upper and mid- Catchment freshening downstream as it travels through areas fed by vegetated freshwater tributaries. This is an anomaly as we would normally expect downstream levels to be concentrated by upstream activity. Fortunately the Lower Catchment is still heavily vegetated by State Forests of Marri, Jarrah and She oak with creek flow sheltered by prolific Teatree and native River Gums and enjoying relatively heavy seasonal rainfall. Widespread clearing of 85% of the inland Yilgarn Plateau for broad scale agriculture accounts for the rise in salinity. The forested valleys of the Darling Range rejuvenate the River as it winds towards the estuarine Hardy inlet, joined by Scott River at the river mouth at Augusta.