

Supplementary material 1. Results of Shapiro–Wilk test for normality on concentration and \log_{10} reduction values for *Escherichia coli*, F-RNA bacteriophage and aerobic spore-forming bacteria in the inlet, HRAP1, HRAP2 and in series measured by either Australian Water Quality Centre or Flinders University of South Australia at the HRAP system in Kingston on Murray, SA between 1 August and 10 October 2013. Results of Shapiro–Wilk test for normality on inlet, HRAP1 and HRAP2 BOD₅ concentration measured by Flinders University of South Australia concurrently is also included.

Samples	Statistic	df	Significance
FUSA inlet <i>Escherichia coli</i> concentration	.938	6	.644
FUSA inlet F-RNA bacteriophage concentration	.820	6	.089
AWQC inlet <i>Escherichia coli</i> concentration	.875	6	.246
AWQC inlet F-RNA bacteriophage concentration	.886	6	.297
AWQC inlet aerobic spore-forming bacteria concentration	.956	6	.789
FUSA HRAP1 <i>Escherichia coli</i> concentration	.929	20	.150
FUSA HRAP2 <i>Escherichia coli</i> concentration	.980	20	.939
FUSA HRAP1 F-RNA bacteriophage concentration	.977	20	.885
FUSA HRAP2 F-RNA bacteriophage concentration	.965	20	.654
FUSA HRAP1 <i>Escherichia coli</i> \log_{10} reduction values	.927	20	.138
FUSA HRAP2 <i>Escherichia coli</i> \log_{10} reduction values	.941	20	.254
FUSA in series <i>Escherichia coli</i> \log_{10} reduction values	.926	20	.130
FUSA HRAP1 F-RNA bacteriophage \log_{10} reduction values	.938	20	.218
FUSA HRAP2 F-RNA bacteriophage \log_{10} reduction values	.933	20	.178
FUSA in series F-RNA bacteriophage \log_{10} reduction values	.973	20	.823
AWQC HRAP1 <i>Escherichia coli</i> concentration	.942	20	.258
AWQC HRAP2 <i>Escherichia coli</i> concentration	.914	20	.076
AWQC HRAP1 F-RNA bacteriophage concentration	.950	20	.362
AWQC HRAP2 F-RNA bacteriophage concentration	.899	20	.040
AWQC HRAP1 <i>Escherichia coli</i> \log_{10} reduction values	.935	20	.193
AWQC HRAP2 <i>Escherichia coli</i> \log_{10} reduction values	.826	20	.002
AWQC in series <i>Escherichia coli</i> \log_{10} reduction values	.924	20	.119
AWQC HRAP1 F-RNA bacteriophage \log_{10} reduction values	.941	20	.253
AWQC HRAP2 F-RNA bacteriophage \log_{10} reduction values	.835	20	.003
AWQC in series F-RNA bacteriophage \log_{10} reduction values	.821	20	.002
FUSA inlet BOD ₅ concentration	.924	6	.534
FUSA HRAP1 BOD ₅ concentration	.755	20	.000
FUSA HRAP2 BOD ₅ concentration	.842	20	.004