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COOPERATIVE RESEARCH CENTRE FOR
CATCHMENT HYDROLOGY

WATER AND SALT BALANCES OF THE CATCHMENTS OF THE MURRAY-DARLING BASIN

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ABSTRACT

Water and salt balances for 89 stations within 18 of the 26 major sub-basins of the Murray-Darling Basin are presented. They have been calculated on an annual basis for the period 1985-94, where data were available. Salt input was assumed to occur via rainfall, and salt output via streamflow. The key parameters describing catchment salinity status which result from the analyses are the salt output/input (O/I) ratio and salt output per area. In the Namoi, Murrumbidgee, Loddon and Campaspe sub-basins, attempts were made to incorporate the effects of the large diversions of streamflow for irrigation, industrial and domestic supplies. No interpretation of the results is given.

1. Introduction

Increasing stream salinity in the Murray-Darling Basin is a widely recognised problem of great concern to the Australian community. The severity of the problem was illustrated by Morton and Cunningham (1985) who found that salinity increases of >2% occurred in the lower reaches of the River Murray between 1970 and the mid 1980's. The extent of the problem was further emphasised by the work of Mackay *et al*. (1988) which showed that the median river salinity increased with distance downstream from the headwaters in the Great Dividing Range.

In response to worsening salinity in the Basin, the Murray-Darling Basin Commission (MDBC) formulated the Salinity and Drainage Strategy (MDBMC, 1987). Underpinning the Strategy was the recognition that there would be an underlying increase in stream salinities for several decades as a result of land management practices already in place. It was assumed that much of this increase would be the result of deep drainage from the large irrigation areas found throughout the Basin. In contrast, the impact of dryland salinity on stream salinisation was thought to be much less, with an increase in River Murray salinity of only 40 $\mu S\ cm^{-1}$ at Morgan over the next 50 years being allowed for in the Strategy. However, numerous studies over the last decade suggest that dryland salinity will increase dramatically in the Basin. For example, conservative estimates suggest that the Victorian Riverine Plains alone will contribute a salinity increase of up to 140 $\mu S\ cm^{-1}$ at Morgan over the next 50 to 100 years (Williamson *et al.*, 1997). Moreover, preliminary results from recent MDBC sponsored work suggests that stream salinities have also been rising in recent years in many of the catchments in southern New South Wales, presumably in response to the increasing outbreaks of dryland salinity in this region. While it is too soon to accurately predict what impacts these will have on the salinity of the River Murray, early indications are that they may become a significant management concern, thus rendering existing and future salt mitigation schemes much less effective than originally designed.

The possibility that dryland salinity may have a greater impact on future stream salinities in the Basin has led the MDBC to sponsor (through the NRMS Investigation and Education Program) a joint CSIRO/NSW Dept. of Land and Water Conservation/Qld Dept. of Natural Resources/Sinclair Knight Merz Ltd/Australian Geological Survey project aimed at evaluating and predicting the historic and future trends in saltloads and concentrations of streamflow throughout the Basin. One of the primary objectives of the project was to develop salt and water balances for the major catchments of the Basin. The salt and water balances were calculated from existing data for the years 1985-94, the period with maximum data over the whole Basin.

Water and salt inputs to a catchment were taken to be rainfall, and in some instances, diversions of water (and hence salt) from other catchments. Water and salt outputs were taken as those in streamflow, and where appropriate, diversions of water out of the catchment. The ratio of the salt outputs to inputs (referred to as the salt O/I ratio) is a key indicator of catchment salinity status (Peck and Hurle, 1973). Prior to clearing of native vegetation, the ratio is usually close to one (ie. in salt balance) with salt being stored in both the soil and groundwater of the catchment. After clearing, the larger fluxes of water resulting from increased recharge and runoff flushes these salt stores, leading to a salt O/I ratio of greater than one. Peck and Hurle (1973) observed ratios

as high as 20 in highly salinised catchments. After these salt stores are leached, the catchment returns to a new salt equilibrium and hence the salt O/I should return to a figure close to one. It may take from 20 years to tens of thousands of years to reach a new salt equilibrium depending on the size of the catchment. In all cases one would expect the new salt equilibrium to take much longer to be established than for a new hydrologic equilibrium to be reached. A salt O/I ratio greater than one is an indication of the existing (or impeding) salinisation of a catchment. The water O/I ratio is essentially the runoff coefficient. Another useful indicator of the salinity status of a catchment is the salt output per unit area. This is particularly useful for identifying the major source areas of a catchment for salt.

It should be recognised that the data upon which the balances were derived were often of low quality. For example, the stream salinity data were often only monthly at best, and rainfall salinity data were only available for 20 stations and were from short-term sampling conducted well before the study period (1974-75). The results are therefore reliable only as general trends, with the salt O/I ratio and salt output per unit area best considered as "indicators" of catchment salinity status.

The purpose of this report is to present the results from this component of the NRMS study. We present only the catchment locations, the methods utilised and the results of the salt and water balances. Full interpretation of the results will be the subject of a subsequent report.

2. Study Area

Salt and water balances were calculated for 101 stream gauging stations throughout the Murray-Darling Basin. The stations were selected so as to obtain balances at the outlets of 18 of the 26 major sub-basins (2 of the sub-basins were excluded due to insufficient data (Paroo River and Warrego River); 5 were excluded due to lack of surface drainage to the River Murray (Lake George, Benanee, Mallee, Wimmera-Avon and Lower Murray River) and one (Murray-Riverina) was excluded due to the complexity of the inflows from other sub-basins). In most cases, balances were calculated at a number of other locations within each of these sub-basins. In four of the sub-basins (Loddon River, Campaspe River, Murrumbidgee River and Namoi River) a greater number of stations were analysed and in more detail with attempts being made to correct for the effects of diversion of water (and hence salt) for irrigation and urban water supplies. In some instances, outflow occurred via more than one stream necessitating the amalgamation of a number of stations (resulting in the total of 89 "stations" reported here).

The locations of many of the stations are shown in Figure 1. More detailed location maps for the Namoi, Murrumbidgee, Loddon, and Campaspe River sub-basins are shown in Figures 2 to 5.

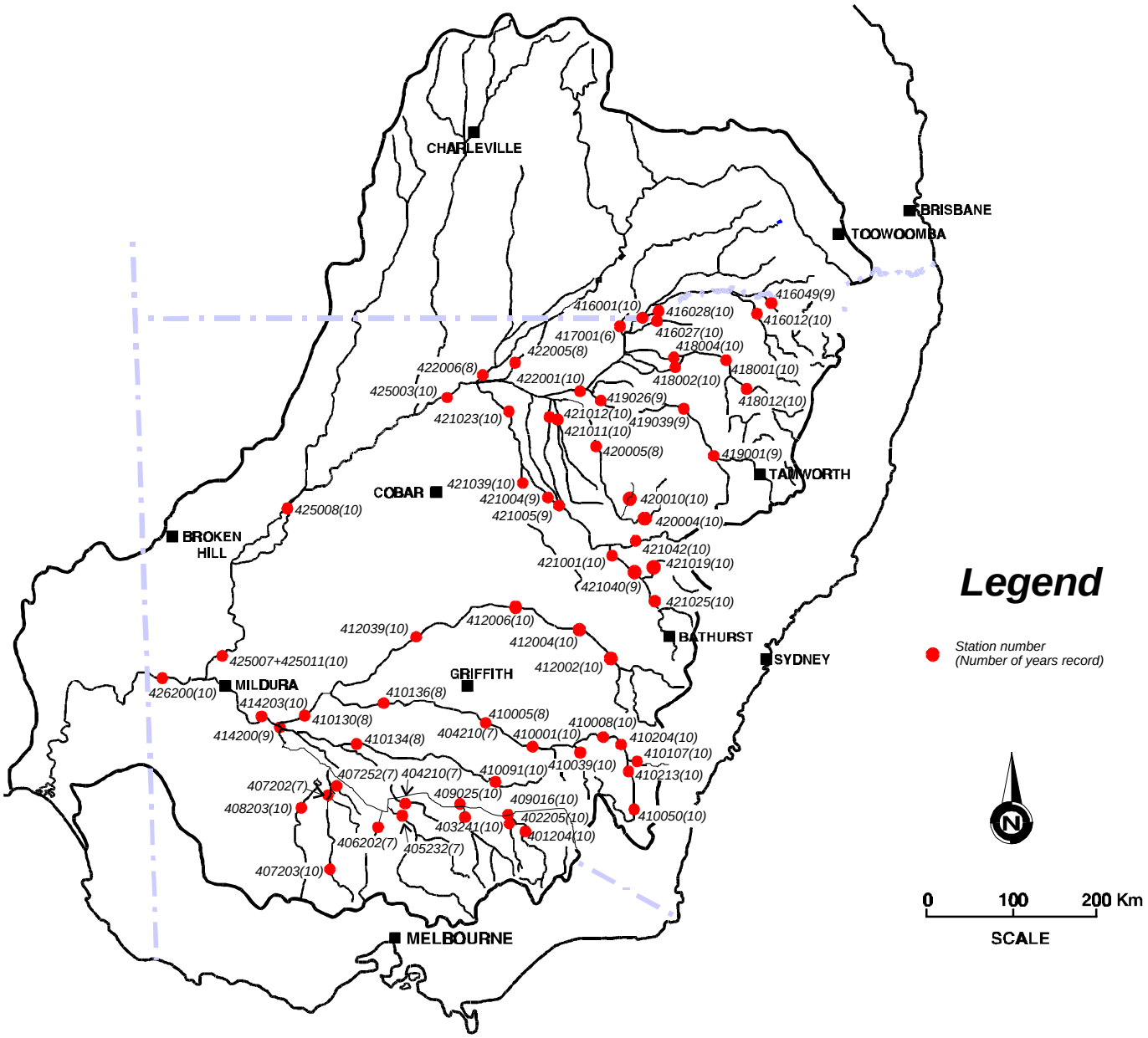


Figure 1: Locations of major stream gauging stations (and years of available record) in the Murray-Darling Basin where salt and water balances have been carried out.

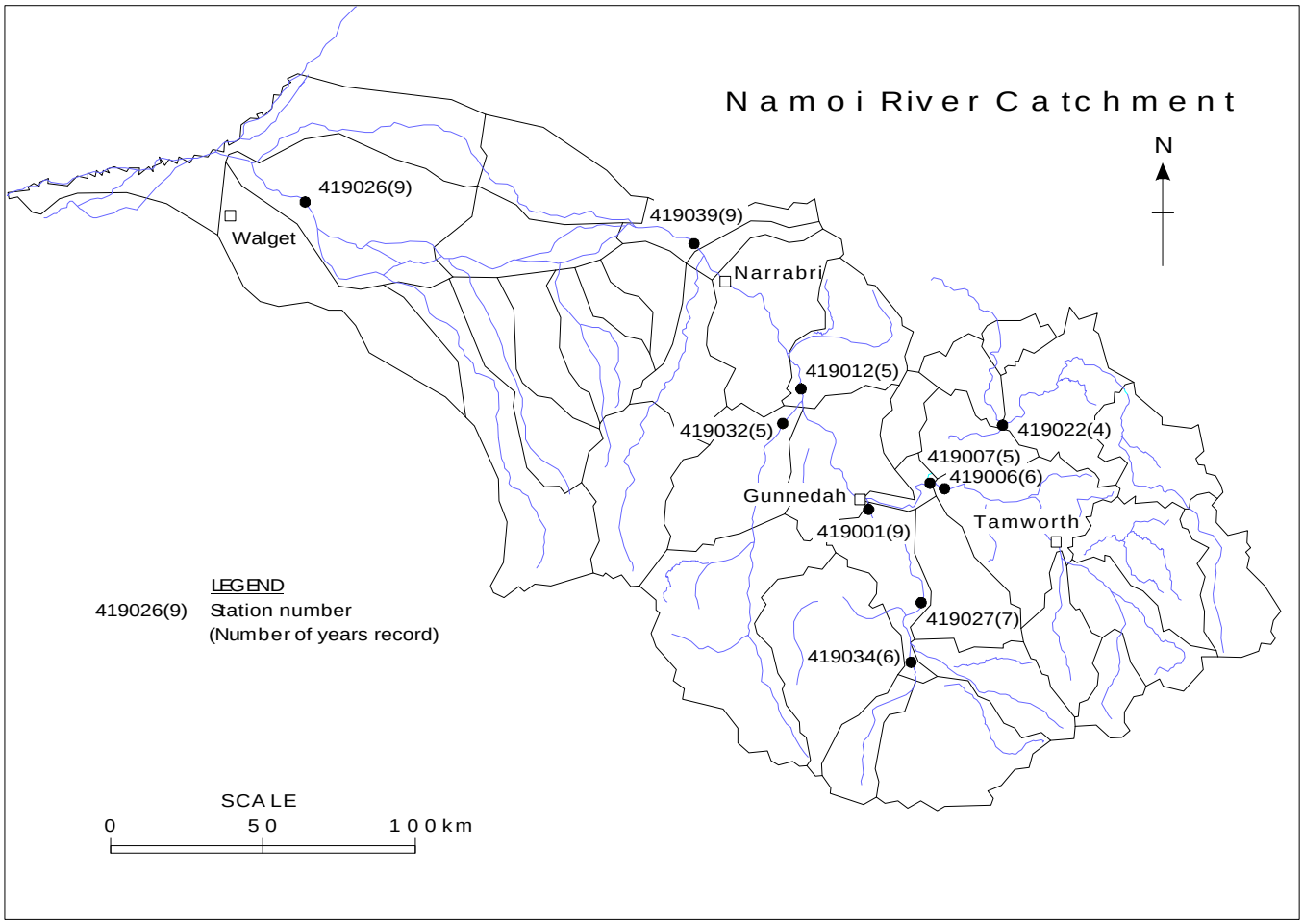


Figure 2: Locations of stream gauging stations (and years of available record) in the Namoi River sub-basin where salt and water balances have been carried out.

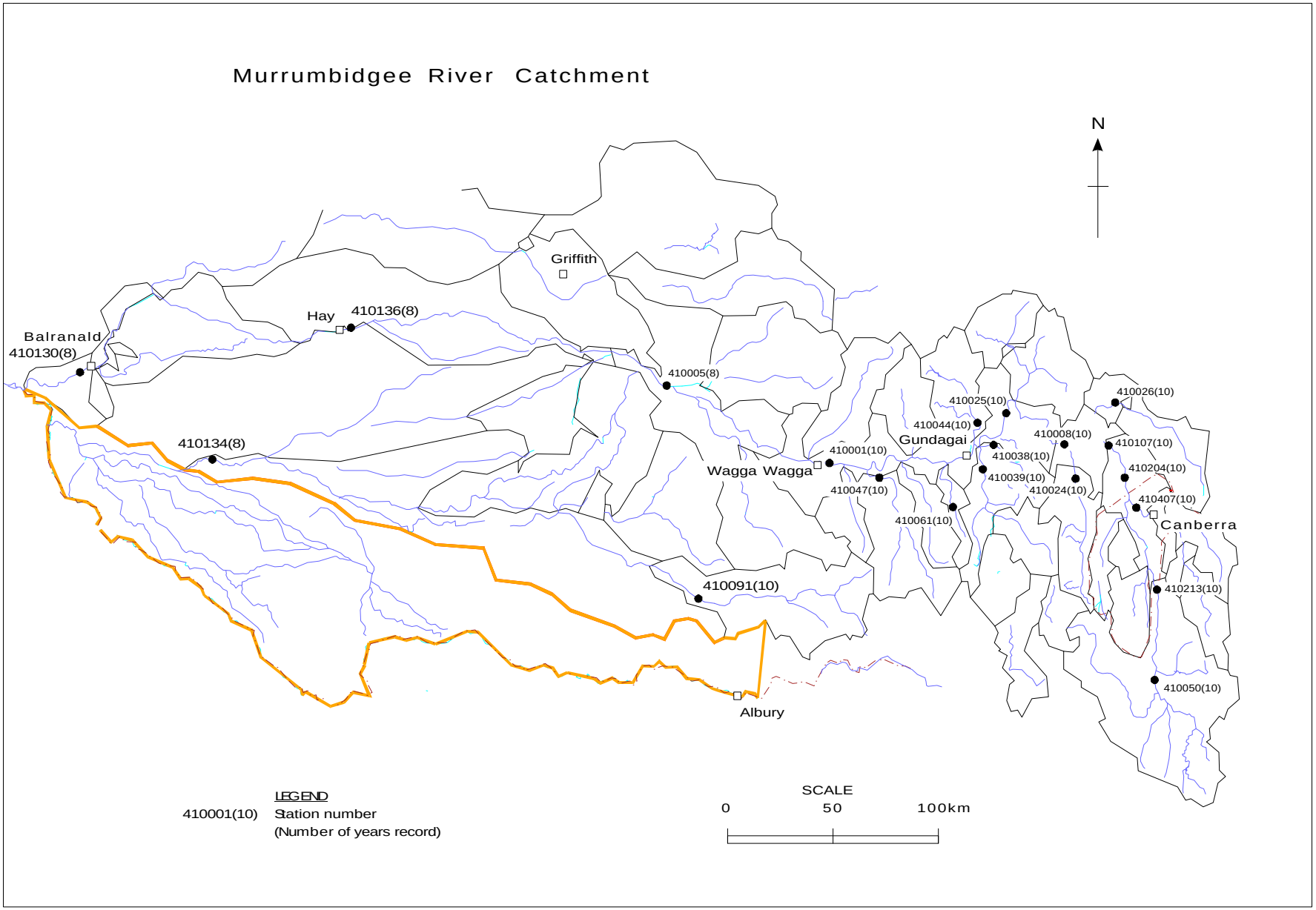


Figure 3: Locations of stream gauging stations (and years of available record) in the Murrumbidgee River sub-basin where salt and water balances have been carried out.

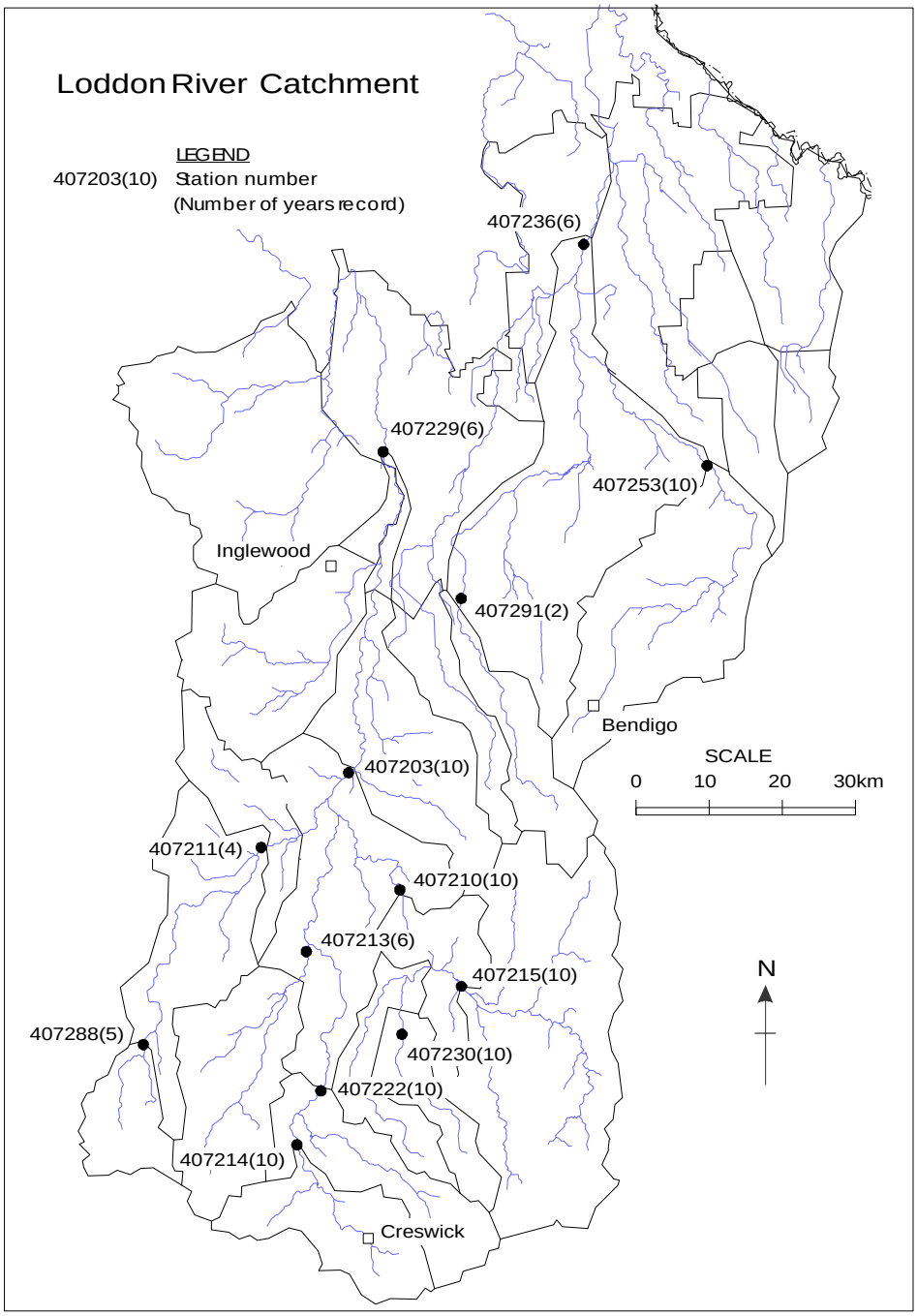


Figure 4: Locations of stream gauging stations (and years of available record) in the Loddon River sub-basin where salt and water balances have been carried out.

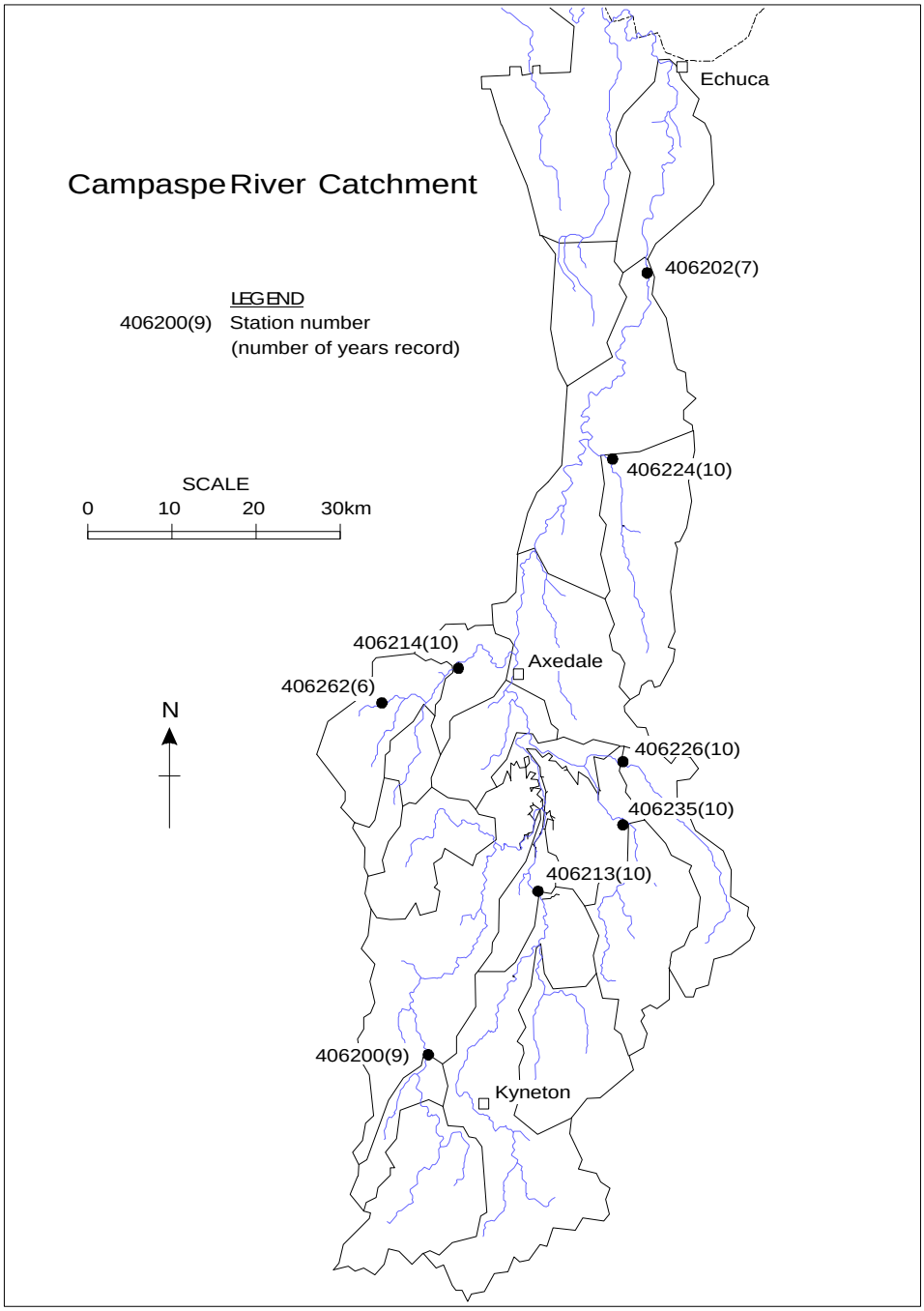


Figure 5: Locations of stream gauging stations (and years of available record) in the Campaspe River sub-basin where salt and water balances have been carried out.

3. Methods

3.1 *Water and Salt Inputs from Rainfall*

Inputs of water and salt to catchments from rainfall were estimated using a GIS-based approach utilising available coverages of interpolated rainfall and existing measurements of salt in rainfall from 18 sites within the Basin (Blackburn and McLeod, 1983). Only sites considered by Simpson and Herczeg (1994) to be uncontaminated by resuspended terrestrial dust were used for rainfall salt concentrations.

Digital maps of the boundaries of the Murray-Darling Basin and its 26 sub-basins were obtained from the Murray-Darling Basin Commission on an Albers projection. This was chosen as the base map for the project and all other areal information acquired was converted to this projection. More detailed catchment boundary maps for the New South Wales sub-basins were obtained in digital form from the New South Wales Department of Land and Water Conservation. As no detailed catchment boundary maps were available for the Victorian sub-basins, the catchment boundaries of the Loddon-Campaspe sub-basin were digitised from 1:100,000 topographic maps. Monthly interpolated rainfall surfaces for Australia were obtained from the Queensland Department of Primary Industries Drought Research Centre for the period 1980-1995. These were available on a 0.01 degree (approximately 5km) grid resolution (approximately 5km) in units of 0.1 mm.

All GIS work was performed in ARC/INFO (ESRI, 1992) using the following approach. The polygons of the coverage for the entire Murray-Darling Basin were converted to a 5 km grid with cell values equal to the unique catchment polygon identifier. The monthly rainfall surface grids were summed to provide annual totals, and then projected and clipped to the boundary of the Murray Darling Basin. An ARC/INFO Macro Language (AML) routine was then used to calculate the area-weighted annual rainfall for each sub-basin. This was then multiplied by the rainfall salt concentration of a station either within or near the catchment. This procedure was then applied at a greater level of detail within sub-basins for each catchment where salt output via streamflow was determined.

3.2 *Water and Salt Outputs in Streamflow*

Daily flow data were available for all stations and these were summed to provide annual water output at each station.

With very few exceptions, salt concentration data were intermittent, often no better than monthly in frequency. For this reason, saltloads were estimated using the following procedure. When the interval between two electrical conductivity samples was less than 7 days, the missing data were interpolated (taking into account the flow regime in the missing period) and daily saltload was calculated as the product of daily flow and salt concentration. The salt concentration was determined from the electrical conductivity in $\mu S\ cm^{-1}$ at 25 °C multiplied by a conversion factor of 0.6 (Mackay *et al*., 1988). Where the gaps in the electrical conductivity measurements were greater than 7 days, we used regression analysis to establish a relationship between saltload and streamflow based on the intermittent data sets. Generally linear regressions were

carried out, although on several occasions polynomial regression provided better fits and were used instead (see Figure 8). For some stations the following function was used to fit the data:

$$Saltload = a * Streamflow / (1 + b * Streamflow) \quad (1)$$

where *a* and *b* are coefficients. This function has the property of saltload being finite and positive when the streamflow becomes very large (as compared to a polynomial function). It was also noted that for some stations the maximum flow in the continuous data set exceeded that in the intermittent data set (the data set used for the regression analysis). When regression was used to calculate saltload, it could introduce large errors during the periods of high flow. To minimise these errors, we set the saltload to the maximum value obtained from the regression analysis.

The regression equations were used to calculate daily saltload from continuous daily flow data. In all cases, saltload was computed in units of tonnes day^{-1}. For most stations, there were a number of electrical conductivity measurements available so the sample size of the data sets used in each of the regressions generally exceeded 50 data points. For most of the stations, the relationships between daily saltload and streamflow were very good and the coefficient of determination was usually greater than 0.90 (Figure 6) However, in some cases, we had to fit the data with more than one regression line to reflect the fact that different relationships existed for low flow and high flow (Figure 7). There were several stations in Victoria where the relationships between saltload and flow showed poor correlation when all the data were used in the regression analysis. For these stations, each data set was broken into four sub-sets based on seasons and then regression analysis was applied to each of the sub data sets. As a result, reasonably good correlations was obtained for these stations (Figure 8). We note that the change in saltload and streamflow relationship with season may help us to understand the process of salt accumulation in the catchments.

There existed a very small number of special cases where none of the above methods were successful. We then used non-linear regression (*log-log*) between the electrical conductivity and flow to interpolate water quality data in the continuous data sets. The saltload was calculated as the product of daily flow and salt concentration.

Finally, daily saltloads were summed to produce annual saltloads for each station.

3.3 *Water Outputs and Inputs by Diversions*

Diversion of water (and hence salt) for irrigation, urban and rural domestic use, stock supplies and industry occurs in many of the catchments of the Murray-Darling Basin. In addition, there are transfers of water between catchments, both within sub-basins and between sub-basins; notable examples include the Snowy Mountains Scheme (NSW/Vic.) and the Waranga Western Channel (Vic.). Whilst the water diverted is typically of relatively low salinity, the large volumes of water involved means that there can be significant masses of salt moved out of the streams and onto the land.

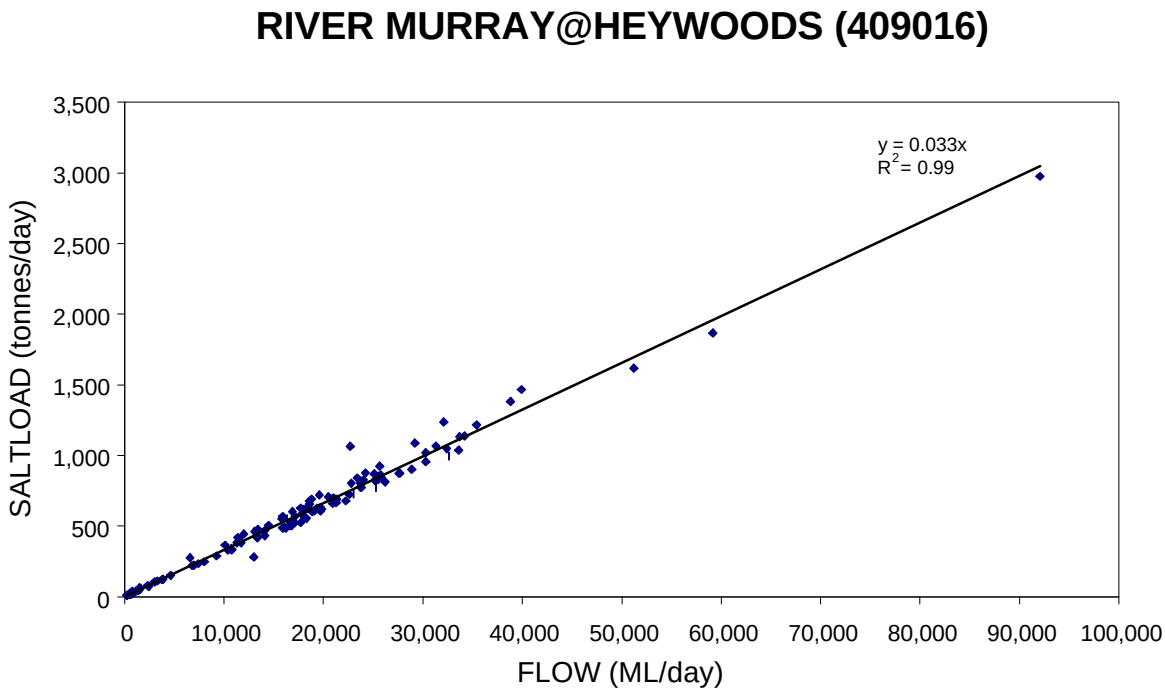
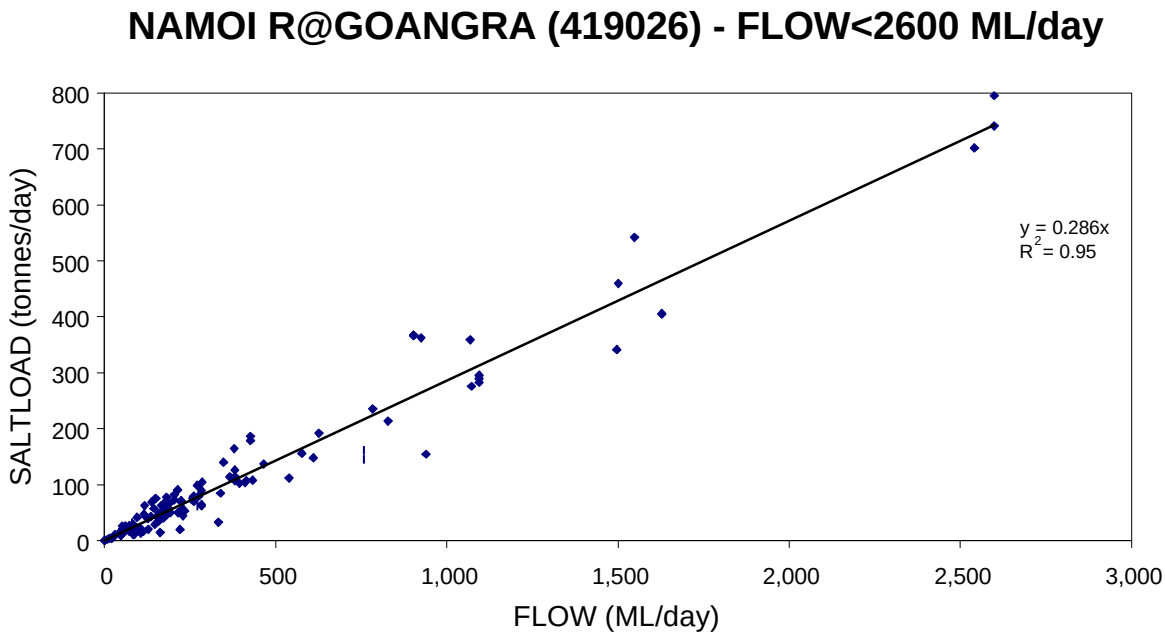


Figure 6: Regression of saltload with flow for station 409016 (River Murray @ Heywoods).



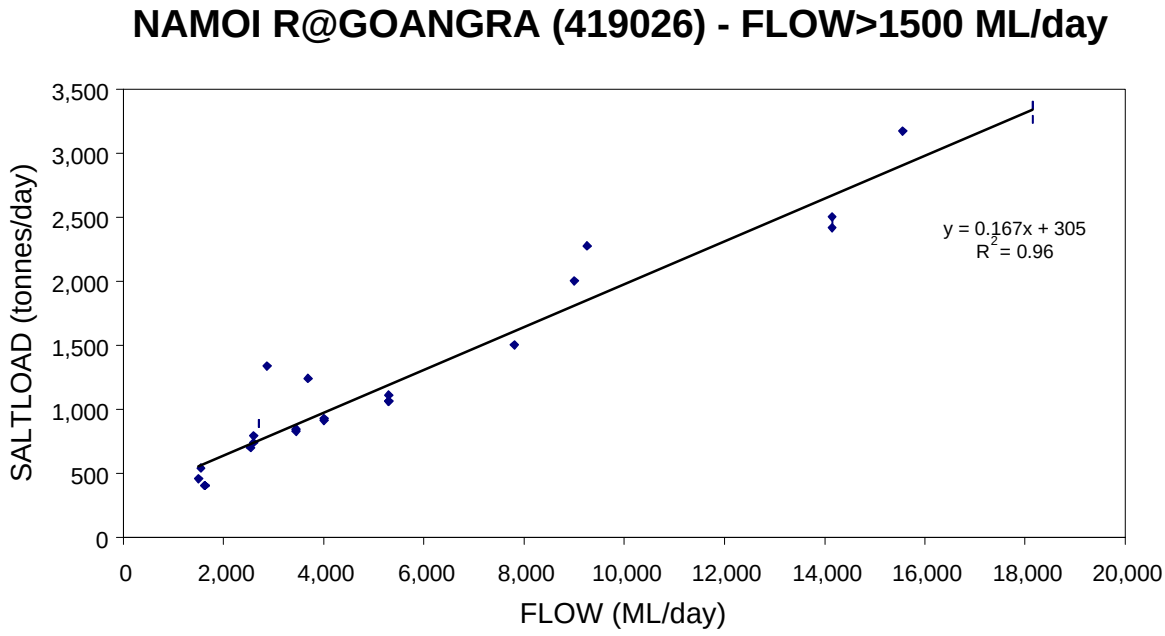


Figure 7: Regressions of saltload with flow (for low and high flow conditions) for station 419026 (Namoi River @ Goandra).

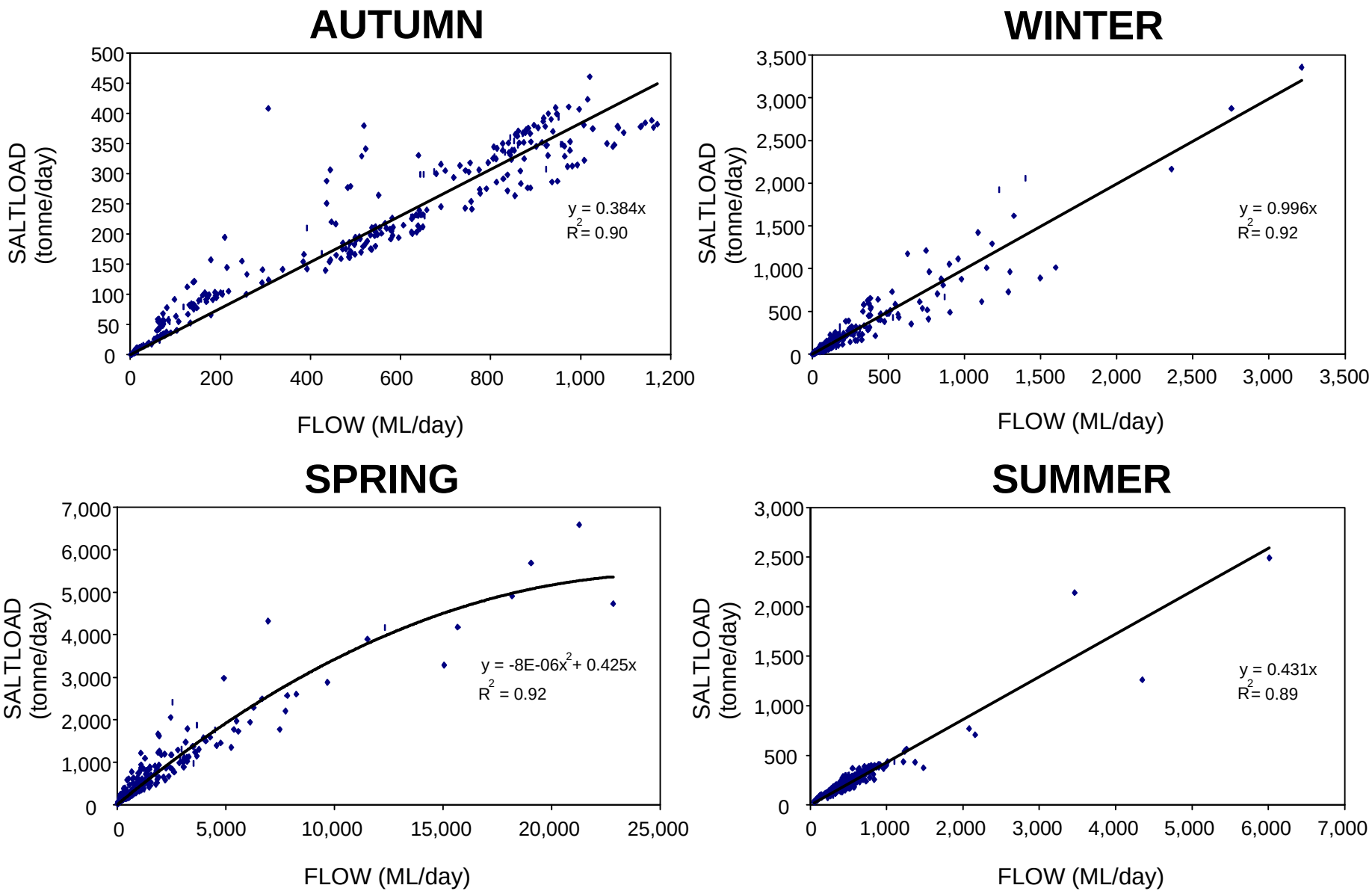


Figure 8: Regressions of saltload with flow (for each season) for station 407229 (Loddon River @ Serpentine Weir).

The salt and water balance analyses seek to determine the quantities of salt and water which are mobilised from within a catchment. Diversions remove water and salt from the river which are not, therefore, accounted for in the streamflow measurement at the gauging station. Transfers into the catchment from external sources add water and salt to that originated within the catchment. Consequently, diversions and transfers needed to be added to, or subtracted from, the gauged streamflow and saltload for a catchment.

The complexities of the water supply systems and the generally poor quality of the flow and salinity data sets means that accounting for the effects of diversions can be extremely difficult and is probably the subject of a project in itself. However, as an example, attempts have been made to include diversions and transfers in the water and salt balance calculations for the Namoi, Murrumbidgee, Loddon, and Campaspe River sub-basins. Three assumptions are implicit in our incorporation of diversions: (i) the water and salt diverted from a stream for irrigation and other uses do not contribute to the return flow to the stream within the time of the 10 year analysis period; (ii) salt and water transferred in from outside the catchment have been accounted for as being added directly to the streamflow rather than being included as a component of the salt and water input for the catchment; and (iii) no attempt has been made to include an estimate of the net movement of water and salt out of a catchment in groundwater flow.

In the case of the Victorian stations, Sinclair Knight Merz provided diversion data (flow, and some salinity as EC for the period 1988-94) and maps (with location reference numbers) for the Broken, Goulburn, Campaspe, Loddon and Avoca River sub-basins from the Victorian Government Bulk Carriers database. The data were annual flow in ML for 1988 to 1994. The major diversions accounted for are from the Goulburn and Campaspe Rivers for the Waranga Western Main Channel which is then distributed into Campaspe, Loddon and Avoca River basins. The diversions from the Coliban River (via the Coliban Main Channel) and the Ovens River for irrigation, domestic, stock, industrial and town water supplies were obtained for 1985 to July 1991 from the Annual Reports of the MDBC. Diversions from the River Murray were obtained from both the Sinclair Knight Merz data (for the Yarrawonga Channel, and the National Channel at Torrumbarry), and MDBC Annual Reports for numerous locations along the river. In the Campaspe River Basin, data were not available for the Eppalock-Bendigo pipeline. In the Loddon River Basin the diversions from Laanecoorie, Cairn Curran and Tullaroop Reservoirs were not provided. These have been managed by local boards rather than the Rural Water Commission. The Gunbower Creek system could not be analysed due to the absence of data for the input from the National Channel near Torrumbarry Weir to Kow Swamp and the upper reaches of the Gunbower Creek and the diversion at Cohuna Weir into No.3 Channel. The MDBC Annual reports give data (1985 to 1990/91) for diversions into the National Channel and also the irrigation returns to the River Murray via Gunbower Creek at Koondrook.

For New South Wales, the Department of Land and Water Conservation provided data and associated maps of diversions for reaches in the Murrumbidgee, Lachlan, Macquarie-Castlereagh, Namoi, Gwydir and other Border Rivers, and the Darling

Rivers. These were variable in length of record available over the period 1985 to 1994. Diversions from the River Murray into NSW, and in some river basins in NSW, were available for 1985 to 1990/91 from the MDBC Annual reports. In addition some complementary information was available from these Annual Reports, for example, the diversions for the Jemalong and Wyldes Plains Irrigation Districts.

In the case of the Snowy Mountains Scheme, The MDBC provided good data for the period 1985-95 for the transfers of water within the Snowy Mountains Scheme and specifically the net contributions to the River Murray and the Murrumbidgee River including the Tumut River. Water is transferred into the Upper Murray at Swampy Plains River, from the Tooma River (in the Upper Murray) and Lake Eucumbene into the Tumut River at Tumut Pond Reservoir, and from the Upper Murrumbidgee via Tantangara Reservoir to Lake Eucumbene. The Snowy Mountain Authority provided limited recent salinity data for some reservoirs, and some documented data from the early construction phases of the scheme. The salinity of the reservoirs was quite variable with a range in measured values of about an order of magnitude. This may reflect the location or depth of sampling rather than the true salinity of these very large bodies of water. However, the data suggest that salinity of the Snowy River water may be higher than for runoff in streams further inland such as the Tumut River catchment. The absence of suitable measured values led to the estimation of salinity using the following rationale. The streams in the upper parts of the River Murray (Mitta Mitta, Kiewa Rivers etc) showed annual mean salinity values (flow weighted) of about 30 mg L^{-1} while the Tumut River, for combined runoff and transferred Snowy Scheme water, had annual mean salinity of 23 ($\pm$1) mg L^{-1} (flow weighted). For the Tumut River at the flow equivalent to the average daily transfer flow volume, the salinity was found to be about 25 mg L^{-1}. The mean salinity value for Tumut Pond was 19 mg L^{-1} (31 samples in 1960-62) and for Eucumbene Reservoir was 39 mg L^{-1} (28 samples in 1958-61). The 42 samples taken from Tumut 2 Tail Race from 1962-67 had mean salinity of 24 mg L^{-1}. In the absence of measured salinity in the 1985-94 period, the salinity of the water transferred from the Snowy Scheme was taken to be 25 mg L^{-1}.

4. Results

The results are presented in Tables 1 to 89. The terminology used in the tables is as follows:

Drainage Division: Sub-basin of the Murray-Darling Basin.

Station: Gauging station(s) number and name.

Contributing Area: Catchment area (km^2) contributing to the gauging station.

Saltfall Station: Rainfall station used for salt input concentration (Saltfall Concentration, taken from Blackburn and McLeod (1983)).

Year: Year.

Rainfall: Areally-averaged rainfall (mm) for the Contributing Area to the Station.

Rainfall Salt Input: Total salt input (tonnes) to the catchment calculated as Rainfall*Contributing Area*Saltfall Concentration.

Rainfall Water Input: Total water input (ML) to the catchment calculated as Rainfall*Contributing Area.

Streamflow Salt Output: Total salt output (tonnes) from the catchment in streamflow.

Streamflow Water Output: Total streamflow (ML) from the catchment.

Diversion Salt: Total saltload (tonnes) diverted from (+ve) or to (-ve) streams within the Contributing Area.

Diversion Water: Total streamflow (ML) diverted from (+ve) or to (-ve) streams within the Contributing Area.

Total Salt Output: Total salt output (tonnes) from the catchment. When diversion data is present it is calculated as Streamflow Salt Output+Diversion Salt, otherwise is the same as Streamflow Salt Output.

Total Water Output: Total water output (ML) from the catchment. When diversion data is present it is calculated as Streamflow Water Output+Diversion Water, otherwise is the same as Streamflow Water Output.

Total SO/SI: Salt output to input ratio calculated as Total Salt Output/Rainfall Salt Input.

Total WO/WI: Water output to input ratio calculated as Total Water Output/Rainfall Water Input.

Total Output/Area: Salt output per unit area of the catchment (tonnes km^{-2}) calculated as Total Salt Output/Contributing Area.

5. Acknowledgments

The Murray-Darling Basin Commission, through its Natural Resources Management Strategy Investigation and Education Program (Grant No. D5035), have provided significant funding for this work. Funding was also provided by the CRC for Catchment Hydrology. The support of both organisations is greatly appreciated.

The rainfall data were provided by Ken Brook and Neil Flood of the Queensland Department of Primary Industries. Vivienne McNeill of the Queensland Department of Natural Resources provided the flow and salinity data for Queensland. Flow, salinity and diversion data for New South Wales were provided by Grant Robinson and Janice Green of the Department of Land and Water Conservation. Tim Vass of Sinclair Knight Merz Pty Ltd provided flow, salinity and diversion data for Victoria. Additional flow and salinity data were also provided by Kit Dyer and Andrew Close of the Murray-Darling Basin Commission.

6. **References**

Blackburn, G. and McLeod, S. (1983) Salinity of atmospheric precipitation in the Murray-Darling Drainage Division, Australia. *Aust. J. of Soil Res.*, 21: 411-34.

ESRI (1992) Arc/Info Command References and Arc/Info User's Guide, Environmental Systems Research Institute Inc., California, USA.

Mackay, N.J., Hillman, T.J. and Rolls, J. (1988) Water Quality of the River Murray. Review of Monitoring, 1978 to 1986. Water Quality Report No. 3, Murray-Darling Basin Commission, Canberra.

MDBCMC (1987) Salinity and Drainage Strategy Background Paper. Murray-Darling Basin Ministerial Council Background Paper 87/1, Canberra.

Morton, R. and Cunningham, R.B. (1985) Longitudinal profile of trends in salinity in the River Murray. *Aust. J. of Soil Res.*, 23: 1-13.

Peck, A.J. and Hurle, D.H. (1973) Chloride balance of some farmed and forested catchments in south western Australia. *Water Resour. Res.*, 9(3): 648-57.

Simpson, H.J. and Herczeg, A.L. (1994) Delivery of marine chloride in precipitation and removal by rivers in the Murray-Darling Basin, Australia. *J. Hydrol.*, 154: 323-350.

Williamson, D.R., Gates, G.W.B., Robinson, G., Linke, G.K., Seker, M.P. and Evans, W.R. (1997) Salt Trends: Historic Trend in Salt Concentration and Saltload of Stream Flow in the Murray-Darling Drainage Division. Murray-Darling Basin Commission Dryland Technical Report No. 1.

Table 1: Salt and water balances for station 422005 + 422006.

Drainage Division: Condamine-Culgoa River
Station: 422005 (Bokhara River@Bokhara) + 422006 (Culgoa River@Collerina)
Contributing Area: 156575 km^2
Saltfall Station: Inverell
Saltfall Concentration: 3.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	461	281506	72181075	5639	52202			5639	52202	0.02	0.00	0.04	1
1986	387	236319	60594525	1583	14668			1583	14668	0.01	0.00	0.01	2
1987	450	274789	70458750	1958	17767			1958	17767	0.01	0.00	0.01	3
1988	585	357226	91596375	140387	1308114			140387	1308114	0.39	0.01	0.90	
1989	562	343181	87995150	81824	779740			81824	779740	0.24	0.01	0.52	4
1990	574	350509	89874050	155483	1521365			155483	1521365	0.44	0.02	0.99	5
1991	411	250974	64352325	6805	66581			6805	66581	0.03	0.00	0.04	6
1992	390	238151	61064250	2677	25726			2677	25726	0.01	0.00	0.02	7
1993	415	253417	64978625	13	129			13	129	0.00	0.00	0.00	8
1994													
Mean	**471**	**287341**	**73677236**	**44041**	**420699**			**44041**	**420699**	**0.13**	**0.00**	**0.28**	
Mean 85-92	**478**	**291582**	**74764563**	**49545**	**473270**			**49545**	**473270**	**0.14**	**0.01**	**0.32**	

Comments:

1 Incomplete year for Bokhara R. (missing 2 days)
2 Incomplete year for Culgoa R. (missing 2 days)
3 Incomplete year for Culgoa R. (missing 42 days)
4 Incomplete year for Bokhara R. (missing 192 days)
5 No data for Bokhara R.
6 No data for Bokhara R.
7 Incomplete year for Bokhara R. (missing 336 days)
8 No data for Bokhara R., incomplete year for Culgoa R. (missing 273 days)

Table 2: Salt and water balances for station 417001.

Drainage Division: Moonie River
Station: 417001 (Moonie River@Gundablouie)
Contributing Area: 15810 km^2
Saltfall Station: Inverell
Saltfall Concentration: 3.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	513	31631	8110530	347	4365			347	4365	0.01	0.00	0.02	
1986	435	26822	6877350	253	3181			253	3181	0.01	0.00	0.02	
1987	498	30706	7873380	408	5125			408	5125	0.01	0.00	0.03	
1988	697	42976	11019570	30330	381032			30330	381032	0.71	0.03	1.92	1
1989	533	32864	8426730	6408	80502			6408	80502	0.19	0.01	0.41	
1990	520	32063	8221200	12821	161073			12821	161073	0.40	0.02	0.81	
1991													
1992													
1993													
1994													
Mean	**533**	**32844**	**8421460**	**8428**	**105880**			**8428**	**105880**	**0.22**	**0.01**	**0.53**	
Mean 85-90	**533**	**32844**	**8421460**	**8428**	**105880**			**8428**	**105880**	**0.22**	**0.01**	**0.53**	

Comments:

1 Incomplete year (missing 55 days)

Table 3: Salt and water balances for station 416049.

Drainage Division: Border Rivers
Station: 416049 (Dumaresq River@Mauro)
Contributing Area: 8850 km^2
Saltfall Station: Inverell
Saltfall Concentration: 3.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	696	24022	6159600	9388	77777			9388	77777	0.39	0.01	1.06	1
1986	639	22055	5655150	18699	148076			18699	148076	0.85	0.03	2.11	
1987	811	27992	7177350	19987	162173			19987	162173	0.71	0.02	2.26	
1988	979	33790	8664150	96289	1151928			96289	1151928	2.85	0.13	10.88	
1989	812	28026	7186200	71486	630910			71486	630910	2.55	0.09	8.08	
1990	700	24161	6195000	67267	578024			67267	578024	2.78	0.09	7.60	
1991	681	23505	6026850	27485	235147			27485	235147	1.17	0.04	3.11	
1992	747	25783	6610950	38875	368586			38875	368586	1.51	0.06	4.39	
1993	845	29165	7478250	12090	96960			12090	96960	0.41	0.01	1.37	
1994	502	17327	4442700	5745	45821			5745	45821	0.33	0.01	0.65	
Mean	**741**	**25583**	**6559620**	**36731**	**349540**			**36731**	**349540**	**1.36**	**0.05**	**4.15**	
Mean 86-94	**746**	**25756**	**6604067**	**39769**	**379736**			**39769**	**379736**	**1.46**	**0.05**	**4.49**	

Comments:

1 Incomplete year (missing 275 days)

Table 4: Salt and water balances for station 416012.

Drainage Division: Border Rivers
Station: 416012 (Macintyre River@Holdfast (Yelarbon Cr.))
Contributing Area: 6740 km^2
Saltfall Station: Inverell
Saltfall Concentration: 3.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	721	18952	4859540	22602	182349			22602	182349	1.19	0.04	3.35	
1986	627	16481	4225980	12063	80236			12063	80236	0.73	0.02	1.79	
1987	855	22475	5762700	23884	164761			23884	164761	1.06	0.03	3.54	
1988	935	24577	6301900	79391	613246			79391	613246	3.23	0.10	11.78	
1989	803	21108	5412220	41867	290485			41867	290485	1.98	0.05	6.21	1
1990	736	19346	4960640	44494	324928			44494	324928	2.30	0.07	6.60	2
1991	766	20135	5162840	28640	372131			28640	372131	1.42	0.07	4.25	
1992	713	18742	4805620	32286	230815			32286	230815	1.72	0.05	4.79	3
1993	615	16166	4145100	10133	67041			10133	67041	0.63	0.02	1.50	
1994	551	14484	3713740	11206	78007			11206	78007	0.77	0.02	1.66	
Mean	**732**	**19247**	**4935028**	**30657**	**240400**			**30657**	**240400**	**1.50**	**0.05**	**4.55**	

Comments:

1 Incomplete year (missing 19 days)
2 Incomplete year (missing 38 days)
3 Incomplete year (missing 1 day)

Table 5: Salt and water balances for station 416001 + 416027 + 416028.

Drainage Division: Border Rivers
Station: 416001 (Barwon River@Mungindi)+416027 (Gil Gil Creek@Weemelah)+416028 (Boomi River@Neeworra)
Contributing Area: 44070 km^2 (Note: Gil Gil Ck has data for 1985-1988 only and Boomi R has data for 1989-94 only)
Saltfall Station: Inverell
Saltfall Concentration: 3.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	608	104499	26794560	41818	323193			41818	323193	0.40	0.01	0.95	1
1986	522	89718	23004540	16128	116589			16128	116589	0.18	0.01	0.37	
1987	652	112061	28733640	20591	148053			20591	148053	0.18	0.01	0.47	2
1988	854	146780	37635780	188494	1658617			188494	1658617	1.28	0.04	4.28	3
1989	662	113780	29174340	80049	726986			80049	726986	0.70	0.02	1.82	4
1990	605	103983	26662350	103363	928248			103363	928248	0.99	0.03	2.35	5
1991	625	107421	27543750	42175	370632			42175	370632	0.39	0.01	0.96	
1992	533	91608	23489310	27689	217280			27689	217280	0.30	0.01	0.63	6
1993	486	83530	21418020	1402	7854			1402	7854	0.02	0.00	0.03	7
1994	444	76312	19567080	5577	55354			5577	55354	0.07	0.00	0.13	8
Mean	**599**	**102969**	**26402337**	**52729**	**455281**			**52729**	**455281**	**0.45**	**0.02**	**1.20**	

Comments:

1 Incomplete year for Gil Gil Ck (missing 27 days)
2 Incomplete year for Gil Gil Ck (missing 22 days)
3 Incomplete year for Gil Gil Ck (missing 339 days)
4 Incomplete year for Boomi R (missing 100 days)
5 Incomplete year for Boomi R (missing 4 days)
6 Incomplete year for Boomi R (missing 274 days)
7 Incomplete year for Boomi R (missing 351 days)
8 Incomplete year for Boomi R (missing 38 days)

Table 6: Salt and water balances for station 418012.

Drainage Division: Gwyder River
Station: 418012 (Gwyder River@Pinegrove)
Contributing Area: 6389 km^2
Saltfall Station: Inverell
Saltfall Concentration: 3.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	796	19834	5085644	46438	448239			46438	448239	2.34	0.09	7.27	1
1986	611	15224	3903679	64542	622997			64542	622997	4.24	0.16	10.10	
1987	848	21130	5417872	44097	425642			44097	425642	2.09	0.08	6.90	
1988	853	21254	5449817	32334	312106			32334	312106	1.52	0.06	5.06	
1989	765	19062	4887585	35210	339869			35210	339869	1.85	0.07	5.51	
1990	835	20806	5334815	46955	453230			46955	453230	2.26	0.08	7.35	
1991	801	19959	5117589	43789	422670			43789	422670	2.19	0.08	6.85	
1992	725	18065	4632025	35168	339459			35168	339459	1.95	0.07	5.50	
1993	737	18364	4708693	9492	91619			9492	91619	0.52	0.02	1.49	
1994	555	13829	3545895	9618	92841			9618	92841	0.70	0.03	1.51	
Mean	**753**	**18753**	**4808361**	**36764**	**354867**			**36764**	**354867**	**1.96**	**0.07**	**5.75**	

Comments:

1 Incomplete year (missing 53 days)

Table 7: Salt and water balances for station 418001.

Drainage Division: Gwyder River
Station: 418001 (Gwyder River@Pallamallawa)
Contributing Area: 12300 km^2
Saltfall Station: Inverell
Saltfall Concentration: 3.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	753	36121	9261900	108820	717811			108820	717811	3.01	0.08	8.85	
1986	584	28014	7183200	110410	728296			110410	728296	3.94	0.10	8.98	
1987	784	37608	9643200	74706	492784			74706	492784	1.99	0.05	6.07	
1988	853	40918	10491900	92016	606968			92016	606968	2.25	0.06	7.48	
1989	739	35450	9089700	77216	509342			77216	509342	2.18	0.06	6.28	
1990	747	35834	9188100	98985	652934			98985	652934	2.76	0.07	8.05	
1991	790	37896	9717000	95029	626841			95029	626841	2.51	0.06	7.73	
1992	649	31133	7982700	54068	356649			54068	356649	1.74	0.04	4.40	
1993	692	33195	8511600	26536	175036			26536	175036	0.80	0.02	2.16	
1994	502	24081	6174600	15618	103021			15618	103021	0.65	0.02	1.27	
Mean	**709**	**34025**	**8724390**	**75340**	**496968**			**75340**	**496968**	**2.18**	**0.06**	**6.13**	

Comments:

Table 8: Salt and water balances for station 418004 + 418002.

Drainage Division: Gwyder River
Station: 418004 (Gwyder River@Yarraman Bridge) + 418002 (Mehi River@Moree)
Contributing Area: 12960 km^2
Saltfall Station: Inverell
Saltfall Concentration: 3.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	739	37352	9577440	82309	513025			82309	513025	2.20	0.05	6.35	
1986	572	28911	7413120	77924	482374			77924	482374	2.70	0.07	6.01	
1987	761	38464	9862560	52361	324337			52361	324337	1.36	0.03	4.04	1
1988	842	42558	10912320	63791	400616			63791	400616	1.50	0.04	4.92	2
1989	726	36695	9408960	59465	369318			59465	369318	1.62	0.04	4.59	
1990	723	36543	9370080	74007	460911			74007	460911	2.03	0.05	5.71	
1991	780	39424	10108800	77515	483444			77515	483444	1.97	0.05	5.98	
1992	635	32095	8229600	43116	267242			43116	267242	1.34	0.03	3.33	
1993	671	33915	8696160	19576	121454			19576	121454	0.58	0.01	1.51	
1994	490	24767	6350400	10537	66123			10537	66123	0.43	0.01	0.81	3
Mean	**694**	**35072**	**8992944**	**56060**	**348884**			**56060**	**348884**	**1.57**	**0.04**	**4.33**	

Comments:

1 Incomplete year for Mehi R. (missing 7 days)
2 Incomplete year for Mehi R. (missing 46 days)
3 Incomplete year for Mehi R. (missing 61 days)

Table 9: Salt and water balances for station 419022.

Drainage Division: Namoi River
Station: 419022 (Namoi River@Manila Railway Bridge)
Contributing Area: 5180 km^2
Saltfall Station: Gunnedah
Saltfall Concentration: 3.3 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	751	12838	3890180	51105	278303	799	4353	51904	282656	4.04	0.07	10.02	
1986	637	10889	3299660	34663	197459	704	4012	35367	201471	3.25	0.06	6.83	1
1987	822	14051	4257960	24938	112995	659	2987	25597	115982	1.82	0.03	4.94	2
1988	878	15009	4548040	50284	232961	1584	7340	51868	240301	3.46	0.05	10.01	
1989	755	12906	3910900	1559	6325	1032	4187	2591	10512	0.20	0.00	0.50	3
1990													
1991													
1992													
1993													
1994													
Mean	**769**	**13138**	**3981348**	**32510**	**165609**	**956**	**4576**	**33466**	**170184**	**2.55**	**0.04**	**6.46**	
Mean 85-88	**772**	**13197**	**3998960**	**40248**	**205430**	**937**	**4673**	**41184**	**210103**	**3.14**	**0.05**	**7.95**	

Comments:

1 Incomplete year (missing 7 days)
2 Incomplete year (missing 12 days)
3 Incomplete year (missing 330 days)

Table 10: Salt and water balances for station 419007.

Drainage Division: Namoi River
Station: 419007 (Namoi River@Keepit)
Contributing Area: 5700 km^2
Saltfall Station: Gunnedah
Saltfall Concentration: 3.3 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	728	13694	4149600	47801	246524	799	4353	48600	250877	3.55	0.06	8.53	
1986	618	11625	3522600	48068	247901	704	4012	48772	251913	4.20	0.07	8.56	
1987	807	15180	4599900	38040	196182	659	2987	38699	199169	2.55	0.04	6.79	
1988	863	16233	4919100	37500	193400	1584	7340	39084	200740	2.41	0.04	6.86	
1989	737	13863	4200900	48949	252445	1032	4187	49981	256632	3.61	0.06	8.77	
1990	837	15744	4770900	27815	143450	1400	6669	29215	150119	1.86	0.03	5.13	1
1991													
1992													
1993													
1994													
Mean	**765**	**14390**	**4360500**	**41362**	**213317**	**1030**	**4925**	**42392**	**218242**	**3.03**	**0.05**	**7.44**	
Mean 85-89	**751**	**14119**	**4278420**	**44072**	**227290**	**956**	**4576**	**45027**	**231866**	**3.26**	**0.06**	**7.90**	

Comments:

1 Incomplete year (missing 184 days)

Table 11: Salt and water balances for station 419006.

Drainage Division: Namoi River
Station: 419006 (Peel River@Carrol Gap)
Contributing Area: 4670 km^2
Saltfall Station: Gunnedah
Saltfall Concentration: 3.3 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	788	12144	3679960	71802	300184	1129	4719	72931	304903	6.01	0.08	15.62	
1986	634	9771	2960780	48038	187777	1793	7008	49831	194785	5.10	0.07	10.67	1
1987	831	12807	3880770	31893	112920	1384	4899	33277	117819	2.60	0.03	7.13	2
1988	894	13777	4174980	54203	198558	2626	9619	56828	208177	4.12	0.05	12.17	
1989	809	12467	3778030	83899	342568	1527	6235	85426	348803	6.85	0.09	18.29	
1990	940	14486	4389800	135607	589879	3139	13655	138746	603534	9.58	0.14	29.71	
1991	753	11604	3516510	36702	153390	4240	17722	40942	171112	3.53	0.05	8.77	3
1992													
1993													
1994													
Mean	**807**	**12437**	**3768690**	**66021**	**269325**	**2262**	**9122**	**68283**	**278448**	**5.40**	**0.07**	**14.62**	
Mean 85-90	**816**	**12575**	**3810720**	**70907**	**288648**	**1933**	**7689**	**72840**	**296337**	**5.71**	**0.08**	**15.60**	

Comments:

1 Incomplete year (missing 24 days)
2 Incomplete year (missing 27 days)
3 Incomplete year (missing 108 days)

Table 12: Salt and water balances for station 419027.

Drainage Division: Namoi River
Station: 419027 (Mooki River@Breeza)
Contributing Area: 3630 km^2
Saltfall Station: Gunnedah
Saltfall Concentration: 3.3 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	797	9547	2893110	9883	32152	188	538	10072	32690	1.05	0.01	2.77	
1986	642	7691	2330460	3455	8837	40	115	3495	8952	0.45	0.00	0.96	
1987	837	10026	3038310	10041	34398	174	502	10215	34900	1.02	0.01	2.81	
1988	903	10817	3277890	8241	22486	366	1040	8607	23526	0.80	0.01	2.37	
1989	819	9811	2972970	56603	260330	0	0	56603	260330	5.77	0.09	15.59	
1990	955	11440	3466650	74471	326388	414	1405	74885	327793	6.55	0.09	20.63	
1991	756	9056	2744280	32816	142018	38	149	32854	142167	3.63	0.05	9.05	
1992													
1993													
1994													
Mean	**816**	**9770**	**2960524**	**27930**	**118087**	**174**	**536**	**28104**	**118623**	**2.75**	**0.04**	**7.74**	
Mean 85-91	**816**	**9770**	**2960524**	**27930**	**118087**	**174**	**536**	**28104**	**118623**	**2.75**	**0.04**	**7.74**	

Comments:

Table 13: Salt and water balances for station 419034.

Drainage Division: Namoi River
Station: 419034 (Mooki River@Caroona)
Contributing Area: 2540 km^2
Saltfall Station: Gunnedah
Saltfall Concentration: 3.3 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	637	5339	1617980	5367	15326	0	0	5367	15326	1.01	0.01	2.1	
1986	549	4602	1394460	1713	4861	0	0	1713	4861	0.37	0.00	0.7	
1987	759	6362	1927860	7506	21709	0	0	7506	21709	1.18	0.01	3.0	
1988	737	6178	1871980	4725	13419	0	0	4725	13419	0.76	0.01	1.9	
1989	794	6655	2016760	49254	180314	0	0	49254	180314	7.40	0.09	19.4	
1990	886	7426	2250440	65550	222492	0	0	65550	222492	8.83	0.10	25.8	
1991	742	6219	1884680	24294	95311	0	0	24294	95311	3.91	0.05	9.6	1
1992	744	6236	1889760	4843	14700	0	0	4843	14700	0.78	0.01	1.9	2
1993													
1994													
Mean	**731**	**6127**	**1856740**	**20407**	**71017**	**0**	**0**	**20407**	**71017**	**3.03**	**0.03**	**8.03**	
Mean 85-90	**727**	**6094**	**1846580**	**22353**	**76354**	**0**	**0**	**22353**	**76354**	**3.26**	**0.04**	**8.80**	

Comments:

1 Incomplete year (missing 169 days flow)

2 Incomplete year (missing 287 days flow)

Table 14: Salt and water balances for station 419001.

Drainage Division: Namoi River
Station: 419001 (Namoi River@Gunnedah)
Contributing Area: 17100 km^2
Saltfall Station: Gunnedah
Saltfall Concentration: 3.3 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	697	39332	11918700	131304	566028	2690	12082	133994	578110	3.41	0.05	7.84	
1986	587	33124	10037700	109138	436469	3556	15161	112694	451630	3.40	0.04	6.59	
1987	777	43846	13286700	82217	313369	2920	10933	85137	324302	1.94	0.02	4.98	
1988	823	46442	14073300	102060	391934	5905	23015	107964	414949	2.32	0.03	6.31	
1989	775	43733	13252500	195566	886470	3356	13526	198922	899996	4.55	0.07	11.63	
1990	869	49038	14859900	320447	1577011	8108	32873	328555	1609884	6.70	0.11	19.21	
1991	747	42153	12773700	129955	573904	7886	34234	137841	608138	3.27	0.05	8.06	
1992	690	38937	11799000	152771	532774	9974	42425	162745	575199	4.18	0.05	9.52	
1993	735	41476	12568500	80604	227229	4624	20004	85228	247233	2.05	0.02	4.98	
1994													
Mean	**744**	**42009**	**12730000**	**144896**	**611688**	**5446**	**22694**	**150342**	**634382**	**3.54**	**0.05**	**8.79**	
Mean 85-93	**744**	**42009**	**12730000**	**144896**	**611688**	**5446**	**22694**	**150342**	**634382**	**3.54**	**0.05**	**8.79**	

Comments:

Table 15: Salt and water balances for station 419032.

Drainage Division: Namoi River
Station: 419032 (Coxs Creek@Boggabri)
Contributing Area: 4040 km^2
Saltfall Station: Gunnedah
Saltfall Concentration: 3.3 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	542	7226	2189680	1455	6090	560	2162	2015	8252	0.28	0.00	0.50	
1986	528	7039	2133120	336	1299	1817	8929	2153	10228	0.31	0.00	0.53	1
1987	713	9506	2880520	4981	24482	515	2911	5496	27393	0.58	0.01	1.36	2
1988	835	11132	3373400	11613	65697	681	5074	12294	70771	1.10	0.02	3.04	3
1989	791	10546	3195640	30231	225143	197	985	30428	226128	2.89	0.07	7.53	4
1990													
1991													
1992													
1993													
1994													
Mean	**682**	**9090**	**2754472**	**9723**	**64542**	**754**	**4012**	**10477**	**68554**	**1.03**	**0.02**	**2.59**	
Mean 85-89	**682**	**9090**	**2754472**	**9723**	**64542**	**754**	**4012**	**10477**	**68554**	**1.03**	**0.02**	**2.59**	

Comments:

1 Incomplete year (missing 44 days)
2 Incomplete year (missing 57 days)
3 Incomplete year (missing 47 days)
4 Incomplete year (missing 11 days)

Table 16: Salt and water balances for station 419012.

Drainage Division: Namoi River
Station: 419012 (Namoi River@Boggabri)
Contributing Area: 22600 km^2
Saltfall Station: Gunnedah
Saltfall Concentration: 3.3 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	657	48999	14848200	125128	591443	3828	16734	128956	608177	2.63	0.04	5.71	
1986	571	42585	12904600	97664	449862	6140	27158	103804	477020	2.44	0.04	4.59	1
1987	759	56606	17153400	75450	343353	3908	15651	79358	359004	1.40	0.02	3.51	2
1988	823	61379	18599800	102699	468491	7703	32385	110402	500876	1.80	0.03	4.89	
1989	772	57576	17447200	183096	1005919	3835	15786	186931	1021705	3.25	0.06	8.27	3
1990													
1991													
1992													
1993													
1994													
Mean	**716**	**53429**	**16190640**	**116807**	**571814**	**5083**	**21543**	**121890**	**593356**	**2.30**	**0.04**	**5.39**	
Mean 85-89	**716**	**53429**	**16190640**	**116807**	**571814**	**5083**	**21543**	**121890**	**593356**	**2.30**	**0.04**	**5.39**	

Comments:

1 Incomplete year (missing 13 days)
2 Incomplete year (missing 14 days)
3 Incomplete year (missing 92 days)

Table 17: Salt and water balances for station 419039.

Drainage Division: Namoi River
Station: 419039 (Namoi River@Mollee)
Contributing Area: 28200 km^2
Saltfall Station: Gunnedah
Saltfall Concentration: 3.3 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	632	58814	17822400	123041	506967	5735	25818	128776	532785	2.19	0.03	4.57	1
1986	564	52486	15904800	106987	440819	7855	35326	114842	476145	2.19	0.03	4.07	
1987	756	70353	21319200	89918	370489	5585	23638	95503	394127	1.36	0.02	3.39	2
1988	825	76775	23265000	117845	485557	11288	49456	129133	535013	1.68	0.02	4.58	
1989	765	71191	21573000	282866	1165497	4948	21086	287814	1186583	4.04	0.06	10.21	
1990	808	75192	22785600	384128	1582728	12948	56468	397076	1639196	5.28	0.07	14.08	
1991	772	71842	21770400	204993	844634	12542	56649	217535	901283	3.03	0.04	7.71	
1992	649	60396	18301800	139411	574416	15228	67128	154639	641544	2.56	0.04	5.48	
1993	714	66445	20134800	78639	324019	12467	58006	91106	382025	1.37	0.02	3.23	
1994													
Mean	**721**	**67055**	**20319667**	**169759**	**699458**	**9844**	**43730**	**179603**	**743189**	**2.63**	**0.04**	**6.37**	
Mean 85-93	**721**	**67055**	**20319667**	**169759**	**699458**	**9844**	**43730**	**179603**	**743189**	**2.63**	**0.04**	**6.37**	

Comments:

1 Incomplete year (missing 96 days)

2 Incomplete year (missing 7 days)

Table 18: Salt and water balances for station 419026.

Drainage Division: Namoi River
Station: 419026 (Namoi River@Goangra)
Contributing Area: 36290 km^2
Saltfall Station: Gunnedah
Saltfall Concentration: 3.3 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	586	70178	21265940	33674	123820	49533	205431	83207	329251	1.19	0.02	2.29	1
1986	523	62633	18979670	38814	141728	49566	206232	88380	347960	1.41	0.02	2.44	2
1987	710	85027	25765900	43181	160798	39818	163783	82999	324581	0.98	0.01	2.29	
1988	784	93889	28451360	74987	280667	89280	369214	164267	649881	1.75	0.02	4.53	3
1989	729	87303	26455410	210094	963159	23016	95775	233110	1058934	2.67	0.04	6.42	
1990	757	90656	27471530	287779	1371111	49844	209161	337623	1580272	3.72	0.06	9.30	
1991	764	91494	27725560	173023	810625	48605	205971	221628	1016596	2.42	0.04	6.11	
1992	579	69339	21011910	45795	187705	46144	194321	91939	382026	1.33	0.02	2.53	
1993	675	80836	24495750	39208	146674	26123	113856	65331	260530	0.81	0.01	1.80	
1994													
Mean	**679**	**81262**	**24624781**	**105173**	**465143**	**46881**	**195971**	**152054**	**661114**	**1.81**	**0.03**	**4.19**	
Mean 85-93	**679**	**81262**	**24624781**	**105173**	**465143**	**46881**	**195971**	**152054**	**661114**	**1.81**	**0.03**	**4.19**	

Comments:

1 Incomplete year (missing 123 days)
2 Incomplete year (missing 50 days)
3 Incomplete year (missing 14 days)

Table 19: Salt and water balances for station 421025.

Drainage Division: Macquarie-Bogan River
Station: 421025 (Macquarie River@Bruinbun)
Contributing Area: 4580 km^2
Saltfall Station: Wellington
Saltfall Concentration: 5.4 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	721	17832	3302180	18012	177989			18012	177989	1.01	0.05	3.93	1
1986	793	19612	3631940	60578	598594			60578	598594	3.09	0.16	13.23	
1987	815	20157	3732700	24991	246947			24991	246947	1.24	0.07	5.46	2
1988	861	21294	3943380	35379	349599			35379	349599	1.66	0.09	7.72	
1989	847	20948	3879260	63392	626405			63392	626405	3.03	0.16	13.84	
1990	1053	26043	4822740	125746	1242551			125746	1242551	4.83	0.26	27.46	
1991	651	16101	2981580	18397	181789			18397	181789	1.14	0.06	4.02	3
1992	840	20775	3847200	35894	354686			35894	354686	1.73	0.09	7.84	
1993	688	17016	3151040	28663	283226			28663	283226	1.68	0.09	6.26	
1994	471	11649	2157180	3441	34004			3441	34004	0.30	0.02	0.75	
Mean	**774**	**19143**	**3544920**	**41449**	**409579**			**41449**	**409579**	**1.97**	**0.11**	**9.05**	

Comments:

1 Incomplete year (missing 57 days)
2 Incomplete year (missing 6 days)
3 Incomplete year (missing 37 days)

Table 20: Salt and water balances for station 421019.

Drainage Division: Macquarie-Bogan River
Station: 421019 (Cungegong River@Yamble Bridge)
Contributing Area: 3490 km^2
Saltfall Station: Wellington
Saltfall Concentration: 5.4 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	657	12382	2292930	9785	46820			9785	46820	0.79	0.02	2.80	
1986	596	11232	2080040	10606	50748			10606	50748	0.94	0.02	3.04	
1987	739	13927	2579110	8726	41752			8726	41752	0.63	0.02	2.50	
1988	696	13117	2429040	5790	27705			5790	27705	0.44	0.01	1.66	
1989	776	14624	2708240	45291	216702			45291	216702	3.10	0.08	12.98	
1990	912	17188	3182880	79246	379168			79246	379168	4.61	0.12	22.71	
1991	657	12382	2292930	9209	44060			9209	44060	0.74	0.02	2.64	
1992	767	14455	2676830	12391	59288			12391	59288	0.86	0.02	3.55	
1993	647	12193	2258030	10610	50763			10610	50763	0.87	0.02	3.04	
1994	423	7972	1476270	13333	63795			13333	63795	1.67	0.04	3.82	
Mean	**687**	**12947**	**2397630**	**20499**	**98080**			**20499**	**98080**	**1.47**	**0.04**	**5.87**	

Comments:

Table 21: Salt and water balances for station 421040.

Drainage Division: Macquarie-Bogan River
Station: 421040 (Macquarie River@d/s Burrendong Dam Spillway)
Contributing Area: 13980 km^2
Saltfall Station: Wellington
Saltfall Concentration: 5.4 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	558	42125	7800840	64371	579922			64371	579922	1.53	0.07	4.60	1
1986	484	36538	6766320	125027	1126371			125027	1126371	3.42	0.17	8.94	2
1987	627	47333	8765460	83912	755965			83912	755965	1.77	0.09	6.00	
1988	667	50353	9324660	92065	829412			92065	829412	1.83	0.09	6.59	
1989	641	48390	8961180	190397	1715292			190397	1715292	3.93	0.19	13.62	
1990	848	64017	11855040	424162	3821280			424162	3821280	6.63	0.32	30.34	3
1991	530	40011	7409400	33701	303614			33701	303614	0.84	0.04	2.41	4
1992													
1993	595	44918	8318100	61647	555375			61647	555375	1.37	0.07	4.41	5
1994	372	28083	5200560	84445	760765			84445	760765	3.01	0.15	6.04	6
Mean	**591**	**44641**	**8266840**	**128859**	**1160888**			**128859**	**1160888**	**2.70**	**0.13**	**9.22**	

Comments:

1 Incomplete year (missing 43 days)
2 Incomplete year (missing 36 days)
3 Incomplete year (missing 14 days)
4 Incomplete year (missing 117 days)
5 Incomplete year (missing 113 days)
6 Incomplete year (missing 65 days)

Table 22: Salt and water balances for station 421001.

Drainage Division: Macquarie-Bogan River
Station: 421001 (Macquarie River@Dubbo)
Contributing Area: 19600 km^2
Saltfall Station: Wellington
Saltfall Concentration: 5.4 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	674	71336	13210400	129661	862678			129661	862678	1.82	0.07	6.62	1
1986	657	69537	12877200	188060	1251230			188060	1251230	2.70	0.10	9.59	
1987	760	80438	14896000	120505	801765			120505	801765	1.50	0.05	6.15	
1988	772	81708	15131200	140380	933996			140380	933996	1.72	0.06	7.16	
1989	783	82873	15346800	306965	2042350			306965	2042350	3.70	0.13	15.66	
1990	987	104464	19345200	781146	5197248			781146	5197248	7.48	0.27	39.85	
1991	629	66573	12328400	138072	918641			138072	918641	2.07	0.07	7.04	
1992	830	87847	16268000	123934	824575			123934	824575	1.41	0.05	6.32	
1993	675	71442	13230000	249349	1659011			249349	1659011	3.49	0.13	12.72	
1994	446	47205	8741600	144780	963274			144780	963274	3.07	0.11	7.39	
Mean	**721**	**76342**	**14137480**	**232285**	**1545477**			**232285**	**1545477**	**2.90**	**0.10**	**11.85**	

Comments:

1 Incomplete year (missing 22 days)

Table 23: Salt and water balances for station 421042.

Drainage Division: Macquarie-Bogan River
Station: 421042 (Talbragar River@Elong Elong)
Contributing Area: 3050 km^2
Saltfall Station: Wellington
Saltfall Concentration: 5.4 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	605	9964	1845250	4969	15232			4969	15232	0.50	0.01	1.63	
1986	521	8581	1589050	1252	3838			1252	3838	0.15	0.00	0.41	
1987	694	11430	2116700	4597	14092			4597	14092	0.40	0.01	1.51	
1988	730	12023	2226500	7012	21496			7012	21496	0.58	0.01	2.30	
1989	775	12764	2363750	47004	144094			47004	144094	3.68	0.06	15.41	1
1990	818	13472	2494900	54516	167125			54516	167125	4.05	0.07	17.87	
1991	691	11381	2107550	22230	64148			22230	64148	1.95	0.03	7.29	
1992	720	11858	2196000	19142	58681			19142	58681	1.61	0.03	6.28	
1993	696	11463	2122800	5600	17166			5600	17166	0.49	0.01	1.84	
1994	388	6390	1183400	282	863			282	863	0.04	0.00	0.09	
Mean	**664**	**10933**	**2024590**	**16660**	**50674**			**16660**	**50674**	**1.35**	**0.02**	**5.46**	

Comments:

1 Incomplete year (missing 32 days)

Table 24: Salt and water balances for station 421004 + 421005.

Drainage Division: Macquarie-Bogan River
Station: 421004 (Macquarie River@Warren Weir) + 421005 (Gunningbar Creek@Below Regulator)
Contributing Area: 26570 km^2
Saltfall Station: Trangie
Saltfall Concentration: 4.7 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	629	78549	16712530	82272	533927			82272	533927	1.05	0.03	3.10	
1986	592	73928	15729440	126822	820473			126822	820473	1.72	0.05	4.77	
1987	707	88289	18784990	68190	442260			68190	442260	0.77	0.02	2.57	
1988	750	93659	19927500	86564	560876			86564	560876	0.92	0.03	3.26	
1989	749	93534	19900930	251647	1630071			251647	1630071	2.69	0.08	9.47	
1990	899	112266	23886430	415597	2696879			415597	2696879	3.70	0.11	15.64	
1991	612	76426	16260840	75958	476553			75958	476553	0.99	0.03	2.86	
1992	756	94409	20086920	94846	472895			94846	472895	1.00	0.02	3.57	
1993	639	79798	16978230	137445	663977			137445	663977	1.72	0.04	5.17	1
1994													
Mean	**704**	**87873**	**18696423**	**148816**	**921990**			**148816**	**921990**	**1.62**	**0.05**	**5.60**	
Mean 85-93	**704**	**87873**	**18696423**	**148816**	**921990**			**148816**	**921990**	**1.62**	**0.05**	**5.60**	

Comments:

1 Incomplete year for Macquarie R. (missing 38 days)

Table 25: Salt and water balances for station 421039.

Drainage Division: Macquarie-Bogan River
Station: 421039 (Bogan River@Neurie Plains)
Contributing Area: 14760 km^2
Saltfall Station: Trangie
Saltfall Concentration: 4.7 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	447	31009	6597720	0	0			0	0	0.00	0.00	0.00	
1986	340	23586	5018400	0	0			0	0	0.00	0.00	0.00	
1987	497	34478	7335720	2163	27140			2163	27140	0.06	0.00	0.15	
1988	591	40999	8723160	99	1248			99	1248	0.00	0.00	0.01	
1989	501	34755	7394760	13919	174644			13919	174644	0.40	0.02	0.94	1
1990	720	49948	10627200	55452	695765			55452	695765	1.11	0.07	3.76	
1991	423	29344	6243480	21	263			21	263	0.00	0.00	0.00	
1992	717	49740	10582920	30518	382913			30518	382913	0.61	0.04	2.07	2
1993	539	37392	7955640	7927	99464			7927	99464	0.21	0.01	0.54	3
1994	313	21713	4619880	37	470			37	470	0.00	0.00	0.00	
Mean	**509**	**35296**	**7509888**	**11014**	**138191**			**11014**	**138191**	**0.24**	**0.01**	**0.75**	

Comments:

1 Incomplete year (missing 138 days)
2 Incomplete year (missing 83 days)
3 Incomplete year (missing 117 days)

Table 26: Salt and water balances for station 421023 + 421012 + 421011.

Drainage Division: Macquarie-Bogan River
Station: 421023 (Bogan R.@Gongolgon) + 421012 (Macquarie R.@Carinda) + 421011 (Marthaguy Ck.@Carinda)
Contributing Area: 70850 km^2 (Note: No data available for 421107 (Marra Ck.@Billybingbone Bridge))
Saltfall Station: Trangie
Saltfall Concentration: 4.7 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	485	161503	34362250	15123	72347			15123	72347	0.09	0.00	0.21	
1986	429	142855	30394650	33246	169548			33246	169548	0.23	0.01	0.47	1
1987	536	178485	37975600	15061	73916			15061	73916	0.08	0.00	0.21	2
1988	641	213450	45414850	40570	194890			40570	194890	0.19	0.00	0.57	3
1989	594	197799	42084900	239797	1394508			239797	1394508	1.21	0.03	3.38	
1990	703	234095	49807550	514587	3086914			514587	3086914	2.20	0.06	7.26	4
1991	441	146851	31244850	15390	74439			15390	74439	0.10	0.00	0.22	5
1992	630	209787	44635500	47459	292212			47459	292212	0.23	0.01	0.67	6
1993	521	173490	36912850	49965	273989			49965	273989	0.29	0.01	0.71	
1994	299	99566	21184150	4273	21260			4273	21260	0.04	0.00	0.06	7
Mean	**528**	**175788**	**37401715**	**97547**	**565402**			**97547**	**565402**	**0.47**	**0.01**	**1.38**	

Comments:

1 Incomplete year for Macquarie R (missing 11 days)
2 Incomplete year for Macquarie R (missing 2 days)
3 Incomplete year for Macquarie R (missing 12 days) and Bogan R (missing 72 days)
4 Incomplete year for Marhaguy Ck (missing 23 days)
5 Incomplete year for Marhaguy Ck (missing 79 days)
6 Incomplete year for Macquarie R (missing 25 days)
7 Incomplete year for Macquarie R (missing 2 days) and Marthaguy Ck (missing 96 days)

Table 27: Salt and water balances for station 420004.

Drainage Division: Castlereagh River
Station: 420004 (Castlereagh River@Mendooran)
Contributing Area: 3600 km^2
Saltfall Station: Trangie
Saltfall Concentration: 4.7 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	661	11184	2379600	2807	24025			2807	24025	0.25	0.01	0.78	1
1986	518	8765	1864800	1191	10108			1191	10108	0.14	0.01	0.33	2
1987	715	12098	2574000	1412	12037			1412	12037	0.12	0.00	0.39	3
1988	819	13857	2948400	5183	44392			5183	44392	0.37	0.02	1.44	4
1989	856	14484	3081600	20600	189240			20600	189240	1.42	0.06	5.72	5
1990	859	14534	3092400	22145	207643			22145	207643	1.52	0.07	6.15	
1991	798	13502	2872800	9539	86650			9539	86650	0.71	0.03	2.65	
1992	678	11472	2440800	3582	31457			3582	31457	0.31	0.01	0.99	
1993	749	12673	2696400	4520	38617			4520	38617	0.36	0.01	1.26	
1994	357	6040	1285200	31	262			31	262	0.01	0.00	0.01	
Mean	**701**	**11861**	**2523600**	**7101**	**64443**			**7101**	**64443**	**0.52**	**0.02**	**1.97**	

Comments:

1 Incomplete year (missing 5 days)
2 Incomplete year (missing 7 days)
3 Incomplete year (missing 6 days)
4 Incomplete year (missing 81 days)
5 Incomplete year (missing 50 days)

Table 28: Salt and water balances for station 420010.

Drainage Division: Castlereagh River
Station: 420010 (Wallumburrawang Creek@Bearbung)
Contributing Area: 452 km^2
Saltfall Station: Trangie
Saltfall Concentration: 4.7 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	551	1171	249052	405	3366			405	3366	0.35	0.01	0.90	
1986	450	956	203400	131	1093			131	1093	0.14	0.01	0.29	
1987	608	1292	274816	156	1299			156	1299	0.12	0.00	0.35	
1988	711	1510	321372	500	4161			500	4161	0.33	0.01	1.11	1
1989	713	1515	322276	1185	9861			1185	9861	0.78	0.03	2.62	2
1990	717	1523	324084	2184	18173			2184	18173	1.43	0.06	4.83	
1991	623	1324	281596	644	5354			644	5354	0.49	0.02	1.42	
1992	616	1309	278432	188	1564			188	1564	0.14	0.01	0.42	
1993	663	1408	299676	357	2970			357	2970	0.25	0.01	0.79	
1994	306	650	138312	0	2			0	2	0.00	0.00	0.00	
Mean	**596**	**1266**	**269302**	**575**	**4784**			**575**	**4784**	**0.40**	**0.02**	**1.27**	

Comments:

1 Incomplete year (missing 34 days)

2 Incomplete year (missing 85 days)

Table 29: Salt and water balances for station 420005.

Drainage Division: Castlereagh River
Station: 420005 (Castlereagh River@Coonamble)
Contributing Area: 8400 km^2
Saltfall Station: Trangie
Saltfall Concentration: 4.7 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985													
1986	440	17371	3696000	110	428			110	428	0.01	0.00	0.01	1
1987	605	23885	5082000	2421	11173			2421	11173	0.10	0.00	0.29	
1988	709	27991	5955600	11897	59137			11897	59137	0.43	0.01	1.42	
1989	719	28386	6039600	39999	305359			39999	305359	1.41	0.05	4.76	
1990	725	28623	6090000	46049	331055			46049	331055	1.61	0.05	5.48	
1991	648	25583	5443200	18737	113889			18737	113889	0.73	0.02	2.23	2
1992	596	23530	5006400	11914	72864			11914	72864	0.51	0.01	1.42	
1993	687	27123	5770800	18277	81599			18277	81599	0.67	0.01	2.18	
1994	325	12831	2730000	533	2077			533	2077	0.04	0.00	0.06	3
Mean	**606**	**23925**	**5090400**	**16660**	**108620**			**16660**	**108620**	**0.61**	**0.02**	**1.98**	
Mean 87-94	**627**	**24744**	**5264700**	**18728**	**122144**			**18728**	**122144**	**0.69**	**0.02**	**2.23**	

Comments:

1 Incomplete year (missing 153 days)
2 Incomplete year (missing 66 days)
3 Incomplete year (missing 55 days)

Table 30: Salt and water balances for station 412002.

Drainage Division: Lachlan River
Station: 412002 (Lachlan River@Cowra)
Contributing Area: 11100 km^2
Saltfall Station: Cowra
Saltfall Concentration: 4.3 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	691	32981	7670100	79199	411426	19	99	79218	411525	2.40	0.05	7.14	
1986	710	33888	7881000	180298	1021542	163	926	180462	1022468	5.33	0.13	16.26	
1987	695	33172	7714500	93861	481826	204	1045	94064	482871	2.84	0.06	8.47	
1988	843	40236	9357300	161044	884985	582	3197	161626	888182	4.02	0.09	14.56	
1989	774	36943	8591400	283172	1657634	857	5018	284029	1662652	7.69	0.19	25.59	
1990	951	45391	10556100	502617	3140417	993	6202	503609	3146619	11.09	0.30	45.37	
1991	679	32409	7536900	152772	837211	1031	5650	153803	842861	4.75	0.11	13.86	
1992	918	43816	10189800	173568	976063	724	4069	174292	980132	3.98	0.10	15.70	
1993	720	34366	7992000	200853	1139423	1342	7614	202195	1147037	5.88	0.14	18.22	
1994	482	23006	5350200	132467	673054	1148	5834	133615	678888	5.81	0.13	12.04	
Mean	**746**	**35621**	**8283930**	**195985**	**1122358**	**706**	**3965**	**196691**	**1126323**	**5.38**	**0.13**	**17.72**	

Comments:

Table 31: Salt and water balances for station 412004.

Drainage Division: Lachlan River
Station: 412004 (Lachlan River@Forbes)
Contributing Area: 19000 km^2
Saltfall Station: Cowra
Saltfall Concentration: 4.3 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	681	55638	12939000	126206	563659	1716	8913	127922	572572	2.30	0.04	6.73	
1986	650	53105	12350000	198133	991897	7920	44874	206053	1036771	3.88	0.08	10.84	
1987	671	54821	12749000	133030	588757	8404	43142	141434	631899	2.58	0.05	7.44	
1988	794	64870	15086000	200594	986852	9645	53004	210239	1039856	3.24	0.07	11.07	
1989	736	60131	13984000	339952	1912669	8607	50385	348559	1963054	5.80	0.14	18.35	
1990	930	75981	17670000	796174	5201880	9845	61512	806019	5263392	10.61	0.30	42.42	
1991	640	52288	12160000	208431	1042315	10357	56759	218788	1099074	4.18	0.09	11.52	
1992	896	73203	17024000	270451	1453107	7442	41850	277893	1494957	3.80	0.09	14.63	
1993	714	58334	13566000	281713	1540853	7679	43563	289392	1584416	4.96	0.12	15.23	
1994	457	37337	8683000	155597	661236	4911	24951	160507	686187	4.30	0.08	8.45	
Mean	**717**	**58571**	**13621100**	**271028**	**1494323**	**7653**	**42895**	**278681**	**1537218**	**4.56**	**0.11**	**14.67**	

Comments:

Table 32: Salt and water balances for station 412006.

Drainage Division: Lachlan River
Station: 412006 (Lachlan River@Condoblin Bridge)
Contributing Area: 25200 km^2
Saltfall Station: Cowra
Saltfall Concentration: 4.3 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	637	69025	16052400	81413	343995	18705	84788	100117	428783	1.45	0.03	5.27	
1986	585	63391	14742000	128546	592148	36697	188938	165244	781086	2.61	0.05	8.70	
1987	633	68592	15951600	76652	329126	39017	178628	115670	507754	1.69	0.03	6.09	
1988	754	81703	19000800	142631	658625	34990	177693	177621	836318	2.17	0.04	9.35	
1989	683	74010	17211600	294407	1541476	26362	150278	320769	1691754	4.33	0.10	16.88	
1990	879	95248	22150800		3408865	26022	167206	591558	3576071	6.21	0.16	31.13	
1991	589	63824	14842800	144851	686699	35917	184578	180768	871277	2.83	0.06	9.51	
1992	864	93623	21772800	226609	1111049	26979	146819	253587	1257868	2.71	0.06	13.35	
1993	679	73576	17110800	253718	1310111	21750	120526	275468	1430637	3.74	0.08	14.50	
1994	424	45945	10684800	79610	330745	20883	92830	100494	423575	2.19	0.04	5.29	
Mean	**673**	**72894**	**16952040**	**199397**	**1031284**	**28732**	**149228**	**228130**	**1180512**	**2.99**	**0.07**	**12.01**	

Comments:

Table 33: Salt and water balances for station 412039.

Drainage Division: Lachlan River
Station: 412039 (Lachlan River@Hillston Weir)
Contributing Area: 54100 km^2
Saltfall Station: Cowra
Saltfall Concentration: 4.3 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	552	128412	29863200	37962	122053	23333	104346	61295	226399	0.48	0.01	1.13	
1986	481	111895	26022100	74055	259782	48127	241591	122182	501373	1.09	0.02	2.26	
1987	531	123527	28727100	52203	162475	52202	235239	104405	397714	0.85	0.01	1.93	
1988	663	154234	35868300	69505	276666	42985	214611	112490	491277	0.73	0.01	2.08	
1989	592	137717	32027200	203114	954830	35255	196839	238369	1151669	1.73	0.04	4.41	
1990	727	169122	39330700	352398	1851524	36462	230133	388860	2081657	2.30	0.05	7.19	
1991	488	113523	26400800	83163	337697	52235	261937	135398	599634	1.19	0.02	2.50	
1992	735	170983	39763500	137568	530070	43828	229429	181396	759499	1.06	0.02	3.35	
1993	628	146092	33974800	179807	801187	34795	187884	214602	989071	1.47	0.03	3.97	
1994	368	85608	19908800	54605	182805	28588	124837	83193	307642	0.97	0.02	1.54	
Mean	**577**	**134111**	**31188650**	**124438**	**547909**	**39781**	**202685**	**164219**	**750593**	**1.19**	**0.02**	**3.04**	

Comments:

Table 34: Salt and water balances for station 410050.

Drainage Division: Murrumbidgee River
Station: 410050 (Murrumbidgee River@Billilingra)
Contributing Area: 3745 km^2
Saltfall Station: Wagga Wagga SCS
Saltfall Concentration: 4.5 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	729	12285	2730105	15039	280523	5845	233800	20884	514323	1.70	0.19	5.58	
1986	651	10971	2437995	7762	133886	6835	273400	14597	407286	1.33	0.17	3.90	
1987	606	10213	2269470	3749	64524	6045	241800	9794	306324	0.96	0.13	2.62	
1988	987	16633	3696315	24048	484398	7600	304000	31648	788398	1.90	0.21	8.45	
1989	892	15032	3340540	29077	552731	10438	417500	39515	970231	2.63	0.29	10.55	
1990	766	12909	2868670	18101	322646	6838	273500	24939	596146	1.93	0.21	6.66	
1991	874	14729	3273130	26239	717894	6595	263800	32834	981694	2.23	0.30	8.77	
1992	1015	17105	3801175	24866	483884	8788	351500	33654	835384	1.97	0.22	8.99	
1993	755	12724	2827475	10594	182336	11825	473000	22419	655336	1.76	0.23	5.99	
1994	601	10128	2250745	3230	55590	2228	89100	5458	144690	0.54	0.06	1.46	
Mean	**788**	**13273**	**2949562**	**16271**	**327841**	**7304**	**292140**	**23574**	**619981**	**1.70**	**0.20**	**6.29**	

Comments:

Table 35: Salt and water balances for station 410213.

Drainage Division: Murrumbidgee River
Station: 410213 (Murrumbidgee River@Angle Crossing)
Contributing Area: 5140 km^2
Saltfall Station: Wagga Wagga SCS
Saltfall Concentration: 4.5 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	729	16862	3747060	23616	363879	5845	233800	29461	597679	1.40	0.10	5.73	
1986	651	15058	3346140	12108	186567	6835	273400	18943	459967	0.80	0.06	3.69	
1987	606	14017	3114840	5279	81335	6045	241800	11324	323135	0.38	0.03	2.20	
1988	987	22829	5073180	45546	701786	7600	304000	53146	1005786	2.00	0.14	10.34	
1989	892	20632	4584880	52337	806421	10438	417500	62775	1223921	2.54	0.18	12.21	
1990	766	17718	3937240	25587	394251	6838	273500	32425	667751	1.44	0.10	6.31	
1991	874	20216	4492360	58097	895174	6595	263800	64692	1158974	2.87	0.20	12.59	
1992	1015	23477	5217100	32875	506543	8788	351500	41663	858043	1.40	0.10	8.11	1
1993	755	17463	3880700	15955	245839	11825	473000	27780	718839	0.91	0.06	5.40	
1994	601	13901	3089140	3489	53757	2228	89100	5717	142857	0.25	0.02	1.11	2
Mean	**788**	**18217**	**4048264**	**27489**	**423555**	**7304**	**292140**	**34792**	**715695**	**1.40**	**0.10**	**6.77**	

Comments:

1 Incomplete year (missing 42 days)

2 Incomplete year (missing 91 days)

Table 36: Salt and water balances for station 410204.

Drainage Division: Murrumbidgee River
Station: 410204 (Murrumbidgee River@Hall's Crossing)
Contributing Area: 9221 km^2
Saltfall Station: Wagga Wagga SCS
Saltfall Concentration: 4.5 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	729	30249	6722109	40330	641181	5845	233800	46175	874981	1.53	0.13	5.01	
1986	651	27013	6002871	28700	456285	6835	273400	35535	729685	1.32	0.12	3.85	
1987	606	25146	5587926	11011	175058	6045	241800	17056	416858	0.68	0.07	1.85	
1988	987	40955	9101127	91389	1452925	7600	304000	98989	1756925	2.42	0.19	10.74	
1989	892	37013	8225132	123199	1958654	10438	417500	133637	2376154	3.61	0.29	14.49	
1990	766	31785	7063286	58734	933770	6838	273500	65572	1207270	2.06	0.17	7.11	
1991	874	36266	8059154	95799	1523038	6595	263800	102394	1786838	2.82	0.22	11.10	
1992	1015	42117	9359315	81285	1292290	8788	351500	90073	1643790	2.14	0.18	9.77	
1993	755	31328	6961855	51523	814837	11825	473000	63348	1287837	2.02	0.18	6.87	
1994	601	24938	5541821	9292	147722	2228	89100	11520	236822	0.46	0.04	1.25	1
Mean	**788**	**32681**	**7262460**	**59126**	**939576**	**7304**	**292140**	**66430**	**1231716**	**1.91**	**0.16**	**7.20**	

Comments:
1 Incomplete year (missing 91 days)

Table 37: Salt and water balances for station 410407.

Drainage Division: Murrumbidgee River
Station: 410407 (Molongolo River@Coppins Crossing)
Contributing Area: 1957 km^2
Saltfall Station: Wagga Wagga SCS
Saltfall Concentration: 4.5 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	703	6191	1375771	12888	147124	0	0	12888	147124	2.08	0.11	6.59	
1986	640	5636	1252480	8241	94080	0	0	8241	94080	1.46	0.08	4.21	
1987	618	5442	1209426	2489	28419	0	0	2489	28419	0.46	0.02	1.27	
1988	968	8525	1894376	35209	401933	0	0	35209	401933	4.13	0.21	17.99	
1989	933	8216	1825881	49193	561569	0	0	49193	561569	5.99	0.31	25.14	
1990	703	6191	1375771	20398	232853	0	0	20398	232853	3.29	0.17	10.42	
1991	749	6596	1465793	21549	245989	0	0	21549	245989	3.27	0.17	11.01	
1992	789	6948	1544073	17331	197837	0	0	17331	197837	2.49	0.13	8.86	
1993	694	6112	1358158	14390	164274	0	0	14390	164274	2.35	0.12	7.35	
1994	502	4421	982414	2971	33920	0	0	2971	33920	0.67	0.03	1.52	1
Mean	**730**	**6428**	**1428414**	**18466**	**210800**	**0**	**0**	**18466**	**210800**	**2.62**	**0.13**	**9.44**	

Comments:

1 Incomplete year (missing 91 days)

Table 38: Salt and water balances for station 410107.

Drainage Division: Murrumbidgee River
Station: 410107 (Mountain Creek@Mountain Creek)
Contributing Area: 186 km^2
Saltfall Station: Wagga Wagga SCS
Saltfall Concentration: 4.5 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	822	688	152892	1389	32227	0	0	1389	32227	2.02	0.21	7.47	
1986	953	798	177258	2802	65021	0	0	2802	65021	3.51	0.37	15.07	
1987	769	644	143034	589	13672	0	0	589	13672	0.92	0.10	3.17	
1988	1012	847	188232	2446	56751	0	0	2446	56751	2.89	0.30	13.15	
1989	1062	889	197532	2477	57472	0	0	2477	57472	2.79	0.29	13.32	
1990	989	828	183954	3096	71832	0	0	3096	71832	3.74	0.39	16.64	
1991	851	712	158286	1735	40264	0	0	1735	40264	2.44	0.25	9.33	
1992	1036	867	192696	2361	54782	0	0	2361	54782	2.72	0.28	12.69	
1993	1052	881	195672	2177	50502	0	0	2177	50502	2.47	0.26	11.70	
1994	603	505	112158	110	2555	0	0	110	2555	0.22	0.02	0.59	
Mean	**915**	**766**	**170171**	**1918**	**44508**	**0**	**0**	**1918**	**44508**	**2.37**	**0.25**	**10.31**	

Comments:

Table 39: Salt and water balances for station 410024.

Drainage Division: Murrumbidgee River
Station: 410024 (Goodradigbee River@Wee Jasper (Kashmir))
Contributing Area: 1165 km^2
Saltfall Station: Wagga Wagga SCS
Saltfall Concentration: 4.5 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	1071	5615	1247715	7542	190458	0	0	7542	190458	1.34	0.15	6.47	
1986	1251	6558	1457415	13361	337411	0	0	13361	337411	2.04	0.23	11.47	
1987	1019	5342	1187135	8040	203029	0	0	8040	203029	1.51	0.17	6.90	
1988	1402	7350	1633330	13403	338449	0	0	13403	338449	1.82	0.21	11.50	
1989	1431	7502	1667115	19115	482714	0	0	19115	482714	2.55	0.29	16.41	
1990	1240	6501	1444600	16296	411516	0	0	16296	411516	2.51	0.28	13.99	
1991	1185	6212	1380525	12395	312998	0	0	12395	312998	2.00	0.23	10.64	
1992	1440	7549	1677600	16922	427326	0	0	16922	427326	2.24	0.25	14.53	
1993	1271	6663	1480715	14401	363650	0	0	14401	363650	2.16	0.25	12.36	
1994	809	4241	942485	4736	119603	0	0	4736	119603	1.12	0.13	4.07	
Mean	**1212**	**6353**	**1411864**	**12621**	**318715**	**0**	**0**	**12621**	**318715**	**1.93**	**0.22**	**10.83**	

Comments:

Table 40: Salt and water balances for station 410026.

Drainage Division: Murrumbidgee River
Station: 410026 (Yass River@Yass)
Contributing Area: 1362 km^2
Saltfall Station: Wagga Wagga SCS
Saltfall Concentration: 4.5 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	599	3140	697835	6397	57946	0	0	6397	57946	2.04	0.08	4.70	1
1986	625	3277	728125	7201	63486	0	0	7201	63486	2.20	0.09	5.29	2
1987	546	2862	636090	2583	13717	0	0	2583	13717	0.90	0.02	1.90	3
1988	819	4294	954135	9662	83255	0	0	9662	83255	2.25	0.09	7.09	4
1989	803	4210	935495	19797	245516	0	0	19797	245516	4.70	0.26	14.54	
1990	700	3670	815500	17190	163507	0	0	17190	163507	4.68	0.20	12.62	
1991	637	3339	742105	9684	89773	0	0	9684	89773	2.90	0.12	7.11	
1992	774	4058	901710	7467	45329	0	0	7467	45329	1.84	0.05	5.48	
1993	752	3942	876080	13807	124987	0	0	13807	124987	3.50	0.14	10.14	
1994	480	2516	559200	2990	17082	0	0	2990	17082	1.19	0.03	2.20	
Mean	**674**	**3531**	**784628**	**9678**	**90460**	**0**	**0**	**9678**	**90460**	**2.62**	**0.11**	**7.11**	

Comments:

1 Incomplete year (missing 9 days)
2 Incomplete year (missing 8 days)
3 Incomplete year (missing 41 days)
4 Incomplete year (missing 92 days)

Table 41: Salt and water balances for station 410008.

Drainage Division: Murrumbidgee River
Station: 410008 (Murrumbidgee River@Burrinjuck Dam)
Contributing Area: 13100 km^2
Saltfall Station: Wagga Wagga SCS
Saltfall Concentration: 4.5 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	760	44802	9956000	89793	996593	5845	233800	95638	1230393	2.13	0.12	7.30	
1986	750	44213	9825000	104481	1159613	6835	273400	111316	1433013	2.52	0.15	8.50	
1987	669	39438	8763900	69393	770173	6045	241800	75438	1011973	1.91	0.12	5.76	
1988	1024	60365	13414400	168875	1874302	7600	304000	176475	2178302	2.92	0.16	13.47	
1989	976	57535	12785600	278922	3095693	10438	417500	289359	3513193	5.03	0.27	22.09	
1990	834	49164	10925400	174491	1936642	6838	273500	181329	2210142	3.69	0.20	13.84	
1991	871	51345	11410100	175116	1943575	6595	263800	181711	2207375	3.54	0.19	13.87	
1992	1010	59540	13231000	164354	1824128	8788	351500	173141	2175628	2.91	0.16	13.22	
1993	856	50461	11213600	139966	1553453	11825	473000	151791	2026453	3.01	0.18	11.59	
1994	606	35724	7938600	83787	929937	2228	89100	86015	1019037	2.41	0.13	6.57	
Mean	**836**	**49259**	**10946360**	**144918**	**1608411**	**7304**	**292140**	**152221**	**1900551**	**3.01**	**0.17**	**11.62**	

Comments:

Table 42: Salt and water balances for station 410025.

Drainage Division: Murrumbidgee River
Station: 410025 (Jugiong Creek@Jugiong (Inverlockie))
Contributing Area: 2120 km^2
Saltfall Station: Wagga Wagga SCS
Saltfall Concentration: 4.5 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	638	6087	1352560	20034	45282	0	0	20034	45282	3.29	0.03	9.45	
1986	661	6306	1401320	33126	82941	0	0	33126	82941	5.25	0.06	15.63	
1987	558	5323	1182960	20291	45848	0	0	20291	45848	3.81	0.04	9.57	
1988	761	7260	1613320	30932	86983	0	0	30932	86983	4.26	0.05	14.59	
1989	779	7432	1651480	68365	245735	0	0	68365	245735	9.20	0.15	32.25	
1990	757	7222	1604840	12018	260850	0	0	12018	260850	1.66	0.16	5.67	
1991	633	6039	1341960	9402	170155	0	0	9402	170155	1.56	0.13	4.44	
1992	839	8004	1778680	10535	172779	0	0	10535	172779	1.32	0.10	4.97	
1993	829	7909	1757480	11701	245128	0	0	11701	245128	1.48	0.14	5.52	
1994	480	4579	1017600	2822	34042	0	0	2822	34042	0.62	0.03	1.33	
Mean	**694**	**6616**	**1470220**	**21923**	**138974**	**0**	**0**	**21923**	**138974**	**3.24**	**0.09**	**10.34**	

Comments:

Table 43: Salt and water balances for station 410038.

Drainage Division: Murrumbidgee River
Station: 410038 (Adjungbilly Cree@Darbalara)
Contributing Area: 411 km^2
Saltfall Station: Wagga Wagga SCS
Saltfall Concentration: 4.5 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	900	1665	369900	4826	73527	0	0	4826	73527	2.90	0.20	11.74	
1986	1040	1923	427440	7311	117580	0	0	7311	117580	3.80	0.28	17.79	
1987	853	1578	350583	5497	82168	0	0	5497	82168	3.48	0.23	13.38	
1988	1054	1949	433194	5376	81427	0	0	5376	81427	2.76	0.19	13.08	
1989	1129	2088	464019	6250	94031	0	0	6250	94031	2.99	0.20	15.21	1
1990	999	1848	410589	7707	123187	0	0	7707	123187	4.17	0.30	18.75	
1991	870	1609	357570	5968	92635	0	0	5968	92635	3.71	0.26	14.52	
1992	1174	2171	482514	7264	116618	0	0	7264	116618	3.35	0.24	17.67	
1993	964	1783	396204	5605	95975	0	0	5605	95975	3.14	0.24	13.64	
1994	606	1121	249066	2639	42362	0	0	2639	42362	2.35	0.17	6.42	
Mean	**959**	**1773**	**394108**	**5844**	**91951**	**0**	**0**	**5844**	**91951**	**3.27**	**0.23**	**14.22**	

Comments:

1 Incomplete year (missing 94 days)

Table 44: Salt and water balances for station 410039.

Drainage Division: Murrumbidgee River
Station: 410039 (Tumut River@Brungle Bridge)
Contributing Area: 3300 km^2
Saltfall Station: Wagga Wagga SCS
Saltfall Concentration: 4.5 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	1072	15919	3537600	38394	1659803	-22260	-890400	16134	769403	1.01	0.22	4.89	1
1986	1267	18815	4181100	47001	2072827	-11695	-467800	35306	1605027	1.88	0.38	10.70	1
1987	1020	15147	3366000	45825	2014684	-9360	-374400	36465	1640284	2.41	0.49	11.05	1
1988	1343	19944	4431900	36214	1554364	-17033	-681300	19182	873064	0.96	0.20	5.81	1
1989	1344	19958	4435200	51780	2299609	-11883	-475300	39898	1824309	2.00	0.41	12.09	1
1990	1201	17835	3963300	56513	2526068	-23553	-942100	32961	1583968	1.85	0.40	9.99	1
1991	1145	17003	3778500	50781	2251815	-26690	-1067600	24091	1184215	1.42	0.31	7.30	1
1992	1424	21146	4699200	50671	2246083	-21615	-864600	29056	1381483	1.37	0.29	8.80	1
1993	1203	17865	3969900	64633	2914614	-30558	-1222300	34076	1692314	1.91	0.43	10.33	1
1994	783	11628	2583900	55172	2461940	-35650	-1426000	19522	1035940	1.68	0.40	5.92	1
Mean	**1180**	**17526**	**3894660**	**49698**	**2200181**	**-21030**	**-841180**	**28669**	**1359001**	**1.65**	**0.35**	**8.69**	

Comments:

1 Salinity of diversions from Snowy River Scheme estimated to be the same as that of the Tumut River at average daily inflow (2500 ML/day)

Table 45: Salt and water balances for station 410044.

Drainage Division: Murrumbidgee River
Station: 410044 (Muttama Creek@Coolac)
Contributing Area: 1025 km^2
Saltfall Station: Wagga Wagga SCS
Saltfall Concentration: 4.5 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	650	2998	666250	8096	26622	0	0	8096	26622	2.70	0.04	7.90	
1986	661	3049	677525	18535	73199	0	0	18535	73199	6.08	0.11	18.08	
1987	528	2435	541200	9625	35543	0	0	9625	35543	3.95	0.07	9.39	
1988	715	3298	732875	13069	44474	0	0	13069	44474	3.96	0.06	12.75	
1989	751	3464	769775	29898	129980	0	0	29898	129980	8.63	0.17	29.17	
1990	674	3109	690850	28203	124724	0	0	28203	124724	9.07	0.18	27.52	
1991	563	2597	577075	14959	54456	0	0	14959	54456	5.76	0.09	14.59	
1992	830	3828	850750	17020	70089	0	0	17020	70089	4.45	0.08	16.60	
1993	752	3469	770800	21735	99276	0	0	21735	99276	6.27	0.13	21.20	
1994	392	1808	401800	4527	15982	0	0	4527	15982	2.50	0.04	4.42	
Mean	**652**	**3006**	**667890**	**16567**	**67434**	**0**	**0**	**16567**	**67434**	**5.34**	**0.10**	**16.16**	

Comments:

Table 46: Salt and water balances for station 410061.

Drainage Division: Murrumbidgee River
Station: 410061 (Adelong Creek@Batlow Road)
Contributing Area: 155 km^2
Saltfall Station: Wagga Wagga SCS
Saltfall Concentration: 4.5 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	861	601	133455	2011	28859	0	0	2011	28859	3.35	0.22	12.97	
1986	1010	704	156550	2847	46401	0	0	2847	46401	4.04	0.30	18.37	
1987	801	559	124155	2196	33046	0	0	2196	33046	3.93	0.27	14.17	
1988	1010	704	156550	2126	35165	0	0	2126	35165	3.02	0.22	13.72	
1989	1060	739	164300	3790	59573	0	0	3790	59573	5.13	0.36	24.45	
1990	964	672	149420	3703	59655	0	0	3703	59655	5.51	0.40	23.89	
1991	801	559	124155	2414	34717	0	0	2414	34717	4.32	0.28	15.57	
1992	1126	785	174530	2875	44507	0	0	2875	44507	3.66	0.26	18.55	
1993	935	652	144925	2790	46069	0	0	2790	46069	4.28	0.32	18.00	
1994	566	395	87730	1511	20641	0	0	1511	20641	3.83	0.24	9.75	
Mean	**913**	**637**	**141577**	**2626**	**40863**	**0**	**0**	**2626**	**40863**	**4.11**	**0.29**	**16.94**	

Comments:

Table 47: Salt and water balances for station 410047.

Drainage Division: Murrumbidgee River
Station: 410047 (Tarcutta Creek@Old Borambola)
Contributing Area: 1660 km^2
Saltfall Station: Wagga Wagga SCS
Saltfall Concentration: 4.5 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	667	4982	1107220	7406	98666	0	0	7406	98666	1.49	0.09	4.46	
1986	820	6125	1361200	17497	243096	0	0	17497	243096	2.86	0.18	10.54	
1987	648	4841	1075680	9846	131771	0	0	9846	131771	2.03	0.12	5.93	
1988	834	6230	1384440	12421	169617	0	0	12421	169617	1.99	0.12	7.48	
1989	871	6506	1445860	20664	281240	0	0	20664	281240	3.18	0.19	12.45	
1990	807	6028	1339620	21381	299427	0	0	21381	299427	3.55	0.22	12.88	
1991	643	4803	1067380	9161	122563	0	0	9161	122563	1.91	0.11	5.52	
1992	970	7246	1610200	19026	271777	0	0	19026	271777	2.63	0.17	11.46	
1993	827	6178	1372820	17626	251977	0	0	17626	251977	2.85	0.18	10.62	
1994	484	3615	803440	3709	48667	0	0	3709	48667	1.03	0.06	2.23	
Mean	**757**	**5656**	**1256786**	**13874**	**191880**	**0**	**0**	**13874**	**191880**	**2.35**	**0.15**	**8.36**	

Comments:

Table 48: Salt and water balances for station 410001.

Drainage Division: Murrumbidgee River
Station: 410001 (Murrumbidgee River@Wagga Wagga)
Contributing Area: 26400 km^2
Saltfall Station: Wagga Wagga SCS
Saltfall Concentration: 4.5 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	753	89456	19879200	280465	3295717	-15844	-652670	264621	2643047	2.96	0.13	10.02	
1986	796	94565	21014400	375706	4414879	-4185	-189471	371521	4225408	3.93	0.20	14.07	
1987	674	80071	17793600	288818	3393864	-2468	-126480	286350	3267384	3.58	0.18	10.85	
1988	956	113573	25238400	361407	4246852	-8505	-368673	352902	3878179	3.11	0.15	13.37	
1989	951	112979	25106400	629519	7397403	-1003	-53113	628516	7344290	5.56	0.29	23.81	
1990	833	98960	21991200	520922	6121293	-16105	-662154	504817	5459139	5.10	0.25	19.12	
1991	795	94446	20988000	446214	5243407	-18748	-790017	427466	4453390	4.53	0.21	16.19	
1992	998	118562	26347200	454290	5338302	-10446	-498333	443844	4839969	3.74	0.18	16.81	
1993	860	102168	22704000	502242	5901784	-17992	-742410	484250	5159374	4.74	0.23	18.34	
1994	558	66290	14731200	311099	3655688	-32561	-1330010	278538	2325678	4.20	0.16	10.55	
Mean	**817**	**97107**	**21579360**	**417068**	**4900919**	**-12786**	**-541333**	**404283**	**4359586**	**4.14**	**0.20**	**15.31**	

Comments:

Table 49: Salt and water balances for station 410005.

Drainage Division: Murrumbidgee River
Station: 410005 (Murrumbidgee River@Narrandera)
Contributing Area: 34200 km^2
Saltfall Station: Wagga Wagga SCS
Saltfall Concentration: 4.5 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	694	106807	23734800	210432	2332948	62383	267036	272815	2599984	2.55	0.11	7.98	
1986	723	111270	24726600	304004	3370329	71075	695183	375079	4065512	3.37	0.16	10.97	
1987	613	94341	20964600	209411	2321629	83819	887708	293230	3209337	3.11	0.15	8.57	
1988	864	132970	29548800	282879	3136127	72897	588039	355776	3724166	2.68	0.13	10.40	
1989	877	134970	29993400	619305	6865904	68138	759707	687443	7625611	5.09	0.25	20.10	
1990	758	116656	25923600	493361	5469629	58705	216991	552066	5686620	4.73	0.22	16.14	
1991	704	108346	24076800	368830	4089029	71784	273836	440614	4362865	4.07	0.18	12.88	
1992	928	142819	31737600	419196	4647400	55950	281832	475146	4929232	3.33	0.16	13.89	
1993	798	122812	27291600	499584	5538626								
1994	508	78181	17373600	128031	1419418								1
Mean	**747**	**114917**	**25537140**	**353503**	**3919104**	**68094**	**496292**	**431521**	**4525416**	**3.62**	**0.17**	**12.62**	
Mean 85-92	**770**	**118522**	**26338275**	**363427**	**4029124**	**68094**	**496292**	**431521**	**4525416**	**3.62**	**0.17**	**12.62**	

Comments:

1 Incomplete year (missing 184 days)

Table 50: Salt and water balances for station 410136.

Drainage Division: Murrumbidgee River
Station: 410136 (Murrumbidgee River@d/s Hay)
Contributing Area: 56800 km^2
Saltfall Station: Griffith
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	616	190861	34988800	106768	991345	183261	1594208	290029	2585553	1.52	0.07	5.11	
1986	625	193650	35500000	199315	1850646	191742	2019748	391057	3870394	2.02	0.11	6.88	
1987	538	166694	30558400	96504	896047	220519	2385579	317023	3281626	1.90	0.11	5.58	1
1988	770	238577	43736000	182666	1696063	200684	1989524	383350	3685587	1.61	0.08	6.75	
1989	785	243224	44588000	510334	4738473	210600	2331301	720934	7069774	2.96	0.16	12.69	
1990	668	206973	37942400	370380	3438994	202395	1794641	572775	5233635	2.77	0.14	10.08	2
1991	589	182496	33455200	219304	2036246	218146	1874830	437450	3911076	2.40	0.12	7.70	
1992	824	255308	46803200	277242	2574202	201899	1881909	479141	4456111	1.88	0.10	8.44	
1993	715	221536	40612000	377117	3501553								
1994	432	133851	24537600	62438	579744								
Mean	**656**	**203317**	**37272160**	**240207**	**2230331**	**203656**	**1983968**	**448970**	**4261720**	**2.13**	**0.11**	**7.90**	
Mean 85-92	**677**	**209723**	**38446500**	**245314**	**2277752**	**203656**	**1983968**	**448970**	**4261720**	**2.13**	**0.11**	**7.90**	

Comments:

1 Incomplete year (missing 1 day)

2 Incomplete year (missing 14 days)

Table 51: Salt and water balances for station 410130.

Drainage Division: Murrumbidgee River + Lachlan River
Station: 410130 (Murrumbidgee River@d/s Balranald Weir)
Contributing Area: 165000 km^2
Saltfall Station: Griffith
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	517	473448	85305000	53262	443793	270977	2224886	324239	2668679	0.68	0.03	1.97	
1986	473	433154	78045000	139238	1114432	343249	3071242	482487	4185674	1.11	0.05	2.92	
1987	475	434986	78375000	59358	415737	345984	3159254	405342	3574991	0.93	0.05	2.46	
1988	655	599823	108075000	112188	898761	322205	2836806	434393	3735567	0.72	0.03	2.63	
1989	608	556782	100320000	489913	3890812	281625	2817582	771538	6708394	1.39	0.07	4.68	
1990	599	548540	98835000	377268	2720842	279301	2357866	656569	5078708	1.20	0.05	3.98	
1991	454	415755	74910000	159393	1180388	342537	2683611	501930	3863999	1.21	0.05	3.04	
1992	690	631874	113850000	159773	1464452	333066	2783657	492839	4248109	0.78	0.04	2.99	
1993	598	547624	98670000	338876	2987469								
1994	349	319600	57585000	45004	441985								
Mean	**542**	**496159**	**89397000**	**193427**	**1555867**	**314868**	**2741863**	**508667**	**4258015**	**1.00**	**0.05**	**3.08**	
Mean 85-92	**559**	**511795**	**92214375**	**193799**	**1516152**	**314868**	**2741863**	**508667**	**4258015**	**1.00**	**0.05**	**3.08**	

Comments:

Table 52: Salt and water balances for station 410091.

Drainage Division: Murrumbidgee River
Station: 410091 (Billabong Creek@Walbundrie)
Contributing Area: 3065 km^2
Saltfall Station: Wagga Wagga SCS
Saltfall Concentration: 4.5 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	630	8689	1930950	22779	62185	0	0	22779	62185	2.62	0.03	7.43	
1986	691	9531	2117915	38859	249699	0	0	38859	249699	4.08	0.12	12.68	
1987	528	7282	1618320	26750	88095	0	0	26750	88095	3.67	0.05	8.73	
1988	699	9641	2142435	27526	103487	0	0	27526	103487	2.86	0.05	8.98	
1989	748	10317	2292620	43136	230293	0	0	43136	230293	4.18	0.10	14.07	
1990	679	9365	2081135	46703	346561	0	0	46703	346561	4.99	0.17	15.24	
1991	566	7807	1734790	32246	143530	0	0	32246	143530	4.13	0.08	10.52	
1992	848	11696	2599120	43265	268798	0	0	43265	268798	3.70	0.10	14.12	
1993	786	10841	2409090	37192	176833	0	0	37192	176833	3.43	0.07	12.13	
1994	434	5986	1330210	18713	29338	0	0	18713	29338	3.13	0.02	6.11	
Mean	**661**	**9115**	**2025659**	**33717**	**169882**	**0**	**0**	**33717**	**169882**	**3.68**	**0.08**	**11.00**	

Comments:

Table 53: Salt and water balances for station 410134.

Drainage Division: Murrumbidgee River
Station: 410134 (Billabong Creek@Darlot)
Contributing Area: 27500 km^2
Saltfall Station: Griffith
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	433	82162	11907500	28726	219633	3323	24797	32049	244430	0.39	0.02	1.17	
1986	426	80834	11715000	46965	389136	3118	23266	50083	412402	0.62	0.04	1.82	
1987	322	61100	8855000	27080	201855	5283	39423	32363	241278	0.53	0.03	1.18	
1988	553	104932	15207500	51999	379757	5156	38475	57155	418232	0.54	0.03	2.08	
1989	541	102655	14877500	110597	848379	4163	31070	114760	879449	1.12	0.06	4.17	
1990	433	82162	11907500	79471	622208	6007	44825	85478	667033	1.04	0.06	3.11	
1991	330	62618	9075000	45080	355520	7732	57703	52812	413223	0.84	0.05	1.92	
1992	568	107778	15620000	72595	520685	6484	48386	79079	569071	0.73	0.04	2.88	
1993	464	88044	12760000	83980	574026								
1994	259	49145	7122500	34804	241133								
Mean	**433**	**82143**	**11904750**	**58130**	**435233**	**5158**	**38493**	**62972**	**480640**	**0.73**	**0.04**	**2.29**	
Mean 85-92	**451**	**85530**	**12395625**	**57814**	**442147**	**5158**	**38493**	**62972**	**480640**	**0.73**	**0.04**	**2.29**	

Comments:

Table 54: Salt and water balances for station 422001.

Drainage Division: Moonie River + Border Rivers + Gwyder River + Namoi River
Station: 422001 (Barwon River@Dangar Bridge (Walgett)
Contributing Area: 132200 km^2
Saltfall Station: Inverell
Saltfall Concentration: 3.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	588	303161	77733600	97680	624770			97680	624770	0.32	0.01	0.74	
1986	496	255728	65571200	52061	292397			52061	292397	0.20	0.00	0.39	
1987	647	333580	85533400	52335	301319			52335	301319	0.16	0.00	0.40	
1988	788	406277	104173600	535205	4292139			535205	4292139	1.32	0.04	4.05	
1989	663	341830	87648600	265701	2036280			265701	2036280	0.78	0.02	2.01	
1990	640	329971	84608000	354030	2739850			354030	2739850	1.07	0.03	2.68	
1991	673	346985	88970600	188952	1417242			188952	1417242	0.54	0.02	1.43	
1992	521	268617	68876200	61233	387818			61233	387818	0.23	0.01	0.46	
1993	557	287178	73635400	29128	164341			29128	164341	0.10	0.00	0.22	
1994	403	207779	53276600	16604	102236			16604	102236	0.08	0.00	0.13	
Mean	**598**	**308111**	**79002720**	**165293**	**1235839**			**165293**	**1235839**	**0.48**	**0.01**	**1.25**	

Comments:

Table 55: Salt and water balances for station 425003.

Drainage Division: Condamine-Culgoa Rivers + Moonie River + Border Rivers + Gwyder River + Namoi River + Castlereagh River + Macquarie-Bogan Rivers

Station: 425003 (Darling River@Bourke)

Contributing Area: 386000 km^2

Saltfall Station: Inverell

Saltfall Concentration: 3.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	511	769259	197246000	156798	644985			156798	644985	0.20	0.00	0.41	
1986	434	653344	167524000	119499	597571			119499	597571	0.18	0.00	0.31	
1987	539	811411	208054000	73905	261316			73905	261316	0.09	0.00	0.19	1
1988	668	1005607	257848000	805884	5338013			805884	5338013	0.80	0.02	2.09	
1989	606	912272	233916000	667922	4767625			667922	4767625	0.73	0.02	1.73	
1990	624	939370	240864000	1297939	9211381			1297939	9211381	1.38	0.04	3.36	
1991	515	775281	198790000	226646	1244595			226646	1244595	0.29	0.01	0.59	
1992	488	734635	188368000	121965	667667			121965	667667	0.17	0.00	0.32	
1993	493	742162	190298000	87966	399365			87966	399365	0.12	0.00	0.23	
1994	361	543449	139346000	36637	273797			36637	273797	0.07	0.00	0.09	
Mean	**524**	**788679**	**202225400**	**359516**	**2340632**			**359516**	**2340632**	**0.40**	**0.01**	**0.93**	

Comments:

1 Incomplete year (missing 70 days)

Table 56: Salt and water balances for station 425008.

Drainage Division: Condamine-Culgoa Rivers + Moonie River + Border Rivers + Gwyder River + Namoi River + Castlereagh River + Macquarie-Bogan Rivers + Warrego River + Paroo River + Darling River

Station: 425008 (Darling River@Wilcannia Main Channel)

Contributing Area: 569800 km^2

Saltfall Station: Bourke

Saltfall Concentration: 4.6 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	459	1203076	261538200	94984	477128			94984	477128	0.08	0.00	0.17	
1986	388	1016979	221082400	77609	474983			77609	474983	0.08	0.00	0.14	
1987	506	1326266	288318800	29888	203042			29888	203042	0.02	0.00	0.05	
1988	583	1528090	332193400	609342	4088176			609342	4088176	0.40	0.01	1.07	
1989	544	1425868	309971200	644346	4340397			644346	4340397	0.45	0.01	1.13	
1990	587	1538574	334472600	1061143	6926502			1061143	6926502	0.69	0.02	1.86	
1991	444	1163760	252991200	147905	1004791			147905	1004791	0.13	0.00	0.26	
1992	450	1179486	256410000	144863	780329			144863	780329	0.12	0.00	0.25	
1993	444	1163760	252991200	80519	300038			80519	300038	0.07	0.00	0.14	
1994	333	872820	189743400	40534	252441			40534	252441	0.05	0.00	0.07	
Mean	**474**	**1241868**	**269971240**	**293113**	**1884783**			**293113**	**1884783**	**0.21**	**0.01**	**0.51**	

Comments:

1 Incomplete year (missing 70 days)

Table 57: Salt and water balances for station 425007 + 425011.

Drainage Division: Condamine-Culgoa Rivers + Moonie River + Border Rivers + Gwyder River + Namoi River + Castlereagh River + Macquarie-Bogan Rivers + Warrego River + Paroo River + Darling River

Station: 425007 (Darling River@Burtundy) + 425011 (Great Darling Anabranch@Bulpunga)

Contributing Area: 647200 km^2

Saltfall Station: Bourke

Saltfall Concentration: 4.6 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	459	1366498	297064800	20246	68754			20246	68754	0.01	0.00	0.03	1
1986	388	1155123	251113600	54481	159472			54481	159472	0.05	0.00	0.08	
1987	506	1506423	327483200	52271	120763			52271	120763	0.03	0.00	0.08	
1988	583	1735661	377317600	248705	1353373			248705	1353373	0.14	0.00	0.38	
1989	544	1619553	352076800	451832	2674662			451832	2674662	0.28	0.01	0.70	
1990	587	1747569	379906400	980928	5258266			980928	5258266	0.56	0.01	1.52	
1991	444	1321841	287356800	183943	752644			183943	752644	0.14	0.00	0.28	
1992	450	1339704	291240000	110202	370848			110202	370848	0.08	0.00	0.17	
1993	444	1321841	287356800	49027	166017			49027	166017	0.04	0.00	0.08	
1994	333	991381	215517600	34151	134907			34151	134907	0.03	0.00	0.05	2
Mean	**474**	**1410559**	**306643360**	**218579**	**1105971**			**218579**	**1105971**	**0.14**	**0.00**	**0.34**	

Comments:

1 Incomplete year for Darling R. (missing 49 days) and Great Darling A. (missing 7 days)

2 Incomplete year for Darling R. (missing 123 days)

Table 58: Salt and water balances for station 409025.

Drainage Division: Murray-Riverina
Station: 409025 (River Murray@Yarrawonga Weir)
Contributing Area: 27300 km^2
Saltfall Station: Albury
Saltfall Concentration: 5.1 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	1000	139230	27300000	109931	3223788			109931	3223788	0.79	0.12	4.03	
1986	1168	162621	31886400	185242	5432310			185242	5432310	1.14	0.17	6.79	
1987	924	128649	25225200	125575	3682562			125575	3682562	0.98	0.15	4.60	
1988	1204	167633	32869200	128535	3769368			128535	3769368	0.77	0.11	4.71	
1989	1147	159697	31313100	209968	6157424			209968	6157424	1.31	0.20	7.69	
1990	1146	159558	31285800	297400	8721396			297400	8721396	1.86	0.28	10.89	
1991	981	136585	26781300	168457	4940088			168457	4940088	1.23	0.18	6.17	
1992	1337	186151	36500100	287155	8420976			287155	8420976	1.54	0.23	10.52	
1993	1308	182113	35708400	317151	9300615			317151	9300615	1.74	0.26	11.62	
1994	749	104283	20447700	129524	3878050			129524	3878050	1.24	0.19	4.74	
Mean	**1096**	**152652**	**29931720**	**195894**	**5752658**			**195894**	**5752658**	**1.26**	**0.19**	**7.18**	

Comments:

Table 59: Salt and water balances for station 409016.

Drainage Division: Upper Murray
Station: 409016 (River Murray@Heywoods)
Contributing Area: 15300 km^2
Saltfall Station: Albury
Saltfall Concentration: 5.1 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	1020	79591	15606000	118097	3567892	-14778	-601007	103319	2966885	1.30	0.19	6.75	1
1986	1182	92231	18084600	129427	3910179	1646	59823	131073	3970002	1.42	0.22	8.57	1
1987	946	73816	14473800	142670	4310278	-5087	-211380	137583	4098898	1.86	0.28	8.99	1
1988	1208	94260	18482400	115236	3481457	-5274	-220647	109962	3260810	1.17	0.18	7.19	1
1989	1162	90671	17778600	151070	4564037	2646	97108	153716	4661145	1.70	0.26	10.05	1
1990	1192	93012	18237600	220037	6647653	-5358	-224640	214679	6423013	2.31	0.35	14.03	1
1991	1039	81073	15896700	169758	5128644	-4305	-190313	165453	4938331	2.04	0.31	10.81	1
1992	1379	107603	21098700	197295	5960565	-4400	-195299	192895	5765266	1.79	0.27	12.61	1
1993	1363	106355	20853900	231933	7007035	-11801	-484221	220132	6522814	2.07	0.31	14.39	1
1994	791	61722	12102300	201292	6081330	-9969	-403220	191323	5678110	3.10	0.47	12.50	1
Mean	**1128**	**88033**	**17261460**	**167682**	**5065907**	**-5668**	**-237380**	**162013**	**4828527**	**1.88**	**0.28**	**10.59**	

Comments:

1 Diversion includes outflow as irrigation and for other purposes above Albury and the net importation of water from the Snowy River Scheme via Swampy Plains R.

There was no transfer out of the Upper Murray to the Tumut River via Tooma Reservoir

There is transfer from the Upper Murray to Tumut Pond and Tumut River

Table 60: Salt and water balances for station 401204.

Drainage Division: Upper Murray
Station: 401204 (Mitta Mitta River@Tallandoon)
Contributing Area: 4716 km^2
Saltfall Station: Albury
Saltfall Concentration: 5.1 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	1020	24533	4810320	13769	456551	0	0	13769	456551	0.56	0.09	2.92	1
1986	1182	28429	5574312	29072	963915	0	0	29072	963915	1.02	0.17	6.16	1
1987	946	22753	4461336	14337	482775	0	0	14337	482775	0.63	0.11	3.04	1
1988	1208	29054	5696928	38838	1314497	0	0	38838	1314497	1.34	0.23	8.24	1
1989	1162	27948	5479992	17737	611153	0	0	17737	611153	0.63	0.11	3.76	1
1990	1192	28670	5621472	46001	1605869	0	0	46001	1605869	1.60	0.29	9.75	1
1991	1039	24990	4899924	37006	1265790	0	0	37006	1265790	1.48	0.26	7.85	1
1992	1379	33167	6503364	41357	1446354	0	0	41357	1446354	1.25	0.22	8.77	1
1993	1363	32782	6427908	49186	1759549	0	0	49186	1759549	1.50	0.27	10.43	1
1994	791	19025	3730356	53169	1841232	0	0	53169	1841232	2.79	0.49	11.27	1
Mean	**1128**	**27135**	**5320591**	**34047**	**1174769**	**0**	**0**	**34047**	**1174769**	**1.28**	**0.23**	**7.22**	

Comments:

1 Rainfall may be inaccurate as the averages of the whole of the Upper-Murray catchment had to be used

Table 61: Salt and water balances for station 402205.

Drainage Division: Kiewa River
Station: 402205 (Kiewa River@Bandiana)
Contributing Area: 1655 km^2
Saltfall Station: Albury
Saltfall Concentration: 5.1 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	1106	9335	1830430	15815	498889	0	0	15815	498889	1.69	0.27	9.56	
1986	1335	11268	2209425	27619	871259	0	0	27619	871259	2.45	0.39	16.69	
1987	1030	8694	1704650	18153	572657	0	0	18153	572657	2.09	0.34	10.97	
1988	1330	11226	2201150	21907	691078	0	0	21907	691078	1.95	0.31	13.24	
1989	1246	10517	2062130	25333	799149	0	0	25333	799149	2.41	0.39	15.31	
1990	1238	10449	2048890	30427	959849	0	0	30427	959849	2.91	0.47	18.38	
1991	991	8365	1640105	17975	666209	0	0	17975	666209	2.15	0.41	10.86	
1992	1344	11344	2224320	30412	971871	0	0	30412	971871	2.68	0.44	18.38	
1993	1252	10568	2072060	32462	1022519	0	0	32462	1022519	3.07	0.49	19.61	
1994	748	6313	1237940	14824	479624	0	0	14824	479624	2.35	0.39	8.96	
Mean	**1162**	**9808**	**1923110**	**23493**	**753310**	**0**	**0**	**23493**	**753310**	**2.38**	**0.39**	**14.19**	

Comments:

Table 62: Salt and water balances for station 403241.

Drainage Division: Ovens River
Station: 403241 (Ovens River@Peechelba East)
Contributing Area: 6239 km^2
Saltfall Station: Albury
Saltfall Concentration: 5.1 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	939	29878	5858421	38061	1155202	823	25720	38884	1180922	1.30	0.20	6.23	1
1986	1105	35160	6894095	77700	2495532	825	25778	78525	2521310	2.23	0.37	12.59	1
1987	858	27301	5353062	46875	1397642	849	26529	47724	1424171	1.75	0.27	7.65	1
1988	1168	37164	7287152	55078	1653431	982	30679	56060	1684110	1.51	0.23	8.99	1
1989	1095	34842	6831705	85253	2640930	686	21433	85939	2662363	2.47	0.39	13.77	1
1990	1038	33028	6476082	82519	2760321	633	19781	83152	2780102	2.52	0.43	13.33	1
1991	869	27651	5421691	47233	1486521	825	25781	48058	1512302	1.74	0.28	7.70	1
1992	1256	39965	7836184	88641	2901810	951	29725	89593	2931535	2.24	0.37	14.36	1
1993	1218	38755	7599102	88736	2849104	658	20570	89395	2869674	2.31	0.38	14.33	1
1994	670	21319	4180130	22130	630095	660	20625	22790	650720	1.07	0.16	3.65	1
Mean	**1022**	**32506**	**6373762**	**63223**	**1997059**	**789**	**24662**	**64012**	**2021721**	**1.91**	**0.31**	**10.26**	

Comments:

1 Diversions based on data in MDBC Annual Reports

Table 63: Salt and water balances for station 405232.

Drainage Division: Goulburn River
Station: 405232 (Goulburn River@McCoy's Bridge) + 404210 (Broken Creek@Rice's Weir)
Contributing Area: 24530 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	761	128805	18667330	68878	611253								
1986	845	143022	20727850	173894	1914737								
1987	700	118480	17171000	116957	1156238								1
1988	932	157748	22861960	151215	1471701	92339	1648904	243554	3120605	1.54	0.14	9.93	
1989	908	153685	22273240	287202	3243087	88304	1401657	375506	4644744	2.44	0.21	15.31	2
1990	752	127281	18446560	180133	2228518	114929	1884079	295062	4112597	2.32	0.22	12.03	3
1991	737	124742	18078610	168408	1689981	104867	1906676	273275	3596657	2.19	0.20	11.14	
1992	898	151993	22027940	228152	2966264	77388	1460157	305540	4426421	2.01	0.20	12.46	4
1993	904	153008	22175120	406834	4361443	78959	1338292	485793	5699735	3.17	0.26	19.80	5
1994	452	76504	11087560	63026	505538	114293	2156473	177319	2662011	2.32	0.24	7.23	
Mean	**789**	**133527**	**19351717**	**184470**	**2014876**	**95869**	**1685177**	**308007**	**4037539**	**2.29**	**0.21**	**12.56**	
Mean 88-94	**798**	**134995**	**19564427**	**212139**	**2352362**	**95869**	**1685177**	**308007**	**4037539**	**2.29**	**0.21**	**12.56**	

Comments:

1 Incomplete year for 405232 (missing 5 days)
2 Incomplete year for 404210 (missing 64 days)
3 Incomplete year for 404210 (missing 89 days)
4 Incomplete year for 404210 (missing 98 days)
5 Incomplete year for 404210 (missing 92 days)

Table 64: Salt and water balances for station 406200.

Drainage Division: Campaspe River
Station: 406200 (Coliban River@Malmsbury)
Contributing Area: 225 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	919	1427	206775	1056	11274	2856	30380	3912	41654	2.74	0.20	17.39	
1986	900	1397	202500	3837	40950	2976	31658	6813	72608	4.88	0.36	30.28	
1987	881	1368	198225	3431	36620	2734	29084	6165	65704	4.51	0.33	27.40	
1988	953	1480	214425	2829	30195	2975	31650	5804	61845	3.92	0.29	25.80	
1989	969	1504	218025	5536	59084	3061	32562	8597	91646	5.71	0.42	38.21	
1990	814	1264	183150	785	8374	3878	41250	4663	49624	3.69	0.27	20.72	
1991	776	1205	174600	676	7214	4352	46302	5028	53516	4.17	0.31	22.35	
1992	1062	1649	238950	5787	61760	2896	30806	8683	92566	5.27	0.39	38.59	
1993	1020	1584	229500	6712	71628	2306	24531	9018	96159	5.69	0.42	40.08	
1994	498	773	112050	35	373								
Mean	**879**	**1365**	**197820**	**3068**	**32747**	**3115**	**33136**	**6520**	**69480**	**4.51**	**0.33**	**28.98**	
Mean 85-93	**922**	**1431**	**207350**	**3405**	**36344**	**3115**	**33136**	**6520**	**69480**	**4.51**	**0.33**	**28.98**	

Comments:

Table 65: Salt and water balances for station 406202.

Drainage Division: Campaspe River
Station: 406202 (Campaspe River@Rochester)
Contributing Area: 3398 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	681	15967	2314038	22722	62082								
1986	696	16319	2365008	105631	359217								
1987	656	15381	2229088	54244	190542								
1988	765	17936	2599470	66565	221238	23424	98945	89989	320183	5.02	0.12	26.48	
1989	732	17163	2487336	101678	352493	16836	82765	118514	435258	6.91	0.17	34.88	
1990	562	13177	1909676	24955	61182	27978	116216	52933	177398	4.02	0.09	15.58	
1991	569	13341	1933462	24950	54913	32940	126038	57890	180951	4.34	0.09	17.04	
1992	818	19179	2779564	96543	390086	25370	90312	121913	480398	6.36	0.17	35.88	
1993	806	18898	2738788	113697	446573	17609	62749	131306	509322	6.95	0.19	38.64	
1994	335	7854	1138330	7273	22500	22240	62504	29513	85004	3.76	0.07	8.69	
Mean	**662**	**15521**	**2249476**	**61826**	**216083**	**23771**	**91361**	**86008**	**312645**	**5.33**	**0.13**	**25.31**	
Mean 88-94	**655**	**15364**	**2226661**	**62237**	**221284**	**23771**	**91361**	**86008**	**312645**	**5.33**	**0.13**	**25.31**	

Comments:

Table 66: Salt and water balances for station 406213.

Drainage Division: Campaspe River
Station: 406213 (Campaspe River@Redesdale)
Contributing Area: 629 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	859	3728	540311	10713	78751	0	0	10713	78751	2.87	0.15	17.03	
1986	774	3359	486846	13320	95601	0	0	13320	95601	3.97	0.20	21.18	
1987	788	3420	495652	12756	83633	0	0	12756	83633	3.73	0.17	20.28	
1988	868	3767	545972	14125	96809	0	0	14125	96809	3.75	0.18	22.46	
1989	873	3789	549117	25101	141291	0	0	25101	141291	6.62	0.26	39.91	
1990	712	3090	447848	13241	66123	0	0	13241	66123	4.28	0.15	21.05	
1991	672	2917	422688	11521	56347	0	0	11521	56347	3.95	0.13	18.32	
1992	939	4075	590631	19835	150428	0	0	19835	150428	4.87	0.25	31.53	
1993	944	4097	593776	22874	156256	0	0	22874	156256	5.58	0.26	36.37	
1994	427	1853	268583	3033	7560	0	0	3033	7560	1.64	0.03	4.82	
Mean	**786**	**3410**	**494142**	**14652**	**93280**	**0**	**0**	**14652**	**93280**	**4.13**	**0.18**	**23.29**	

Comments:

Table 67: Salt and water balances for station 406214.

Drainage Division: Campaspe River
Station: 406214 (Axe Creek@Longlea)
Contributing Area: 325 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	588	1319	191100	2340	4533	0	0	2340	4533	1.77	0.02	7.20	1
1986	650	1458	211250	9459	23059	0	0	9459	23059	6.49	0.11	29.10	
1987	612	1372	198900	6237	16718	0	0	6237	16718	4.54	0.08	19.19	
1988	708	1588	230100	10131	23429	0	0	10131	23429	6.38	0.10	31.17	2
1989	687	1541	223275	10136	21419	0	0	10136	21419	6.58	0.10	31.19	3
1990	484	1085	157300	3280	6881	0	0	3280	6881	3.02	0.04	10.09	
1991	513	1150	166725	5012	10225	0	0	5012	10225	4.36	0.06	15.42	
1992	723	1621	234975	10881	29379	0	0	10881	29379	6.71	0.13	33.48	
1993	686	1538	222950	8574	20349	0	0	8574	20349	5.57	0.09	26.38	
1994	275	617	89375	271	455	0	0	271	455	0.44	0.01	0.83	4
Mean	**593**	**1329**	**192595**	**6632**	**15645**	**0**	**0**	**6632**	**15645**	**4.59**	**0.07**	**20.41**	

Comments:

1 Incomplete year (missing 2 days)
2 Incomplete year (missing 5 days)
3 Incomplete year (missing 2 days)
4 Incomplete year (missing 21 days)

Table 68: Salt and water balances for station 406224.

Drainage Division: Campaspe River
Station: 406224 (Mt. Pleasant Creek@Runnymede)
Contributing Area: 250 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	529	913	132250	1542	3474	0	0	1542	3474	1.69	0.03	6.17	
1986	595	1026	148750	13814	15546	0	0	13814	15546	13.46	0.10	55.26	
1987	505	871	126250	3347	5771	0	0	3347	5771	3.84	0.05	13.39	
1988	662	1142	165500	14506	7903	0	0	14506	7903	12.70	0.05	58.02	
1989	590	1018	147500	5322	8665	0	0	5322	8665	5.23	0.06	21.29	
1990	431	743	107750	897	809	0	0	897	809	1.21	0.01	3.59	
1991	488	842	122000	3618	6908	0	0	3618	6908	4.30	0.06	14.47	
1992	700	1208	175000	6055	24250	0	0	6055	24250	5.01	0.14	24.22	
1993	654	1128	163500	4866	22971	0	0	4866	22971	4.31	0.14	19.46	
1994													
Mean	**573**	**988**	**143167**	**5996**	**10700**	**0**	**0**	**5996**	**10700**	**5.75**	**0.07**	**23.99**	
Mean 85-93	**573**	**988**	**143167**	**5996**	**10700**	**0**	**0**	**5996**	**10700**	**5.75**	**0.07**	**23.99**	

Comments:

Table 69: Salt and water balances for station 406226.

Drainage Division: Campaspe River
Station: 406226 (Mt Ida Creek@Derrinal)
Contributing Area: 175 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	682	824	119350	2532	7423	0	0	2532	7423	3.07	0.06	14.47	
1986	714	862	124950	4910	25966	0	0	4910	25966	5.70	0.21	28.06	
1987	640	773	112000	3576	14813	0	0	3576	14813	4.63	0.13	20.43	
1988	775	936	135625	4328	14048	0	0	4328	14048	4.62	0.10	24.73	
1989	709	856	124075	5003	17873	0	0	5003	17873	5.84	0.14	28.59	
1990	545	658	95375	2533	7221	0	0	2533	7221	3.85	0.08	14.47	
1991	570	688	99750	3304	11621	0	0	3304	11621	4.80	0.12	18.88	
1992	779	941	136325	5311	24461	0	0	5311	24461	5.65	0.18	30.35	
1993	781	943	136675	4720	22367	0	0	4720	22367	5.00	0.16	26.97	
1994	313	378	54775	786	1092	0	0	786	1092	2.08	0.02	4.49	
Mean	**651**	**786**	**113890**	**3700**	**14689**	**0**	**0**	**3700**	**14689**	**4.52**	**0.12**	**21.14**	

Comments:

Table 70: Salt and water balances for station 406235.

Drainage Division: Campaspe River
Station: 406235 (Wild Duck Creek@Heathcote)
Contributing Area: 200 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985		1053	152600		17458	0		7289	17458		0.11	36.45	
	755	1042		12890	34609		0	12890		12.37	0.23		
1987	703		140600	10004		0	0		24325	10.31		50.02	
1988		1150	166600		29436	0		12701	29436		0.18	63.51	
	777	1072		15105	33642		0	15105		14.09	0.22		
1990	602		120400	7075		0	0		14523	8.52		35.38	
1991		832	120600		22561	0		11094	22561		0.19	55.47	
	819	1130		14523	40100		0	14523		12.85	0.24		
1993	826		165200	13826		0	0		40070	12.13		69.13	
1994		464	67200		1763	0		1992	1763		0.03	9.96	
	702	**968**		**10650**	**25849**		**0**	**10650**		**10.59**	**0.17**		

Comments:

Table 71: Salt and water balances for station 406262.

Drainage Division: Campaspe River
Station: 406262 (Axe Creek@Strathfieldsaye)
Contributing Area: 100 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985													
1986													
1987													
1988													
1989	726	501	72600	2664	6327	0	0	2664	6327	5.32	0.09	26.64	1
1990	521	359	52100	1976	2227	0	0	1976	2227	5.50	0.04	19.76	
1991	550	380	55000	2582	4151	0	0	2582	4151	6.80	0.08	25.82	2
1992	806	556	80600	5704	14880	0	0	5704	14880	10.26	0.18	57.04	3
1993	756	522	75600	3738	9832	0	0	3738	9832	7.17	0.13	37.38	4
1994	307	212	30700	466	216	0	0	466	216	2.20	0.01	4.66	5
Mean	**611**	**422**	**61100**	**2855**	**6272**	**0**	**0**	**2855**	**6272**	**6.21**	**0.09**	**28.55**	
Mean 90-94	**588**	**406**	**58800**	**2893**	**6261**	**0**	**0**	**2893**	**6261**	**6.38**	**0.09**	**28.93**	

Comments:

1 Incomplete year (missing 255 days)
2 Incomplete year (missing 69 days)
3 Incomplete year (missing 28 days)
4 Incomplete year (missing 1 day)
5 Incomplete year (missing 5 days)

Table 72: Salt and water balances for station 407202 + 407252.

Drainage Division: Loddon River
Station: 407202 (Loddon River@Kerang) + 407252 (Barr Creek @Capel's Crossing)
Contributing Area: 15400 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985													
1986													
1987													
1988	559	59399	8608600	480485	318044	-1831	-50691	478654	267353	8.06	0.03	753.79	1
1989	556	59081	8562400	561356	372412	754	-52510	562110	319902	9.51	0.04	885.21	1
1990	391	41548	6021400	301688	193918	-382	-62002	301306	131916	7.25	0.02	474.50	1
1991	443	47073	6822200	254507	191944	660	-56904	255167	135040	5.42	0.02	401.84	1
1992	632	67156	9732800	447397	344504	172	-49924	447570	294580	6.66	0.03	704.83	1
1993	558	59293	8593200	453953	388639	-726	-52402	453228	336237	7.64	0.04	713.74	1
1994	274	29115	4219600	212733	138102	-872	-63739	211861	74363	7.28	0.02	333.64	1
Mean	**488**	**51809**	**7508600**	**387446**	**278223**	**-318**	**-55453**	**387128**	**222770**	**7.40**	**0.03**	**609.65**	
Mean 88-94	**488**	**51809**	**7508600**	**387446**	**278223**	**-318**	**-55453**	**387128**	**222770**	**7.40**	**0.03**	**609.65**	

Comments:

1 Flow from R. Murray to Kow Swamp not accounted for

Table 73: Salt and water balances for station 407203.

Drainage Division: Loddon River
Station: 407203 (Loddon River@Laanecoorie)
Contributing Area: 4178 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	564	16259	2356392	30578	81650			30578	81650	1.88	0.03	7.32	
1986	641	18479	2678098	78265	208985			78265	208985	4.24	0.08	18.73	
1987	641	18479	2678098	87188	232811			87188	232811	4.72	0.09	20.87	
1988	693	19978	2895354	119924	320225			119924	320225	6.00	0.11	28.70	
1989	702	20237	2932956	146675	391655			146675	391655	7.25	0.13	35.11	
1990	547	15769	2285366	69695	186102			69695	186102	4.42	0.08	16.68	
1991	594	17124	2481732	67155	179320			67155	179320	3.92	0.07	16.07	
1992	735	21189	3070830	115108	307364			115108	307364	5.43	0.10	27.55	
1993	752	21679	3141856	167209	446486			167209	446486	7.71	0.14	40.02	
1994	362	10436	1512436	55127	147203			55127	147203	5.28	0.10	13.19	
Mean	**623**	**17963**	**2603312**	**93692**	**250180**			**93692**	**250180**	**5.09**	**0.09**	**22.43**	

Comments:

Table 74: Salt and water balances for station 407210.

Drainage Division: Loddon River
Station: 407210 (Loddon River@Cairn Curran Reservoir)
Contributing Area: 1750 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	635	7668	1111250	16843	55043			16843	55043	2.20	0.05	9.62	
1986	696	8404	1218000	39631	129514			39631	129514	4.72	0.11	22.65	
1987	690	8332	1207500	40945	133806			40945	133806	4.91	0.11	23.40	
1988	751	9068	1314250	50184	164000			50184	164000	5.53	0.12	28.68	
1989	732	8839	1281000	49393	161401			49393	161401	5.59	0.13	28.22	
1990	603	7281	1055250	35067	114599			35067	114599	4.82	0.11	20.04	
1991	628	7583	1099000	28259	92350			28259	92350	3.73	0.08	16.15	
1992	785	9479	1373750	47695	155866			47695	155866	5.03	0.11	27.25	
1993	793	9575	1387750	66108	216040			66108	216040	6.90	0.16	37.78	
1994	379	4576	663250	31104	101648			31104	101648	6.80	0.15	17.77	
Mean	**669**	**8081**	**1171100**	**40523**	**132427**			**40523**	**132427**	**5.02**	**0.11**	**23.16**	

Comments:

Table 75: Salt and water balances for station 407211.

Drainage Division: Loddon River
Station: 407211 (Bet Bet Creek@Bet Bet)
Contributing Area: 635 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985													
1986													
1987													
1988													
1989													
1990	462	2024	293370	1579	1030	0	0	1579	1030	0.78	0.00	2.49	1
1991	546	2392	346710	15838	22692	0	0	15838	22692	6.62	0.07	24.94	
1992	688	3014	436880	21680	41668	0	0	21680	41668	7.19	0.10	34.14	
1993	702	3076	445770	22562	46318	0	0	22562	46318	7.34	0.10	35.53	
1994	322	1411	204470	6410	2355	0	0	6410	2355	4.54	0.01	10.09	
Mean	**544**	**2384**	**345440**	**13614**	**22813**	**0**	**0**	**13614**	**22813**	**5.29**	**0.06**	**21.44**	
Mean 91-94	**565**	**2473**	**358458**	**16623**	**28258**	**0**	**0**	**16623**	**28258**	**6.42**	**0.07**	**26.18**	

Comments:

1 Incomplete year (missing 180 days)

Table 76: Salt and water balances for station 407213.

Drainage Division: Loddon River
Station: 407213 (McCallum Creek@Carisbrook)
Contributing Area: 525 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	517	1873	271425	2248	5308	0	0	2248	5308	1.20	0.02	4.28	
1986	628	2275	329700	6248	16406	0	0	6248	16406	2.75	0.05	11.90	
1987	613	2221	321825	5600	14808	0	0	5600	14808	2.52	0.05	10.67	
1988	669	2423	351225	7990	21371	0	0	7990	21371	3.30	0.06	15.22	
1989	688	2492	361200	11865	34481	0	0	11865	34481	4.76	0.10	22.60	
1990	513	1858	269325	3058	7042	0	0	3058	7042	1.65	0.03	5.82	
1991	583	2112	306075	78	143	0	0	78	143	0.04	0.00	0.15	1
1992													
1993													
1994													
Mean	**602**	**2179**	**315825**	**5298**	**14223**	**0**	**0**	**5298**	**14223**	**2.32**	**0.04**	**10.09**	
Mean 85-90	**605**	**2190**	**317450**	**6168**	**16569**	**0**	**0**	**6168**	**16569**	**2.70**	**0.05**	**11.75**	

Comments:

1 Incomplete year (missing 270 days)

Table 77: Salt and water balances for station 407214.

Drainage Division: Loddon River
Station: 407214 (Creswick Creek@Clunes)
Contributing Area: 225 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	638	990	143550	1621	6569	0	0	1621	6569	1.64	0.05	7.20	
1986	740	1149	166500	5173	27123	0	0	5173	27123	4.50	0.16	22.99	
1987	727	1129	163575	4084	18575	0	0	4084	18575	3.62	0.11	18.15	
1988	758	1177	170550	4662	24418	0	0	4662	24418	3.96	0.14	20.72	
1989	817	1268	183825	7533	40642	0	0	7533	40642	5.94	0.22	33.48	
1990	680	1056	153000	3196	15161	0	0	3196	15161	3.03	0.10	14.20	
1991	700	1087	157500	3492	17742	0	0	3492	17742	3.21	0.11	15.52	
1992	826	1282	185850	5816	33997	0	0	5816	33997	4.54	0.18	25.85	
1993	868	1348	195300	6948	47254	0	0	6948	47254	5.16	0.24	30.88	
1994	461	716	103725	912	3344	0	0	912	3344	1.27	0.03	4.05	
Mean	**722**	**1120**	**162338**	**4344**	**23483**	**0**	**0**	**4344**	**23483**	**3.69**	**0.14**	**19.31**	

Comments:

Table 78: Salt and water balances for station 407215.

Drainage Division: Loddon River
Station: 407215 (Loddon River@Newstead)
Contributing Area: 1050 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	693	5021	727650	8783	50792	0	0	8783	50792	1.75	0.07	8.36	
1986	759	5499	796950	19630	123380	0	0	19630	123380	3.57	0.15	18.70	
1987	735	5325	771750	16498	102292	0	0	16498	102292	3.10	0.13	15.71	
1988	811	5876	851550	18760	114793	0	0	18760	114793	3.19	0.13	17.87	
1989	786	5695	825300	22413	130290	0	0	22413	130290	3.94	0.16	21.35	
1990	647	4688	679350	12685	79440	0	0	12685	79440	2.71	0.12	12.08	
1991	665	4818	698250	13654	81345	0	0	13654	81345	2.83	0.12	13.00	
1992	826	5984	867300	24199	157877	0	0	24199	157877	4.04	0.18	23.05	
1993	848	6144	890400	23554	159937	0	0	23554	159937	3.83	0.18	22.43	
1994	397	2876	416850	3701	19322	0	0	3701	19322	1.29	0.05	3.52	
Mean	**717**	**5192**	**752535**	**16388**	**101947**	**0**	**0**	**16388**	**101947**	**3.03**	**0.13**	**15.61**	

Comments:

Table 79: Salt and water balances for station 407222.

Drainage Division: Loddon River
Station: 407222 (Tullaroop Creek@Clunes)
Contributing Area: 550 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	643	2440	353650	4670	17999	0	0	4670	17999	1.91	0.05	8.49	
1986	734	2786	403700	12926	14492	0	0	12926	14492	4.64	0.04	23.50	
1987	721	2736	396550	10476	46584	0	0	10476	46584	3.83	0.12	19.05	
1988	757	2873	416350	11377	57254	0	0	11377	57254	3.96	0.14	20.69	
1989	795	3017	437250	15947	82527	0	0	15947	82527	5.29	0.19	28.99	
1990	658	2497	361900	8258	38618	0	0	8258	38618	3.31	0.11	15.01	
1991	687	2607	377850	8222	40187	0	0	8222	40187	3.15	0.11	14.95	
1992	802	3044	441100	13929	75540	0	0	13929	75540	4.58	0.17	25.33	
1993	831	3154	457050	15729	95909	0	0	15729	95909	4.99	0.21	28.60	
1994	441	1674	242550	2815	9259	0	0	2815	9259	1.68	0.04	5.12	
Mean	**707**	**2683**	**388795**	**10435**	**47837**	**0**	**0**	**10435**	**47837**	**3.73**	**0.12**	**18.97**	

Comments:

Table 80: Salt and water balances for station 407229.

Drainage Division: Loddon River
Station: 407229 (Loddon River@Serpentine Weir)
Contributing Area: 5350 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	537	19823	2872950	34457	78433								
1986	608	22444	3252800	89121	190788								
1987	611	22555	3268850	145731	223745								
1988	667	24622	3568450	164287	299057								
1989	682	25176	3648700	242069	394353	1052	1713	243121	396066	9.66	0.11	45.44	
1990	518	19122	2771300	91435	174205	1220	2324	92655	176529	4.85	0.06	17.32	
1991	568	20968	3038800	94660	167022	1407	2483	96067	169505	4.58	0.06	17.96	
1992	724	26726	3873400	135963	302653	739	1645	136702	304298	5.11	0.08	25.55	
1993	711	26247	3803850	139699	374279	437	1170	140136	375449	5.34	0.10	26.19	
1994	341	12588	1824350	56689	114906	992	2010	57681	116916	4.58	0.06	10.78	
Mean	**597**	**22027**	**3192345**	**119411**	**231944**	**971**	**1867**	**127727**	**256461**	**5.69**	**0.08**	**23.87**	
Mean 89-95	**591**	**21804**	**3160067**	**126753**	**254570**	**974**	**1891**	**127727**	**256461**	**5.69**	**0.08**	**23.87**	

Comments:

Table 81: Salt and water balances for station 407230.

Drainage Division: Loddon River
Station: 407230 (Joyces Creek@Strathlea)
Contributing Area: 225 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	613	952	137925	640	3313	0	0	640	3313	0.67	0.02	2.84	
1986	679	1054	152775	2730	14122	0	0	2730	14122	2.59	0.09	12.13	
1987	684	1062	153900	1715	8873	0	0	1715	8873	1.62	0.06	7.62	
1988	730	1133	164250	2741	14179	0	0	2741	14179	2.42	0.09	12.18	
1989	717	1113	161325	1946	10066	0	0	1946	10066	1.75	0.06	8.65	
1990	598	928	134550	822	4250	0	0	822	4250	0.89	0.03	3.65	
1991	630	978	141750	1605	8302	0	0	1605	8302	1.64	0.06	7.13	
1992	777	1206	174825	3608	18664	0	0	3608	18664	2.99	0.11	16.04	
1993	772	1199	173700	3049	15771	0	0	3049	15771	2.54	0.09	13.55	
1994	386	599	86850	257	1328	0	0	257	1328	0.43	0.02	1.14	
Mean	**659**	**1022**	**148185**	**1911**	**9887**	**0**	**0**	**1911**	**9887**	**1.75**	**0.06**	**8.49**	
Mean 89-95	**647**	**1004**	**145500**	**1881**	**9730**	**0**	**0**	**1881**	**9730**	**1.71**	**0.06**	**8.36**	

Comments:

Table 82: Salt and water balances for station 407236.

Drainage Division: Loddon River
Station: 407236 (Mt Hope Creek@Mitiamo)
Contributing Area: 1775 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	442	5413	784550	1048	1405	0	0	1048	1405	0.19	0.00	0.59	1
1986	476	5830	844900	1993	2672	0	0	1993	2672	0.34	0.00	1.12	2
1987	435	5328	772125	2258	3161	0	0	2258	3161	0.42	0.00	1.27	3
1988	555	6797	985125	1890	2534	0	0	1890	2534	0.28	0.00	1.06	4
1989	544	6663	965600	2192	2939	0	0	2192	2939	0.33	0.00	1.23	5
1990	365	4470	647875	1423	1907	0	0	1423	1907	0.32	0.00	0.80	
1991	417	5107	740175	68	91	0	0	68	91	0.01	0.00	0.04	6
1992													
1993													
1994													
Mean	**462**	**5658**	**820050**	**1553**	**2101**	**0**	**0**	**1553**	**2101**	**0.27**	**0.00**	**0.88**	
Mean 87-90	**475**	**5815**	**842681**	**1941**	**2635**	**0**	**0**	**1941**	**2635**	**0.34**	**0.00**	**1.09**	

Comments:

1 Incomplete year (missing 184 days)
2 Incomplete year (missing 132 days)
3 Incomplete year (missing 2 days)
4 Incomplete year (missing 73 days)
5 Incomplete year (missing 19 days)
6 Incomplete year (missing 290 days)

Table 83: Salt and water balances for station 407253.

Drainage Division: Loddon River
Station: 407253 (Piccaninny Creek@Minto)
Contributing Area: 600 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	473	1958	283800	4581	20468	0	0	4581	20468	2.34	0.07	7.64	
1986	532	2202	319200	9429	42130	0	0	9429	42130	4.28	0.13	15.72	
1987	465	1925	279000	4755	21249	0	0	4755	21249	2.47	0.08	7.93	
1988	592	2451	355200	7576	33851	0	0	7576	33851	3.09	0.10	12.63	
1989	572	2368	343200	6788	30329	0	0	6788	30329	2.87	0.09	11.31	
1990	391	1619	234600	2761	12339	0	0	2761	12339	1.71	0.05	4.60	
1991	433	1793	259800	5285	23615	0	0	5285	23615	2.95	0.09	8.81	
1992	676	2799	405600	12730	56880	0	0	12730	56880	4.55	0.14	21.22	
1993	581	2405	348600	11313	50548	0	0	11313	50548	4.70	0.15	18.86	
1994	250	1035	150000	1275	5696	0	0	1275	5696	1.23	0.04	2.13	
Mean	**497**	**2056**	**297900**	**6649**	**29711**	**0**	**0**	**6649**	**29711**	**3.02**	**0.09**	**11.08**	

Comments:

Table 84: Salt and water balances for station 407288.

Drainage Division: Loddon River
Station: 407288 (Bet Bet Creek@Lillicur)
Contributing Area: 225 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985													
1986													
1987													
1988													
1989													
1990	529	821	119025	1062	453	0	0	1062	453	1.29	0.00	4.72	1
1991	592	919	133200	8381	7925	0	0	8381	7925	9.12	0.06	37.25	
1992	713	1107	160425	11881	17582	0	0	11881	17582	10.73	0.11	52.80	
1993	762	1183	171450	7666	10475	0	0	7666	10475	6.48	0.06	34.07	2
1994	356	553	80100	2448	1183	0	0	2448	1183	4.43	0.01	10.88	3
Mean	**590**	**917**	**132840**	**6288**	**7524**	**0**	**0**	**6288**	**7524**	**6.41**	**0.05**	**27.94**	
Mean 91-94	**606**	**940**	**136294**	**7594**	**9291**	**0**	**0**	**7594**	**9291**	**7.69**	**0.06**	**33.75**	

Comments:

1 Incomplete year (missing 240 days)
2 Incomplete year (missing 16 days)
3 Incomplete year (missing 13 days)

Table 85: Salt and water balances for station 407291.

Drainage Division: Loddon River
Station: 407291 (Bullock Creek@Yarraberb)
Contributing Area: 225 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985													
1986													
1987													
1988													
1989													
1990													
1991	464	720	104400	4489	7855	0	0	4489	7855	6.23	0.08	19.95	
1992	610	947	137250	9601	26815	0	0	9601	26815	10.14	0.20	42.67	
1993	554	860	124650	836	1043	0	0	836	1043	0.97	0.01	3.72	1
1994													
Mean	**543**	**842**	**122100**	**4975**	**11904**	**0**	**0**	**4975**	**11904**	**5.78**	**0.09**	**22.11**	
Mean 91-92	**537**	**834**	**120825**	**7045**	**17335**	**0**	**0**	**7045**	**17335**	**8.18**	**0.14**	**31.31**	

Comments:

1 Incomplete year (missing 165 days)

Table 86: Salt and water balances for station 408203.

Drainage Division: Avoca River
Station: 408203 (Avoca River@Quambatook)
Contributing Area: 4740 km^2
Saltfall Station: Kyabram
Saltfall Concentration: 6.9 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	319	10433	1512060	3579	12693	0	0	3579	12693	0.34	0.01	0.76	
1986	403	13181	1910220	23532	41293	0	0	23532	41293	1.79	0.02	4.96	
1987	364	11905	1725360	67951	40284	0	0	67951	40284	5.71	0.02	14.34	
1988	436	14260	2066640	81299	91852	0	0	81299	91852	5.70	0.04	17.15	
1989	461	15077	2185140	80185	118941	0	0	80185	118941	5.32	0.05	16.92	
1990	310	10139	1469400	29940	20655	0	0	29940	20655	2.95	0.01	6.32	
1991	338	11055	1602120	27815	42057	0	0	27815	42057	2.52	0.03	5.87	
1992	545	17825	2583300	73988	86370	0	0	73988	86370	4.15	0.03	15.61	
1993	430	14064	2038200	52360	65513	0	0	52360	65513	3.72	0.03	11.05	
1994	197	6443	933780	23861	5635	0	0	23861	5635	3.70	0.01	5.03	
Mean	**380**	**12438**	**1802622**	**46451**	**52529**	**0**	**0**	**46451**	**52529**	**3.59**	**0.03**	**9.80**	

Comments:

Table 87: Salt and water balances for station 414200.

Drainage Division: Mallee
Station: 414200 (River Murray@d/s Wakool Junction)
Contributing Area: 86175 km^2
Saltfall Station: Deniliquin
Saltfall Concentration: 6.0 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	641	331429	55238175	346449	1961922			346449	1961922	1.05	0.04	4.02	1
1986	730	377447	62907750	798377	5992246			798377	5992246	2.12	0.10	9.26	
1987	605	312815	52135875	656969	3760390			656969	3760390	2.10	0.07	7.62	
1988	798	412606	68767650	974050	4645526			974050	4645526	2.36	0.07	11.30	
1989	770	398129	66354750	1580389	9180775			1580389	9180775	3.97	0.14	18.34	
1990	665	343838	57306375	1078711	8394983			1078711	8394983	3.14	0.15	12.52	
1991	623	322122	53687025	691088	4511560			691088	4511560	2.15	0.08	8.02	
1992	855	442078	73679625	1516680	9133299			1516680	9133299	3.43	0.12	17.60	
1993	812	419845	69974100	2509151	14088568			2509151	14088568	5.98	0.20	29.12	
1994	426	220263	36710550	538094	3153550			538094	3153550	2.44	0.09	6.24	
Mean	**693**	**358057**	**59676188**	**1068996**	**6482282**			**1068996**	**6482282**	**2.87**	**0.11**	**12.40**	
Mean 86-94	**698**	**361016**	**60169300**	**1149279**	**6984544**			**1149279**	**6984544**	**3.08**	**0.11**	**13.34**	

Comments:

1 Incomplete year (missing 181 days)

Table 88: Salt and water balances for station 414203.

Drainage Division: Mallee
Station: 414203 (River Murray@Euston Weir)
Contributing Area: 251175 km^2
Saltfall Station: Deniliquin
Saltfall Concentration: 6.0 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	554	834906	139150950	496020	2924450			496020	2924450	0.59	0.02	1.97	
1986	562	846962	141160350	994716	7182646			994716	7182646	1.17	0.05	3.96	
1987	507	764074	127345725	708175	4061480			708175	4061480	0.93	0.03	2.82	
1988	696	1048907	174817800	1061674	5326470			1061674	5326470	1.01	0.03	4.23	
1989	660	994653	165775500	1700800	13250210			1700800	13250210	1.71	0.08	6.77	
1990	606	913272	152212050	1181881	11429187			1181881	11429187	1.29	0.08	4.71	
1991	503	758046	126341025	707200	5692081			707200	5692081	0.93	0.05	2.82	
1992	738	1112203	185367150	1118156	10249350			1118156	10249350	1.01	0.06	4.45	
1993	663	999174	166529025	1744996	17431410			1744996	17431410	1.75	0.10	6.95	
1994	368	554594	92432400	584795	3533556			584795	3533556	1.05	0.04	2.33	
Mean	**586**	**882679**	**147113198**	**1029841**	**8108084**			**1029841**	**8108084**	**1.15**	**0.05**	**4.10**	

Comments:

Table 89: Salt and water balances for station 426200.

Drainage Division: Lower Murray River
Station: 426200 (River Murray@d/s Rufus River Junction)
Contributing Area: 898375 km^2
Saltfall Station: Deniliquin
Saltfall Concentration: 6.0 mg/L

Year	Rainfall (mm)	Rainfall Salt Input (tonnes)	Rainfall Water Input (ML)	Streamflow Salt Output (tonnes)	Streamflow Water Output (ML)	Diversion Salt (tonnes)	Diversion Water (ML)	Total Salt Output (tonnes)	Total Water Output (ML)	Total SO/SI	Total WO/WI	Total Output/Area (tonnes/km^2)	Comments
1985	488	2630442	438407000	586075	2387730			586075	2387730	0.22	0.01	0.65	
1986	443	2387881	397980125	1112479	6438395			1112479	6438395	0.47	0.02	1.24	
1987	521	2808320	468053375	732477	3469319			732477	3469319	0.26	0.01	0.82	
1988	617	3325784	554297375	1355585	5810809			1355585	5810809	0.41	0.01	1.51	
1989	580	3126345	521057500	2611607	14555845			2611607	14555845	0.84	0.03	2.91	
1990	599	3228760	538126625	2361911	14185561			2361911	14185561	0.73	0.03	2.63	
1991	473	2549588	424931375	1076289	5573330			1076289	5573330	0.42	0.01	1.20	
1992	515	2775979	462663125	1477417	8520590			1477417	8520590	0.53	0.02	1.64	
1993	503	2711296	451882625	2211696	15886040			2211696	15886040	0.82	0.04	2.46	
1994	348	1875807	312634500	766518	3180640			766518	3180640	0.41	0.01	0.85	
Mean	**509**	**2742020**	**457003363**	**1429205**	**8000826**			**1429205**	**8000826**	**0.51**	**0.02**	**1.59**	

Comments: