1 Appendix 2a

Table 1.1: Location and characteristics of field sites.

Site	*Gauge Name*	*Longitude*	*Latitude*	*Catchment area (km2)*	*Elevation (m asl)*
1	Mammy Johnsons River at Pikes Crossing	151.979	-32.244	158	104
2	Wallagaraugh River at Princes Highway	149.714	-37.371	477	35
3	Genoa River at Bondi	149.321	-37.174	234	417
4	Wadbilliga River at Wadbilliga	149.694	-36.259	126	201
5	Tuross River D/S Wadbilliga Junction	149.761	-36.197	918	79
6	Tuross River at Belowra	149.709	-36.201	564	105
7	Jacobs River at Jacobs Ladder	148.427	-36.727	184	343
8	Nariel Creek at Upper Nariel	147.826	-36.444	261	711
9	Gibbo River at Gibbo Park	147.709	-36.756	390	515
10	Snowy Creek at Below Granite Flat	147.413	-36.569	416	331
11	Mann River at Mitchell	152.105	-29.695	890	401
12	Cataract Creek at Sandy Hill	152.217	-28.934	237	595
13	Sportsmans Creek at Gurranang Siding	152.981	-29.467	205	13
14	Goodradigbee River at Brindabella	148.731	-35.421	432	510
15	Jilliby Creek at U/S Wyong River	151.389	-33.246	93	39

Table 1.2: Importance of components, from Principal Components Analysis of the set of 23 hydrological metrics used as explanatory variables in this study.

	PC1	*PC2*	*PC3*	*PC4*	*PC5*
Standard deviation	3.848	1.824	1.377	0.935	0.788
Proportion of variance	0.644	0.145	0.082	0.038	0.027
Cumulative proportion	0.644	0.788	0.871	0.909	0.936

Table 1.3: Loadings across principal components for the set of 23 hydrological metrics used in this study.

metric	*PC1*	*PC2*	*PC3*	*PC4*	*PC5*
HSPeak	-0.24	0.09	0.23	0.13	0.02
MDFAnnHSNum	-0.08	-0.46	-0.08	-0.39	0.03
CVAnnHSNum	0.00	0.40	-0.34	0.43	0.06
CVAnnHSPeak	-0.19	0.06	-0.42	-0.22	0.03
MRateRise	-0.22	-0.18	0.20	0.18	0.12
MRateFall	-0.21	-0.25	0.10	0.22	-0.02
CVAnnMRateRise	-0.22	0.26	-0.02	-0.15	0.02
CVAnnMRateFall	-0.24	0.14	0.08	-0.05	0.22
AS20YrARI	-0.25	0.02	0.01	0.05	-0.02
C_MDFM	0.24	-0.10	-0.14	0.12	0.24
M_MDFM	0.25	0.01	0.02	0.09	-0.30
C_MinM	0.24	-0.07	-0.15	0.19	0.14
M_MinM	0.22	0.11	0.10	0.10	-0.53
C_MaxM	0.02	-0.43	0.33	0.27	0.10
M_MaxM	0.25	-0.02	0.00	0.07	-0.01
MDFMDFSpring	0.24	0.08	0.11	-0.19	0.19
MDFMDFSummer	-0.18	-0.19	-0.44	0.19	0.07
MDFMDFAutumn	-0.23	-0.13	-0.04	0.17	-0.42
MDFMDFWinter	0.14	0.30	0.40	-0.13	0.23
CVMDFSpring	-0.22	0.10	0.20	0.35	0.14
CVMDFSummer	-0.22	0.11	0.14	-0.20	-0.42
CVMDFAutumn	-0.24	0.02	0.01	-0.24	0.09
CVMDFWinter	-0.21	0.22	0.03	0.08	0.06

Table 1.4: Summary statistics for hydrological variables. From left: minimum, maximum, mean and standard deviation.

metric	*min*	*max*	*mean*	*sd*
HSPeak	5.38	29.81	16.67	8.34
MDFAnnHSNum	2.8	5.93	4.1	0.96
CVAnnHSNum	0.48	0.84	0.74	0.11
CVAnnHSPeak	0.24	1.47	0.69	0.34
MRateRise	0.2	1.99	0.91	0.57
MRateFall	0.07	0.8	0.34	0.23
CVAnnMRateRise	0.43	1.18	0.85	0.25
CVAnnMRateFall	0.41	1.46	0.9	0.34
AS20YrARI	17.94	209.99	126.13	81.19
C_MDFM	0.05	0.31	0.14	0.09
M_MDFM	0.06	0.2	0.12	0.05
C_MinM	0.01	0.27	0.12	0.08
M_MinM	0.07	0.16	0.11	0.03
C_MaxM	0.19	0.44	0.28	0.09
M_MaxM	0.04	0.18	0.09	0.06
MDFMDFSpring	0.19	1.81	1.02	0.55
MDFMDFSummer	0.42	1.49	0.88	0.33
MDFMDFAutumn	0.28	1.82	1	0.52
MDFMDFWinter	0.64	1.44	1.08	0.25
CVMDFSpring	0.36	2.1	1.12	0.54
CVMDFSummer	0.6	1.66	1.15	0.39
CVMDFAutumn	0.48	1.49	1.07	0.35
CVMDFWinter	0.46	1.99	1.05	0.46

Bioclimatic variables assessed for relationships with FDis:

Annual Mean Temperature

Mean Diurnal Range (Mean of monthly (max temp - min temp))

Isothermality (BIO2/BIO7) (* 100)

Temperature Seasonality (standard deviation * 100)

Max Temperature of Warmest Month

Min Temperature of Coldest Month

Temperature Annual Range (BIO5-BIO6)

Mean Temperature of Wettest Quarter

Mean Temperature of Driest Quarter

Mean Temperature of Warmest Quarter

Mean Temperature of Coldest Quarter

Annual Precipitation

Precipitation of Wettest Month

Precipitation of Driest Month

Precipitation Seasonality (Coefficient of Variation)

Precipitation of Wettest Quarter

Precipitation of Driest Quarter

Precipitation of Warmest Quarter

Precipitation of Coldest Quarter

Edaphic variables assessed for relationships with FDis:

Available Water Capacity

Bulk Density Whole Earth (g cm-3)

Clay (%)

Depth of Regolith (m)

Depth of Soil (m)

Effective Cation Exchange Capacity (meq / 100 g)

Total Nitrogen (%)

pH CaCl2

Total Phosphorous (%)

Silt (%)

Sand (%)

Organic Carbon (%)

Further information on soil variables can be found at:

`http://www.clw.csiro.au/aclep/soilandlandscapegrid` (accessed 09/06/2015)