

NAME ..... Section Name  
 DELTX .... Distance (M)  
 Q ..... Discharge (M3/S)  
 H ..... Stage (M)  
 V.H ..... Velocity Head (M) :  $V.H = ALPHA * V^2 / 19.6$   
 TOTAL E ... Total Energy Head (M) :  $TOTAL E = H + V.H.$   
 IE ..... Energy Gradient :  $IE = (H+Q/(A*R^{2/3}))^{**2}$   
 A ..... Discharge Area (M2)  
 B ..... Width of Water Surface (M)  
 R ..... Hydraulic Radius (M)  
 A/B ..... Hydraulic Depth (M)  
 N ..... Roughness Coefficient  
 ALPHA .... Rectification Coefficient  
 V ..... Velocity (M/S) :  $V = Q / A$   
 FR ..... Froude Number :  $FR = V/SQRT(9.8*(A/B)/ALPHA)$

"Non-Uniform Flow, Om3/s, 8a"

NAME	DELTX (M)	Q (M3/S)	H (M)	V.H (M)	TOTAL E (M)	IE	A (M2)	B (M)	R (M)	A/B (M)	N	ALPHA	V (M/S)	FR
BA 400	0	.00	1.000	.000	1.000	.14022E-17	1168.649	363.91	3.19	3.21	.0300	1.00	.00	.00
BA 1000	600.0	.00	1.000	.000	1.000	.14829E-17	982.360	245.02	3.97	4.01	.0300	1.00	.00	.00
BA 1500	500.0	.00	1.000	.000	1.000	.14178E-17	891.234	184.41	4.75	4.83	.0300	1.00	.00	.00
BA 2000	500.0	.00	1.000	.000	1.000	.15795E-17	921.509	218.97	4.17	4.21	.0300	1.00	.00	.00
BA 2500	500.0	.00	1.000	.000	1.000	.17210E-17	805.955	166.71	4.78	4.83	.0300	1.00	.00	.00
BA 3000	500.0	.00	1.000	.000	1.000	.10892E-17	1224.931	338.67	3.59	3.62	.0300	1.00	.00	.00
BA 3500	500.0	.00	1.000	.000	1.000	.14558E-17	1172.904	379.17	3.09	3.09	.0300	1.00	.00	.00

BA	4000	500.0	.00	1.000	.000	1.000	.18969E-17	1054.079	353.98	2.97	2.98	.0300	1.00	.00	.00
BA	4500	500.0	.00	1.000	.000	1.000	.15257E-17	886.571	192.23	4.53	4.61	.0300	1.00	.00	.00
BA	5000	500.0	.00	1.000	.000	1.000	.23760E-17	748.084	176.98	4.20	4.23	.0300	1.00	.00	.00
BA	5500	500.0	.00	1.000	.000	1.000	.24264E-17	922.489	305.06	3.02	3.02	.0300	1.00	.00	.00
BA	6000	500.0	.00	1.000	.000	1.000	.16758E-16	439.457	203.12	2.15	2.16	.0300	1.00	.00	.00
BA	6500	500.0	.00	1.000	.000	1.000	.32610E-17	722.305	206.32	3.49	3.50	.0300	1.00	.00	.00
BA	7000	500.0	.00	1.000	.000	1.000	.33156E-17	708.695	199.30	3.54	3.56	.0300	1.00	.00	.00
BA	7500	500.0	.00	1.000	.000	1.000	.58635E-17	594.049	183.19	3.22	3.24	.0300	1.00	.00	.00
BA	8000	500.0	.00	1.000	.000	1.000	.56037E-17	518.192	133.84	3.82	3.87	.0300	1.00	.00	.00
BA	8500	500.0	.00	1.000	.000	1.000	.93775E-18	1057.930	207.97	5.01	5.09	.0300	1.00	.00	.00
BA	9000	500.0	.00	1.000	.000	1.000	.54489E-17	605.454	193.83	3.09	3.12	.0300	1.00	.00	.00
BA	9500	500.0	.00	1.000	.000	1.000	.63822E-17	588.804	203.66	2.86	2.89	.0300	1.00	.00	.00
BA	10000	500.0	.00	1.000	.000	1.000	.67901E-17	551.048	180.89	3.02	3.05	.0300	1.00	.00	.00
BA	10500	500.0	.00	1.000	.000	1.000	.93125E-17	542.678	221.07	2.44	2.45	.0300	1.00	.00	.00
BA	11000	500.0	.00	1.000	.000	1.000	.98424E-17	527.555	215.12	2.44	2.45	.0300	1.00	.00	.00
BA	11500	500.0	.00	1.000	.000	1.000	.93614E-17	487.028	169.36	2.86	2.88	.0300	1.00	.00	.00
BA	12000	500.0	.00	1.000	.000	1.000	.12397E-16	520.472	247.59	2.09	2.10	.0300	1.00	.00	.00
BA	12500	500.0	.00	1.000	.000	1.000	.10098E-16	483.826	175.71	2.73	2.75	.0300	1.00	.00	.00
BA	13000	500.0	.00	1.000	.000	1.000	.15210E-16	439.876	189.18	2.31	2.33	.0300	1.00	.00	.00
BA	13500	500.0	.00	1.000	.000	1.000	.17245E-16	431.759	198.56	2.16	2.17	.0300	1.00	.00	.00
BA	14000	500.0	.00	1.000	.000	1.000	.14396E-16	444.431	186.47	2.37	2.38	.0300	1.00	.00	.00
BA	14500	500.0	.00	1.000	.000	1.000	.25592E-16	382.689	197.44	1.93	1.94	.0300	1.00	.00	.00
BA	15000	500.0	.00	1.000	.000	1.000	.15798E-16	430.597	184.34	2.32	2.34	.0300	1.00	.00	.00
BA	15500	500.0	.00	1.000	.000	1.000	.14325E-16	430.443	171.05	2.50	2.52	.0300	1.00	.00	.00
BA	16000	500.0	.00	1.000	.000	1.000	.32372E-16	326.619	158.39	2.05	2.06	.0300	1.00	.00	.00
BA	16500	500.0	.00	1.000	.000	1.000	.57133E-16	264.650	143.39	1.84	1.85	.0300	1.00	.00	.00
BA	17000	500.0	.00	1.000	.000	1.000	.35594E-16	273.396	108.32	2.49	2.52	.0300	1.00	.00	.00
BA	17500	500.0	.00	1.000	.000	1.000	.18298E-16	361.209	132.24	2.71	2.73	.0300	1.00	.00	.00
BA	18000	500.0	.00	1.000	.000	1.000	.62129E-16	252.127	135.44	1.85	1.86	.0300	1.00	.00	.00
BA	18500	500.0	.00	1.000	.000	1.000	.83588E-17	421.851	107.13	3.86	3.94	.0300	1.00	.00	.00
BA	19000	500.0	.00	1.000	.000	1.000	.81523E-17	445.524	120.82	3.62	3.69	.0300	1.00	.00	.00
BA	19500	500.0	.00	1.000	.000	1.000	.14988E-16	373.745	123.35	2.99	3.03	.0300	1.00	.00	.00
BA	20000	500.0	.00	1.000	.000	1.000	.16505E-16	341.270	106.06	3.18	3.22	.0300	1.00	.00	.00
BA	20500	500.0	.00	1.000	.000	1.000	.76646E-16	249.492	154.39	1.61	1.62	.0300	1.00	.00	.00
BA	21000	500.0	.00	1.000	.000	1.000	.18632E-15	148.770	82.33	1.80	1.81	.0300	1.00	.00	.00
BA	21500	500.0	.00	1.000	.000	1.000	.18403E-15	149.465	80.84	1.80	1.85	.0300	1.00	.00	.00
BA	22000	500.0	.00	1.000	.000	1.000	.81808E-16	188.107	78.86	2.34	2.39	.0300	1.00	.00	.00
BA	22500	500.0	.00	1.000	.000	1.000	.11232E-15	161.379	68.70	2.32	2.35	.0300	1.00	.00	.00
BA	23000	500.0	.00	1.000	.000	1.000	.55028E-15	107.182	81.07	1.30	1.32	.0300	1.00	.00	.00
BA	23500	500.0	.00	1.000	.000	1.000	.48890E-15	108.582	76.95	1.40	1.41	.0300	1.00	.00	.00
BA	24000	500.0	.00	1.000	.000	1.000	.85621E-14	41.448	59.75	.69	.69	.0300	1.00	.00	.00
BA	24500	500.0	.00	1.000	.000	1.000	.67724E-15	79.285	44.26	1.75	1.79	.0300	1.00	.00	.00
BA	25000	500.0	.00	1.000	.000	1.000	.26400E-15	112.027	50.69	2.12	2.21	.0300	1.00	.00	.00
BA	25500	500.0	.00	1.000	.000	1.000	.71180E-14	32.950	28.42	1.12	1.16	.0300	1.00	.00	.00
BA	26000	500.0	.00	1.000	.000	1.000	.16233E-14	59.407	41.36	1.40	1.44	.0300	1.00	.00	.00
BA	26500	500.0	.00	1.000	.000	1.000	.23767E-14	46.893	30.52	1.50	1.54	.0300	1.00	.00	.00
BA	27000	500.0	.00	1.000	.000	1.000	.23234E-13	24.184	32.00	.73	.76	.0300	1.00	.00	.00
BA	27500	500.0	.00	1.000	.000	1.000	.46589E-14	44.462	44.74	.98	.99	.0300	1.00	.00	.00
BA	28000	500.0	.00	1.000	.000	1.000	.66053E-15	76.811	39.06	1.87	1.97	.0300	1.00	.00	.00
BA	28500	500.0	.00	1.000	.000	1.000	.29609E-10	1.440	5.53	.24	.26	.0300	1.00	.00	.00
BA	29000	500.0	.00	1.000	.000	1.000	.26839E-13	22.515	29.99	.73	.75	.0300	1.00	.00	.00



BA 29500 500.0	.00	1.000	.000	1.000	.000	10357E-10	2.081	6.28	.30	.33	.0300	1.00	.00
BA 30000 500.0	.00	1.000	.000	1.000	.000	26188E-12	9.168	17.33	.51	.53	.0300	1.00	.00
BA 30500 500.0	.00	2.820	.000	2.820	.000	34734E-09	1.628	9.35	.03	.17	.0300	1.00	.00
BA 31000 500.0	.00	2.820	.000	2.820	.000	91545E-15	68.677	39.00	1.73	1.76	.0300	1.00	.00
BA 31500 500.0	.00	4.490	.000	4.490	.000	14825E-08	.872	6.81	.03	.13	.0300	1.00	.00
BA 32000 500.0	.00	5.200	.000	5.200	.000	24057E-08	.696	9.55	.03	.07	.0300	1.00	.00
BA 32500 500.0	.00	5.200	.000	5.200	.000	62182E-14	33.318	26.23	1.22	1.27	.0300	1.00	.00
BA 33000 500.0	.00	5.830	.000	5.830	.000	22533E-08	.654	3.03	.03	.22	.0300	1.00	.00
BA 33500 500.0	.00	5.830	.000	5.830	.000	17212E-13	25.211	28.62	.86	.88	.0300	1.00	.00
BA 33715 215.0	.00	5.830	.000	5.830	.000	14291E-08	.413	2.49	.08	.17	.0300	1.00	.00
BA 34000 285.0	.00	5.860	.000	5.860	.000	73068E-07	.130	1.73	.02	.07	.0300	1.00	.00
BA 34500 500.0	.00	6.870	.000	6.870	.000	51824E-07	.154	1.34	.02	.11	.0300	1.00	.00
BA 35000 500.0	.00	6.870	.000	6.870	.000	81109E-13	15.084	25.61	.58	.59	.0300	1.00	.00

\*\*\* Legend \*\*\*

NAME ..... Section Name  
 DELTX ..... Distance (M)  
 Q ..... Discharge (M3/S)  
 H ..... Stage (M)  
 V.H ..... Velocity Head (M) :  $V.H = ALPHA * V^2 / 19.6$   
 TOTAL E ... Total Energy Head (M) :  $TOTAL E = H + V.H.$   
 IE ..... Energy Gradient :  $IE = (N*Q/(A*R**(2/3)))**2$   
 A ..... Discharge Area (M2)  
 B ..... Width of Water Surface (M)  
 R ..... Hydraulic Radius (M)  
 A/B ..... Hydraulic Depth (M)  
 N ..... Roughness Coefficient  
 ALPHA ..... Rectification Coefficient  
 V ..... Velocity (M/S) :  $V = Q / A$   
 FR ..... Froude Number :  $FR = V/SQRT(9.8*(A/B)/ALPHA)$

"Non-Uniform Flow, 100m3/s, 8a"

NAME	DELTX (M)	Q (M3/S)	H (M)	V.H (M)	TOTAL E (M)	IE	A (M2)	B (M)	R (M)	A/B (M)	N	ALPHA	V (M/S)	FR
BA 400	0	100.00	1.000	.000	1.000	.14022E-05	1168.649	363.91	3.19	3.21	.0300	1.00	.09	.02
BA 1000	600.0	100.00	1.001	.001	1.001	.14820E-05	982.536	245.02	3.97	4.01	.0300	1.00	.10	.02
BA 1500	500.0	100.00	1.001	.001	1.002	.14166E-05	891.479	184.41	4.75	4.83	.0300	1.00	.11	.02
BA 2000	500.0	100.00	1.002	.001	1.003	.15769E-05	921.973	218.97	4.17	4.21	.0300	1.00	.11	.02
BA 2500	500.0	100.00	1.003	.001	1.004	.17179E-05	806.414	166.72	4.78	4.84	.0300	1.00	.12	.02
BA 3000	500.0	100.00	1.004	.000	1.004	.10854E-05	1226.253	338.67	3.60	3.62	.0300	1.00	.08	.01
BA 3500	500.0	100.00	1.005	.000	1.005	.14488E-05	1174.618	379.18	3.09	3.10	.0300	1.00	.09	.02

BA	4000	500.0	100.00	1.005	.000	1.006	.18361E-05	1055.943	354.03	2.98	2.98	.0300	1.00	.09	.02
BA	4500	500.0	100.00	1.006	.001	1.007	.15193E-05	887.711	192.23	4.54	4.62	.0300	1.00	.11	.02
BA	5000	500.0	100.00	1.007	.001	1.008	.23640E-05	749.260	176.99	4.20	4.23	.0300	1.00	.13	.02
BA	5500	500.0	100.00	1.008	.001	1.009	.24052E-05	924.979	305.10	3.02	3.03	.0300	1.00	.11	.02
BA	5000	500.0	100.00	1.011	.003	1.013	.16485E-04	441.665	203.16	2.16	2.17	.0300	1.00	.23	.05
BA	6500	500.0	100.00	1.017	.001	1.018	.32086E-05	725.902	206.35	3.50	3.52	.0300	1.00	.14	.02
BA	7000	500.0	100.00	1.019	.001	1.020	.32608E-05	712.491	199.46	3.56	3.57	.0300	1.00	.17	.02
BA	7500	500.0	100.00	1.021	.001	1.022	.52543E-05	597.847	183.26	3.24	3.26	.0300	1.00	.17	.03
BA	8000	500.0	100.00	1.023	.002	1.025	.55205E-05	521.302	134.34	3.83	3.88	.0300	1.00	.19	.03
BA	8500	500.0	100.00	1.026	.000	1.026	.92901E-06	1063.262	209.13	5.01	5.08	.0300	1.00	.09	.01
BA	9000	500.0	100.00	1.027	.001	1.028	.52392E-05	610.620	193.86	3.12	3.15	.0300	1.00	.16	.03
BA	9500	500.0	100.00	1.029	.001	1.031	.61725E-05	594.799	203.67	2.89	2.92	.0300	1.00	.17	.03
BA	10000	500.0	100.00	1.032	.002	1.034	.66046E-05	556.864	181.89	3.04	3.06	.0300	1.00	.18	.03
BA	10500	500.0	100.00	1.036	.002	1.038	.88730E-05	550.698	221.12	2.47	2.49	.0300	1.00	.18	.04
BA	11000	500.0	100.00	1.041	.002	1.042	.93219E-05	536.314	215.15	2.48	2.49	.0300	1.00	.19	.04
BA	11500	500.0	100.00	1.045	.002	1.047	.89135E-05	494.560	169.69	2.90	2.92	.0300	1.00	.20	.04
BA	12000	500.0	100.00	1.050	.002	1.052	.11469E-04	532.939	247.76	2.14	2.15	.0300	1.00	.19	.04
BA	12500	500.0	100.00	1.055	.002	1.057	.94632E-05	493.539	175.85	2.78	2.81	.0300	1.00	.20	.04
BA	13000	500.0	100.00	1.061	.003	1.063	.13977E-04	451.361	189.33	2.37	2.38	.0300	1.00	.22	.05
BA	13500	500.0	100.00	1.068	.003	1.071	.15578E-04	445.271	198.66	2.23	2.24	.0300	1.00	.22	.05
BA	14000	500.0	100.00	1.075	.002	1.078	.13000E-04	458.483	186.67	2.44	2.46	.0300	1.00	.25	.06
BA	14500	500.0	100.00	1.083	.003	1.087	.22275E-04	399.152	197.62	2.01	2.02	.0300	1.00	.22	.04
BA	15000	500.0	100.00	1.093	.003	1.096	.13895E-04	447.767	194.54	2.41	2.43	.0300	1.00	.22	.05
BA	15500	500.0	100.00	1.100	.003	1.102	.12620E-04	447.520	171.37	2.59	2.61	.0300	1.00	.22	.04
BA	16000	500.0	100.00	1.108	.004	1.112	.27415E-04	343.748	158.80	2.15	2.16	.0300	1.00	.29	.06
BA	16500	500.0	100.00	1.124	.006	1.131	.46545E-04	282.584	144.81	1.94	1.95	.0300	1.00	.35	.08
BA	17000	500.0	100.00	1.144	.006	1.150	.29711E-04	288.974	108.49	2.63	2.66	.0300	1.00	.35	.07
BA	17500	500.0	100.00	1.158	.003	1.161	.15260E-04	382.103	132.73	2.85	2.88	.0300	1.00	.26	.05
BA	18000	500.0	100.00	1.170	.007	1.177	.46983E-04	275.247	136.69	2.01	2.01	.0300	1.00	.36	.08
BA	18500	500.0	100.00	1.188	.003	1.190	.72141E-05	441.913	107.59	4.02	4.11	.0300	1.00	.23	.04
BA	19000	500.0	100.00	1.191	.002	1.194	.69209E-05	468.670	121.02	3.80	3.87	.0300	1.00	.21	.03
BA	19500	500.0	100.00	1.195	.003	1.199	.12242E-04	397.873	123.79	3.16	3.21	.0300	1.00	.25	.04
BA	20000	500.0	100.00	1.201	.004	1.205	.13943E-04	363.108	109.05	3.29	3.33	.0300	1.00	.28	.05
BA	20500	500.0	100.00	1.215	.006	1.221	.51113E-04	282.859	155.83	1.81	1.82	.0300	1.00	.35	.08
BA	21000	500.0	100.00	1.247	.018	1.265	.12439E-03	169.371	83.98	2.00	2.02	.0300	1.00	.59	.13
BA	21500	500.0	100.00	1.309	.017	1.326	.11707E-03	175.178	85.69	1.99	2.04	.0300	1.00	.57	.13
BA	22000	500.0	100.00	1.357	.011	1.368	.52097E-04	216.356	79.43	2.66	2.72	.0300	1.00	.46	.09
BA	22500	500.0	100.00	1.384	.014	1.399	.71002E-04	188.371	71.57	2.60	2.63	.0300	1.00	.53	.10
BA	23000	500.0	100.00	1.445	.025	1.470	.21337E-03	143.647	82.62	1.71	1.74	.0300	1.00	.70	.17
BA	23500	500.0	100.00	1.543	.022	1.565	.16842E-03	150.772	78.57	1.90	1.92	.0300	1.00	.66	.15
BA	24000	500.0	100.00	1.741	.055	1.796	.75334E-03	96.510	79.66	1.21	1.21	.0300	1.00	.1.04	.30
BA	24500	500.0	100.00	2.009	.025	2.035	.20242E-03	142.386	76.95	1.80	1.85	.0300	1.00	.70	.16
BA	25000	500.0	100.00	2.088	.018	2.106	.81677E-04	170.528	60.00	2.72	2.84	.0300	1.00	.59	.11
BA	25500	500.0	100.00	2.226	.044	2.270	.57398E-03	107.741	84.32	1.25	1.28	.0300	1.00	.93	.26
BA	26000	500.0	100.00	2.431	.030	2.461	.19184E-03	130.064	58.80	2.15	2.21	.0300	1.00	.77	.17
BA	26500	500.0	100.00	2.539	.035	2.574	.26170E-03	120.375	60.66	1.91	1.98	.0300	1.00	.83	.19
BA	27000	500.0	100.00	2.698	.051	2.748	.43457E-03	100.226	57.00	1.72	1.76	.0300	1.00	.1.00	.24
BA	27500	500.0	100.00	2.868	.025	2.893	.14292E-03	143.943	61.39	2.30	2.34	.0300	1.00	.69	.14
BA	28000	500.0	100.00	2.927	.020	2.947	.72978E-04	160.726	46.54	3.23	3.45	.0300	1.00	.62	.11
BA	28500	500.0	100.00	3.066	.061	3.127	.64766E-03	91.320	61.37	1.47	1.49	.0300	1.00	.1.10	.29
BA	29000	500.0	100.00	3.305	.036	3.341	.20885E-03	119.034	50.63	2.30	2.35	.0300	1.00	.84	.18

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BA	29500	500.0	100.00	3.461	.053	3.515	.48483E-03	97.963	58.49	1.64	1.67	.0300	1.00	1.02	.25
BA	30000	500.0	100.00	3.662	.038	3.699	.25411E-03	116.462	55.63	2.05	2.09	.0300	1.00	.86	.19
BA	30500	500.0	100.00	4.056	.102	4.157	.15780E-02	70.856	63.79	1.10	1.11	.0300	1.00	1.41	.43
BA	31000	500.0	100.00	4.552	.025	4.577	.10088E-03	143.823	46.68	2.99	3.08	.0300	1.00	.70	.13
BA	31500	500.0	100.00	5.520	.177	5.697	.43778E-02	53.710	68.83	.78	.78	.0300	1.00	1.86	.67
BA	32000	500.0	100.00	6.879	.045	6.923	.52922E-03	106.859	78.71	1.35	1.36	.0300	1.00	.94	.26
BA	32500	500.0	100.00	7.091	.046	7.138	.32748E-03	104.872	51.19	1.99	2.05	.0300	1.00	.95	.21
BA	33000	500.0	100.00	7.454	.074	7.527	.12306E-02	83.300	79.50	1.04	1.05	.0300	1.00	1.20	.37
BA	33500	500.0	89.00	7.858	.034	7.893	.23108E-03	108.379	51.26	2.06	2.11	.0300	1.00	.82	.18
BA	33715	215.0	89.00	7.926	.050	7.977	.55082E-03	89.578	61.95	1.43	1.45	.0300	1.00	.99	.26
BA	34000	285.0	89.00	8.082	.064	8.146	.63515E-03	79.672	51.35	1.53	1.55	.0300	1.00	1.12	.29
BA	34500	500.0	89.00	8.762	.126	8.887	.23321E-02	56.666	58.35	.96	.97	.0300	1.00	1.57	.51
BA	35000	500.0	89.00	9.489	.034	9.523	.21019E-03	109.145	48.93	2.19	2.23	.0300	1.00	.82	.17

\*\*\* Legend \*\*\*

NAME ..... Section Name  
DELTX ..... Distance (M)  
Q ..... Discharge (M3/S)  
H ..... Stage (M)  
V.H ..... Velocity Head (M) :  $V.H = ALPHA * V^2 / 19.6$   
TOTAL E .... Total Energy Head (M) :  $TOTAL E = H + V.H.$   
IE ..... Energy Gradient :  $IE = (N*Q/(A*R**(2/3)))**2$   
A ..... Discharge Area (M2)  
B ..... Width of Water Surface (M)  
R ..... Hydraulic Radius (M)  
A/B ..... Hydraulic Depth (M)  
N ..... Roughness Coefficient  
ALPHA ..... Rectification Coefficient  
V ..... Velocity (M/S) :  $V = Q / A$   
FR ..... Froude Number :  $FR = V/SORT(9.8*(A/B)/ALPHA)$

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"Non-Uniform Flow, 300m3/s, Ba"

NAME	DELTX (M)	Q (M3/S)	H (M)	V.H (M)	TOTAL E (M)	IE	A (M2)	B (M)	R (M)	A/S (M)	N	ALPHA	V (M/S)	FR
BA 400	.0	300.00	1.000	.003	1.003	.12620E-04	1168.649	363.91	3.19	3.21	.0300	1.00	.26	.05
BA 1000	600.0	300.00	1.006	.005	1.011	.13276E-04	983.926	245.02	3.98	4.02	.0300	1.00	.30	.05
BA 1500	500.0	300.00	1.012	.006	1.018	.12659E-04	893.421	184.41	4.76	4.84	.0300	1.00	.34	.05
BA 2000	500.0	300.00	1.019	.005	1.024	.14008E-04	925.654	218.97	4.19	4.23	.0300	1.00	.32	.05
BA 2500	500.0	300.00	1.025	.007	1.032	.15240E-04	810.052	166.78	4.80	4.86	.0300	1.00	.37	.05
BA 3000	500.0	300.00	1.035	.003	1.038	.94979E-05	1236.713	338.67	3.63	3.65	.0300	1.00	.24	.04
BA 3500	500.0	300.00	1.040	.003	1.043	.12560E-04	1188.095	379.31	3.12	3.13	.0300	1.00	.25	.05

BA	4000	500.0	300.00	1.046	.004	1.051	16242E-04	1070.534	354.42	3.01	3.02	.0300	1.00	.28	.05
BA	4500	500.0	300.00	1.052	.006	1.058	13235E-04	896.599	192.24	4.58	4.66	.0300	1.00	.33	.05
BA	5000	500.0	300.00	1.058	.008	1.066	20457E-04	758.406	177.09	4.25	4.28	.0300	1.00	.40	.06
BA	5500	500.0	300.00	1.071	.005	1.076	20242E-04	944.256	305.42	3.08	3.09	.0300	1.00	.32	.06
BA	6000	500.0	300.00	1.093	.002	1.114	13150E-03	458.273	203.48	2.24	2.25	.0300	1.00	.65	.14
BA	6500	500.0	300.00	1.146	.008	1.154	25678E-04	752.356	206.44	3.63	3.64	.0300	1.00	.40	.07
BA	7000	500.0	300.00	1.158	.008	1.167	26021E-04	740.336	200.54	3.68	3.69	.0300	1.00	.41	.07
BA	7500	500.0	300.00	1.172	.012	1.183	40874E-04	625.541	183.89	3.38	3.40	.0300	1.00	.48	.08
BA	8000	500.0	300.00	1.189	.016	1.205	44689E-04	543.824	137.93	3.90	3.94	.0300	1.00	.55	.09
BA	8500	500.0	300.00	1.214	.004	1.218	75967E-05	1103.173	213.27	5.09	5.17	.0300	1.00	.27	.04
BA	9000	500.0	300.00	1.219	.011	1.230	39280E-04	647.851	194.07	3.30	3.34	.0300	1.00	.46	.08
BA	9500	500.0	300.00	1.239	.011	1.250	44210E-04	637.506	203.70	3.09	3.13	.0300	1.00	.47	.08
BA	10000	500.0	300.00	1.261	.013	1.274	48711E-04	599.191	188.00	3.16	3.19	.0300	1.00	.50	.09
BA	10500	500.0	300.00	1.288	.012	1.300	58142E-04	606.379	221.48	2.72	2.74	.0300	1.00	.49	.10
BA	11000	500.0	300.00	1.317	.013	1.330	59331E-04	595.738	215.35	2.75	2.77	.0300	1.00	.50	.10
BA	11500	500.0	300.00	1.344	.015	1.359	58889E-04	545.688	171.86	3.15	3.18	.0300	1.00	.55	.10
BA	12000	500.0	300.00	1.378	.012	1.390	64733E-04	614.299	248.85	2.46	2.47	.0300	1.00	.49	.10
BA	12500	500.0	300.00	1.406	.015	1.421	57978E-04	555.372	176.79	3.10	3.14	.0300	1.00	.54	.10
BA	13000	500.0	300.00	1.438	.017	1.455	77673E-04	522.981	190.32	2.73	2.75	.0300	1.00	.57	.11
BA	13500	500.0	300.00	1.478	.017	1.494	80596E-04	526.798	199.26	2.63	2.64	.0300	1.00	.55	.10
BA	14000	500.0	300.00	1.516	.016	1.532	68128E-04	540.976	187.84	2.86	2.88	.0300	1.00	.55	.10
BA	14500	500.0	300.00	1.555	.019	1.574	10064E-03	492.673	199.21	2.46	2.47	.0300	1.00	.61	.12
BA	15000	500.0	300.00	1.600	.016	1.616	67424E-04	541.732	186.63	2.88	2.90	.0300	1.00	.55	.10
BA	15500	500.0	300.00	1.632	.016	1.648	61971E-04	539.235	173.10	3.09	3.12	.0300	1.00	.56	.10
BA	16000	500.0	300.00	1.668	.024	1.693	11694E-03	433.646	161.90	2.66	2.68	.0300	1.00	.69	.14
BA	16500	500.0	300.00	1.733	.033	1.766	17729E-03	372.891	151.80	2.44	2.46	.0300	1.00	.80	.16
BA	17000	500.0	300.00	1.809	.035	1.844	13173E-03	361.574	111.12	3.19	3.25	.0300	1.00	.83	.15
BA	17500	500.0	300.00	1.873	.020	1.893	66756E-04	477.758	134.60	3.50	3.55	.0300	1.00	.63	.11
BA	18000	500.0	300.00	1.916	.032	1.948	15152E-03	378.826	140.29	2.68	2.70	.0300	1.00	.79	.15
BA	18500	500.0	300.00	1.979	.016	1.996	39380E-04	531.330	116.96	4.43	4.54	.0300	1.00	.56	.08
BA	19000	500.0	300.00	2.000	.014	2.014	33731E-04	566.807	121.87	4.52	4.65	.0300	1.00	.53	.08
BA	19500	500.0	300.00	2.017	.018	2.035	52817E-04	500.397	125.95	3.89	3.97	.0300	1.00	.60	.10
BA	20000	500.0	300.00	2.042	.022	2.064	61468E-04	456.751	112.93	3.98	4.04	.0300	1.00	.66	.10
BA	20500	500.0	300.00	2.086	.026	2.112	13017E-03	421.526	163.62	2.56	2.58	.0300	1.00	.71	.14
BA	21000	500.0	300.00	2.156	.074	2.231	34432E-03	248.405	90.02	2.73	2.76	.0300	1.00	.121	.23
BA	21500	500.0	300.00	2.326	.064	2.390	29210E-03	267.808	94.56	2.76	2.83	.0300	1.00	.112	.21
BA	22000	500.0	300.00	2.456	.048	2.504	16588E-03	307.932	87.63	3.42	3.51	.0300	1.00	.97	.17
BA	22500	500.0	300.00	2.544	.057	2.601	22228E-03	283.128	89.58	3.11	3.16	.0300	1.00	.106	.19
BA	23000	500.0	300.00	2.666	.075	2.742	33979E-03	246.871	86.65	2.78	2.85	.0300	1.00	.122	.23
BA	23500	500.0	300.00	2.827	.071	2.898	28662E-03	254.167	82.39	3.02	3.08	.0300	1.00	.118	.21
BA	24000	500.0	300.00	3.024	.108	3.132	64926E-03	205.997	90.84	2.25	2.27	.0300	1.00	.146	.31
BA	24500	500.0	300.00	3.301	.075	3.376	32696E-03	247.341	83.65	2.85	2.96	.0300	1.00	.121	.23
BA	25000	500.0	300.00	3.445	.068	3.513	21923E-03	260.520	69.61	3.56	3.74	.0300	1.00	.115	.19
BA	25500	500.0	300.00	3.596	.089	3.686	47175E-03	226.557	89.19	2.47	2.54	.0300	1.00	.132	.27
BA	26000	500.0	300.00	3.803	.098	3.901	38810E-03	216.900	68.66	3.06	3.16	.0300	1.00	.138	.25
BA	26500	500.0	300.00	4.028	.084	4.112	45748E-03	233.399	93.10	2.42	2.51	.0300	1.00	.129	.26
BA	27000	500.0	300.00	4.246	.110	4.356	51821E-03	204.464	74.03	2.69	2.76	.0300	1.00	.147	.28
BA	27500	500.0	300.00	4.484	.069	4.552	26772E-03	258.649	81.73	3.10	3.16	.0300	1.00	.116	.21
BA	28000	500.0	300.00	4.599	.075	4.674	22001E-03	246.895	60.05	3.85	4.11	.0300	1.00	.122	.21
BA	28500	500.0	300.00	4.744	.109	4.852	49207E-03	205.500	72.55	2.77	2.83	.0300	1.00	.146	.28
BA	29000	500.0	300.00	4.962	.103	5.065	35955E-03	211.280	60.66	3.37	3.48	.0300	1.00	.142	.24

BA	29500	500.0	300.00	5.157	.111	5.268	.45230E-03	202.942	65.38	3.01	3.10	.0300	1.00	1.48	.27
BA	30000	500.0	300.00	5.369	.097	5.466	.33695E-03	217.522	62.58	3.38	3.48	.0300	1.00	1.38	.24
BA	30500	500.0	300.00	5.609	.148	5.757	.82928E-03	175.974	73.13	2.37	2.41	.0300	1.00	1.70	.35
BA	31000	500.0	300.00	5.940	.191	6.041	.30728E-03	213.243	54.99	3.74	3.88	.0300	1.00	1.41	.23
BA	31500	500.0	300.00	6.496	.302	6.798	.27178E-02	123.328	73.74	1.66	1.67	.0300	1.00	2.43	.60
BA	32000	500.0	300.00	7.606	.168	7.773	.11852E-02	165.378	82.46	1.99	2.01	.0300	1.00	1.81	.41
BA	32500	500.0	300.00	8.127	.167	8.293	.89442E-03	165.980	65.80	2.44	2.52	.0300	1.00	1.81	.36
BA	33000	500.0	300.00	8.617	.139	8.755	.95421E-03	182.006	89.04	2.03	2.04	.0300	1.00	1.65	.37
BA	33500	500.0	268.00	9.015	.120	9.135	.56355E-03	174.602	62.84	2.70	2.78	.0300	1.00	1.53	.29
BA	33715	215.0	268.00	9.148	.124	9.272	.71074E-03	172.131	73.03	2.32	2.36	.0300	1.00	1.56	.32
BA	34000	285.0	268.00	9.347	.148	9.495	.85757E-03	157.237	67.13	2.31	2.34	.0300	1.00	1.70	.36
BA	34500	500.0	268.00	9.902	.225	10.127	.16679E-02	127.604	65.88	1.92	1.94	.0300	1.00	2.10	.48
BA	35000	500.0	268.00	10.548	.137	10.685	.56524E-03	163.601	53.73	2.97	3.04	.0300	1.00	1.64	.30

\*\*\* Legend \*\*\*

NAME ..... Section Name  
DELTX ..... Distance (M)  
Q ..... Discharge (M3/S)  
H ..... Stage (M)  
V.H ..... Velocity Head (M) :  $V.H = ALPHA * V**2 / 19.6$   
TOTAL E ... Total Energy Head (M) :  $TOTAL E = H + V.H.$   
IE ..... Energy Gradient :  $IE = (N*Q/(A*R**(2/3)))**2$   
A ..... Discharge Area (M2)  
B ..... Width of Water Surface (M)  
R ..... Hydraulic Radius (M)  
A/B ..... Hydraulic Depth (M)  
N ..... Roughness Coefficient  
ALPHA ..... Rectification Coefficient  
V ..... Velocity (M/S) :  $V = Q / A$   
FR ..... Froude Number :  $FR = V/SORT(9.8*(A/B) / ALPHA)$

"Non-Uniform Flow, 500m3/s, Ba"

NAME	DELTX (M)	Q (M3/S)	H (M)	V.H (M)	TOTAL E (M)	IE	A (M2)	B (M)	R (M)	A/B (M)	N	ALPHA	V (M/S)	FR
BA 400	0	500.00	1.000	.009	1.009	.35058E-04	1168.649	363.91	3.19	3.21	.0300	1.00	.43	.08
BA 1000	600.0	500.00	1.018	.013	1.031	.36538E-04	986.701	245.02	3.99	4.03	.0300	1.00	.51	.08
BA 1500	500.0	500.00	1.033	.016	1.049	.34672E-04	897.278	184.41	4.78	4.87	.0300	1.00	.56	.08
BA 2000	500.0	500.00	1.052	.015	1.067	.37924E-04	932.921	218.97	4.22	4.26	.0300	1.00	.54	.08
BA 2500	500.0	500.00	1.067	.019	1.087	.41145E-04	817.198	166.79	4.84	4.90	.0300	1.00	.61	.09
BA 3000	500.0	500.00	1.095	.008	1.103	.24995E-04	1257.106	338.68	3.69	3.71	.0300	1.00	.40	.07
BA 3500	500.0	500.00	1.109	.009	1.117	.32485E-04	1214.176	379.53	3.19	3.20	.0300	1.00	.41	.07

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BA	4000	500.0	500.00	1.125	.011	1.136	.41525E-04	1098.538	355.16	3.08	3.09	.0300	1.00	.46	.08
BA	4500	500.0	500.00	1.140	.015	1.155	.34598E-04	913.425	192.25	4.67	4.75	.0300	1.00	.55	.08
BA	5000	500.0	500.00	1.156	.021	1.177	.52843E-04	775.650	177.27	4.34	4.38	.0300	1.00	.64	.10
BA	5500	500.0	500.00	1.189	.013	1.202	.49781E-04	980.304	306.00	3.19	3.20	.0300	1.00	.51	.09
BA	6000	500.0	500.00	1.236	.054	1.290	.29852E-03	487.486	204.05	2.38	2.39	.0300	1.00	1.03	.21
BA	6500	500.0	500.00	1.339	.020	1.379	.59177E-04	796.400	206.55	3.83	3.86	.0300	1.00	.63	.10
BA	7000	500.0	500.00	1.388	.021	1.409	.59503E-04	786.557	201.42	3.89	3.91	.0300	1.00	.64	.10
BA	7500	500.0	500.00	1.418	.028	1.446	.90638E-04	670.959	184.94	3.60	3.63	.0300	1.00	.75	.12
BA	8000	500.0	500.00	1.457	.038	1.495	.10320E-03	581.290	141.82	4.05	4.10	.0300	1.00	.86	.14
BA	8500	500.0	500.00	1.515	.009	1.525	.17548E-04	1167.497	213.40	5.37	5.47	.0300	1.00	.43	.06
BA	9000	500.0	500.00	1.524	.026	1.550	.81879E-04	707.211	194.40	3.59	3.64	.0300	1.00	.71	.12
BA	9500	500.0	500.00	1.567	.026	1.592	.88508E-04	704.222	203.75	3.41	3.46	.0300	1.00	.71	.12
BA	10000	500.0	500.00	1.611	.029	1.640	.10098E-03	666.555	196.77	3.35	3.39	.0300	1.00	.75	.13
BA	10500	500.0	500.00	1.665	.027	1.691	.10563E-03	689.902	222.01	3.08	3.11	.0300	1.00	.72	.13
BA	11000	500.0	500.00	1.717	.027	1.744	.10563E-03	681.923	215.65	3.13	3.16	.0300	1.00	.73	.13
BA	11500	500.0	500.00	1.765	.033	1.798	.11039E-03	618.697	174.92	3.51	3.54	.0300	1.00	.81	.14
BA	12000	500.0	500.00	1.828	.024	1.852	.10378E-03	726.498	250.34	2.89	2.90	.0300	1.00	.69	.13
BA	12500	500.0	500.00	1.872	.031	1.903	.10260E-03	638.046	178.03	3.54	3.58	.0300	1.00	.78	.13
BA	13000	500.0	500.00	1.927	.034	1.960	.12621E-03	616.340	191.59	3.19	3.22	.0300	1.00	.81	.14
BA	13500	500.0	500.00	1.991	.032	2.023	.12508E-03	629.340	200.43	3.11	3.14	.0300	1.00	.79	.14
BA	14000	500.0	500.00	2.051	.031	2.082	.10842E-03	641.827	189.25	3.36	3.39	.0300	1.00	.78	.14
BA	14500	500.0	500.00	2.110	.035	2.145	.14417E-03	603.823	201.33	2.98	3.00	.0300	1.00	.83	.15
BA	15000	500.0	500.00	2.177	.030	2.207	.10533E-03	650.694	191.43	3.37	3.40	.0300	1.00	.77	.13
BA	15500	500.0	500.00	2.227	.031	2.258	.97539E-04	642.759	175.02	3.63	3.67	.0300	1.00	.78	.13
BA	16000	500.0	500.00	2.279	.045	2.324	.16680E-03	533.306	164.44	3.21	3.24	.0300	1.00	.94	.17
BA	16500	500.0	500.00	2.370	.057	2.427	.24541E-03	472.826	162.82	2.88	2.90	.0300	1.00	1.06	.20
BA	17000	500.0	500.00	2.474	.066	2.541	.20929E-03	438.218	118.12	3.64	3.71	.0300	1.00	1.14	.19
BA	17500	500.0	500.00	2.580	.039	2.619	.10313E-03	573.551	136.43	4.13	4.20	.0300	1.00	.87	.14
BA	18000	500.0	500.00	2.638	.055	2.693	.19478E-03	480.978	142.54	3.34	3.37	.0300	1.00	1.04	.18
BA	18500	500.0	500.00	2.726	.033	2.759	.68589E-04	620.296	121.15	4.99	5.12	.0300	1.00	.81	.11
BA	19000	500.0	500.00	2.751	.029	2.791	.57484E-04	659.942	122.53	5.19	5.39	.0300	1.00	.76	.10
BA	19500	500.0	500.00	2.791	.035	2.826	.84292E-04	599.554	130.41	4.50	4.60	.0300	1.00	.83	.12
BA	20000	500.0	500.00	2.829	.043	2.872	.97227E-04	546.659	115.60	4.64	4.73	.0300	1.00	.91	.13
BA	20500	500.0	500.00	2.893	.041	2.934	.15457E-03	557.880	174.14	3.18	3.20	.0300	1.00	.90	.16
BA	21000	500.0	500.00	2.958	.123	3.080	.42851E-03	322.528	94.35	3.37	3.42	.0300	1.00	1.55	.27
BA	21500	500.0	500.00	3.174	.104	3.278	.36135E-03	350.159	100.82	3.38	3.48	.0300	1.00	1.43	.24
BA	22000	500.0	500.00	3.341	.085	3.426	.23029E-03	388.226	92.72	4.06	4.19	.0300	1.00	1.29	.20
BA	22500	500.0	500.00	3.457	.095	3.552	.27601E-03	366.473	92.93	3.87	3.94	.0300	1.00	1.36	.22
BA	23000	500.0	500.00	3.600	.117	3.718	.38544E-03	329.499	90.79	3.53	3.63	.0300	1.00	1.52	.25
BA	23500	500.0	500.00	3.785	.114	3.899	.34062E-03	334.607	86.22	3.79	3.88	.0300	1.00	1.49	.24
BA	24000	500.0	500.00	3.990	.144	4.134	.59833E-03	297.863	99.66	2.95	2.99	.0300	1.00	1.68	.31
BA	24500	500.0	500.00	4.268	.116	4.384	.40206E-03	331.817	94.57	3.39	3.51	.0300	1.00	1.51	.26
BA	25000	500.0	500.00	4.442	.116	4.558	.29479E-03	331.928	73.73	4.27	4.50	.0300	1.00	1.57	.27
BA	25500	500.0	500.00	4.617	.125	4.742	.44138E-03	319.279	92.50	3.24	3.45	.0300	1.00	1.51	.23
BA	26000	500.0	500.00	4.811	.154	4.965	.45007E-03	287.909	71.89	3.85	4.01	.0300	1.00	1.74	.28
BA	26500	500.0	500.00	5.086	.108	5.195	.46790E-03	343.386	115.83	2.87	2.96	.0300	1.00	1.46	.27
BA	27000	500.0	500.00	5.282	.160	5.441	.51971E-03	353.852	96.79	3.55	3.68	.0300	1.00	1.77	.29
BA	27500	500.0	500.00	5.551	.102	5.653	.32780E-03	353.852	96.79	3.58	3.66	.0300	1.00	1.41	.24
BA	28000	500.0	500.00	5.699	.120	5.819	.33479E-03	325.850	77.10	3.99	4.23	.0300	1.00	1.53	.24
BA	28500	500.0	500.00	5.869	.152	6.021	.47342E-03	289.382	76.59	3.68	3.78	.0300	1.00	1.73	.28
BA	29000	500.0	500.00	6.088	.159	6.247	.42964E-03	283.251	66.60	4.08	4.25	.0300	1.00	1.77	.27

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BA	29500	500.0	500.00	6.314	.160	6.474	.47871E-03	282.300	72.19	3.78	3.91	.0300	1.00	1.77	.29
BA	30000	500.0	500.00	6.549	.146	6.695	.40757E-03	295.334	71.84	3.99	4.11	.0300	1.00	1.69	.27
BA	30500	500.0	500.00	6.794	.175	6.969	.68692E-03	259.946	86.01	3.09	3.14	.0300	1.00	1.85	.33
BA	31000	500.0	500.00	7.087	.160	7.247	.42421E-03	282.706	65.94	4.13	4.29	.0300	1.00	1.77	.27
BA	31500	500.0	500.00	7.452	.328	7.790	.17464E-02	197.334	79.34	2.45	2.49	.0300	1.00	2.53	.51
BA	32000	500.0	500.00	8.302	.252	8.554	.13114E-02	225.102	89.20	2.50	2.52	.0300	1.00	2.22	.45
BA	32500	500.0	500.00	8.907	.261	9.168	.11451E-02	221.025	75.33	2.84	2.93	.0300	1.00	2.26	.42
BA	33000	500.0	500.00	9.478	.189	9.667	.84868E-03	259.857	91.89	2.79	2.83	.0300	1.00	1.92	.37
BA	33500	500.0	446.00	9.865	.190	10.055	.70386E-03	231.252	69.69	3.22	3.32	.0300	1.00	1.93	.34
BA	33715	215.0	446.00	10.042	.173	10.215	.79084E-03	242.125	86.42	2.75	2.80	.0300	1.00	1.84	.35
BA	34000	285.0	446.00	10.239	.211	10.451	.96109E-03	219.184	71.67	3.00	3.06	.0300	1.00	2.03	.37
BA	34500	500.0	446.00	10.745	.296	11.041	.14993E-02	185.125	71.48	2.55	2.59	.0300	1.00	2.41	.48
BA	35000	500.0	446.00	11.410	.220	11.630	.85923E-03	214.645	67.53	3.10	3.18	.0300	1.00	2.08	.37

\*\*\* Legend \*\*\*

NAME ..... Section Name  
DELTX .... Distance (M)  
Q ..... Discharge (M3/S)  
H ..... Stage (M)  
V.H ..... Velocity Head (M) :  $V.H = ALPHA * V^2 / 19.6$   
TOTAL E .... Total Energy Head (M) :  $TOTAL E = H + V.H.$   
IE ..... Energy Gradient :  $IE = (N*Q / (A*R^{2/3}))^{**2}$   
A ..... Discharge Area (M2)  
B ..... Width of Water Surface (M)  
R ..... Hydraulic Radius (M)  
A/B ..... Hydraulic Depth (M)  
N ..... Roughness Coefficient  
ALPHA ..... Rectification Coefficient  
V ..... Velocity (M/S) :  $V = Q / A$   
FR ..... Froude Number :  $FR = V / \sqrt{9.8 * (A/B) / ALPHA}$

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"Non-Uniform Flow, 1000m3/s, Ba"

NAME	DELTX (M)	Q (M3/S)	H (M)	V.H (M)	TOTAL E (M)	IE	A (M2)	B (M)	R (M)	A/B (M)	N	ALPHA	V (M/S)	FR
BA 400	0	1000.00	1.000	.037	1.037	.14022E-03	1168.649	363.91	3.19	3.21	.0300	1.00	.86	.15
BA 1000	600.0	1000.00	1.070	.051	1.121	.14004E-03	999.604	245.02	4.04	4.08	.0300	1.00	1.00	.16
BA 1500	500.0	1000.00	1.128	.061	1.189	.13019E-03	914.844	184.41	4.87	4.96	.0300	1.00	1.09	.16
BA 2000	500.0	1000.00	1.201	.055	1.255	.13556E-03	965.455	218.97	4.36	4.41	.0300	1.00	1.04	.16
BA 2500	500.0	1000.00	1.255	.071	1.326	.14569E-03	848.468	166.84	5.01	5.09	.0300	1.00	1.18	.17
BA 3000	500.0	1000.00	1.354	.028	1.382	.80014E-04	1344.812	338.70	3.94	3.97	.0300	1.00	.74	.12
BA 3500	500.0	1000.00	1.398	.029	1.427	.97766E-04	1323.858	380.27	3.47	3.48	.0300	1.00	.76	.13

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BA	4000	500.0	1000.00	1.447	.035	1.481	12083E-03	1213.090	358.17	3.37	3.39	.0300	1.00	.82	.14
BA	4500	500.0	1000.00	1.486	.053	1.539	10998E-03	979.977	192.28	4.99	5.10	.0300	1.00	1.02	.14
BA	5000	500.0	1000.00	1.535	.072	1.607	16154E-03	843.049	177.99	4.68	4.74	.0300	1.00	1.19	.17
BA	5500	500.0	1000.00	1.639	.041	1.680	12917E-03	1117.997	306.40	3.63	3.65	.0300	1.00	.89	.15
BA	6000	500.0	1000.00	1.726	.148	1.874	64731E-03	587.933	205.54	2.84	2.86	.0300	1.00	1.70	.32
BA	6500	500.0	1000.00	2.012	.059	2.071	14167E-03	931.406	206.76	4.45	4.50	.0300	1.00	1.07	.16
BA	7000	500.0	1000.00	2.082	.059	2.141	13932E-03	926.435	201.86	4.54	4.59	.0300	1.00	1.08	.16
BA	7500	500.0	1000.00	2.147	.078	2.226	19952E-03	806.549	186.48	4.27	4.33	.0300	1.00	1.24	.19
BA	8000	500.0	1000.00	2.233	.106	2.338	24975E-03	695.360	152.15	4.51	4.57	.0300	1.00	1.44	.21
BA	8500	500.0	1000.00	2.384	.028	2.411	43419E-04	1352.745	213.40	6.17	6.34	.0300	1.00	.74	.09
BA	9000	500.0	1000.00	2.397	.066	2.463	16206E-03	877.195	195.30	4.40	4.49	.0300	1.00	1.14	.17
BA	9500	500.0	1000.00	2.480	.064	2.544	16391E-03	890.387	203.89	4.27	4.37	.0300	1.00	1.12	.17
BA	10000	500.0	1000.00	2.562	.069	2.631	18212E-03	858.014	202.17	4.17	4.24	.0300	1.00	1.17	.18
BA	10500	500.0	1000.00	2.657	.061	2.719	16971E-03	911.012	223.42	4.02	4.08	.0300	1.00	1.10	.17
BA	11000	500.0	1000.00	2.741	.063	2.803	16796E-03	903.120	216.40	4.10	4.17	.0300	1.00	1.11	.17
BA	11500	500.0	1000.00	2.814	.079	2.893	19026E-03	804.922	178.46	4.44	4.51	.0300	1.00	1.24	.19
BA	12000	500.0	1000.00	2.926	.051	2.977	14474E-03	1003.449	253.91	3.92	3.95	.0300	1.00	1.00	.16
BA	12500	500.0	1000.00	2.983	.073	3.056	17239E-03	838.108	182.97	4.50	4.58	.0300	1.00	1.19	.18
BA	13000	500.0	1000.00	3.075	.072	3.147	19167E-03	841.142	201.08	4.13	4.18	.0300	1.00	1.19	.19
BA	13500	500.0	1000.00	3.171	.068	3.239	17752E-03	868.338	205.44	4.18	4.23	.0300	1.00	1.15	.18
BA	14000	500.0	1000.00	3.259	.066	3.325	16434E-03	881.023	201.06	4.33	4.38	.0300	1.00	1.14	.17
BA	14500	500.0	1000.00	3.345	.069	3.414	19522E-03	857.247	214.14	3.96	4.00	.0300	1.00	1.17	.19
BA	15000	500.0	1000.00	3.439	.063	3.502	15536E-03	899.732	203.24	4.38	4.43	.0300	1.00	1.11	.17
BA	15500	500.0	1000.00	3.510	.067	3.578	14704E-03	869.838	178.31	4.80	4.88	.0300	1.00	1.15	.17
BA	16000	500.0	1000.00	3.580	.091	3.670	22385E-03	750.708	169.85	3.62	3.65	.0300	1.00	1.41	.23
BA	16500	500.0	1000.00	3.706	.101	3.806	31995E-03	711.398	194.68	3.47	3.42	.0300	1.00	1.33	.20
BA	17000	500.0	1000.00	3.823	.141	3.964	31220E-03	601.507	123.96	4.74	4.85	.0300	1.00	1.66	.24
BA	17500	500.0	1000.00	3.997	.086	4.083	16169E-03	769.380	139.80	5.37	5.50	.0300	1.00	1.30	.18
BA	18000	500.0	1000.00	4.077	.107	4.185	24614E-03	689.052	146.25	4.62	4.71	.0300	1.00	1.45	.21
BA	18500	500.0	1000.00	4.199	.079	4.278	12609E-03	804.764	129.25	6.05	6.23	.0300	1.00	1.24	.16
BA	19000	500.0	1000.00	4.264	.071	4.336	10469E-03	844.781	123.74	6.47	6.83	.0300	1.00	1.18	.14
BA	19500	500.0	1000.00	4.317	.079	4.396	13709E-03	804.488	138.08	5.68	5.83	.0300	1.00	1.24	.16
BA	20000	500.0	1000.00	4.374	.096	4.470	15915E-03	729.366	120.86	5.89	6.03	.0300	1.00	1.37	.18
BA	20500	500.0	1000.00	4.484	.070	4.554	17538E-03	852.660	195.19	4.33	4.37	.0300	1.00	1.17	.18
BA	21000	500.0	1000.00	4.500	.229	4.729	52403E-03	472.309	99.93	4.62	4.73	.0300	1.00	2.12	.31
BA	21500	500.0	1000.00	4.796	.179	4.975	46282E-03	533.363	122.84	4.23	4.34	.0300	1.00	1.87	.29
BA	22000	500.0	1000.00	5.001	.171	5.171	32099E-03	546.962	98.25	5.36	5.57	.0300	1.00	1.83	.25
BA	22500	500.0	1000.00	5.159	.182	5.341	35727E-03	530.035	99.61	5.18	5.32	.0300	1.00	1.89	.26
BA	23000	500.0	1000.00	5.337	.207	5.544	45645E-03	496.061	101.01	4.76	4.91	.0300	1.00	2.02	.29
BA	23500	500.0	1000.00	5.566	.203	5.769	44297E-03	500.843	101.51	4.80	4.93	.0300	1.00	2.00	.29
BA	24000	500.0	1000.00	5.829	.203	6.031	60590E-03	501.902	131.08	3.78	3.83	.0300	1.00	1.99	.33
BA	24500	500.0	1000.00	6.101	.190	6.290	43124E-03	518.330	107.26	4.65	4.83	.0300	1.00	1.93	.28
BA	25000	500.0	1000.00	6.274	.227	6.501	41222E-03	474.094	81.16	5.50	5.84	.0300	1.00	2.11	.28
BA	25500	500.0	1000.00	6.509	.204	6.713	43580E-03	500.190	98.65	4.87	5.07	.0300	1.00	2.00	.28
BA	26000	500.0	1000.00	6.716	.250	6.967	57781E-03	451.319	94.54	4.60	4.77	.0300	1.00	2.22	.32
BA	26500	500.0	1000.00	7.089	.116	7.205	37348E-03	663.083	180.31	3.58	3.68	.0300	1.00	1.51	.25
BA	27000	500.0	1000.00	7.178	.269	7.447	59545E-03	435.531	88.07	4.74	4.95	.0300	1.00	2.30	.33
BA	27500	500.0	1000.00	7.512	.167	7.680	33534E-03	552.636	105.33	5.10	5.25	.0300	1.00	1.81	.25
BA	28000	500.0	1000.00	7.851	.216	7.867	41399E-03	486.476	86.75	5.28	5.61	.0300	1.00	2.06	.28
BA	28500	500.0	1000.00	7.839	.256	8.096	50133E-03	446.133	81.74	5.20	5.46	.0300	1.00	2.24	.31
BA	29000	500.0	1000.00	8.066	.287	8.353	52770E-03	421.980	73.54	5.44	5.74	.0300	1.00	2.37	.32

BA 29500 500.0	1000.00	8.355	.261	8.616	.52425E-03	442.248	83.47	5.10	5.30	.0300	1.00	2.26	.31
BA 30000 500.0	1000.00	8.629	.236	8.864	.46863E-03	465.388	87.36	5.14	5.33	.0300	1.00	2.15	.30
BA 30500 500.0	1000.00	8.933	.193	9.126	.57915E-03	514.532	134.53	3.77	3.82	.0300	1.00	1.94	.32
BA 31000 500.0	1000.00	9.125	.277	9.402	.52297E-03	429.461	77.32	5.34	5.55	.0300	1.00	2.33	.32
BA 31500 500.0	1000.00	9.419	.390	9.809	.11073E-02	361.822	90.03	3.93	4.02	.0300	1.00	2.76	.44
BA 32000 500.0	1000.00	10.119	.266	10.385	.11940E-02	438.222	155.38	2.79	2.82	.0300	1.00	2.28	.43
BA 32500 500.0	1000.00	10.585	.387	10.972	.11579E-02	363.012	92.71	3.78	3.92	.0300	1.00	2.75	.44
BA 33000 500.0	1000.00	11.160	.290	11.451	.75455E-03	419.158	97.46	4.21	4.30	.0300	1.00	2.39	.37
BA 33500 500.0	892.00	11.506	.321	11.837	.79001E-03	350.466	75.24	4.43	4.66	.0300	1.00	2.55	.38
BA 33715 215.0	892.00	11.756	.240	11.996	.69378E-03	410.969	103.27	3.89	3.98	.0300	1.00	2.17	.35
BA 34000 285.0	892.00	11.876	.346	12.222	.89378E-03	342.516	78.96	4.22	4.34	.0300	1.00	2.60	.40
BA 34500 500.0	892.00	12.331	.438	12.769	.12920E-02	304.498	77.63	3.82	3.92	.0300	1.00	2.93	.47
BA 35000 500.0	892.00	12.961	.378	13.339	.98777E-03	327.671	75.77	4.19	4.32	.0300	1.00	2.72	.42

\*\*\* Legend \*\*\*

NAME ..... Section Name  
DELTX ..... Distance (M)  
Q ..... Discharge (M3/S)  
H ..... Stage (M)  
V.H ..... Velocity Head (M) :  $V.H = ALPHA * V^{**2} / 19.6$   
TOTAL E ... Total Energy Head (M) :  $TOTAL E = H + V.H.$   
IE ..... Energy Gradient :  $IE = (N*Q / (A*R** (2/3))) **2$   
A ..... Discharge Area (M2)  
B ..... Width of Water Surface (M)  
R ..... Hydraulic Radius (M)  
A/B ..... Hydraulic Depth (M)  
N ..... Roughness Coefficient  
ALPHA ..... Rectification Coefficient  
V ..... Velocity (M/S) :  $V = Q / A$   
FR ..... Froude Number :  $FR = V / SORT (9.8 * (A/B) / ALPHA)$

"Non-Uniform Flow, 3000m3/s. Ba"

NAME	DELTX (M)	Q (M3/S)	H (M)	V.H (M)	TOTAL E (M)	IE	A (M2)	B (M)	R (M)	A/B (M)	N	ALPHA	V (M/S)	FR
BA 400	.0	3000.00	1.000	.336	1.336	.12620E-02	1168.649	363.91	3.19	3.21	.0300	1.00	2.57	.46
BA 1000	600.0	3000.00	1.603	.359	1.967	.83918E-03	1131.279	245.02	4.55	4.62	.0300	1.00	2.65	.39
BA 1500	500.0	3000.00	1.950	.404	2.354	.71093E-03	1066.495	184.41	5.63	5.78	.0300	1.00	2.81	.37
BA 2000	500.0	3000.00	2.365	.308	2.673	.56843E-03	1220.436	218.97	5.45	5.57	.0300	1.00	2.46	.33
BA 2500	500.0	3000.00	2.568	.403	2.971	.62249E-03	1067.505	166.84	6.21	6.40	.0300	1.00	2.81	.35
BA 3000	500.0	3000.00	3.057	.124	3.182	.22199E-03	1921.788	338.70	5.57	5.67	.0300	1.00	1.56	.21
BA 3500	500.0	3000.00	3.179	.115	3.293	.22466E-03	2001.662	380.51	5.20	5.26	.0300	1.00	1.50	.21

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BA	4000	500.0	3000.00	3.284	1.30	3.415	26018E-03	1877.223	361.61	5.12	5.19	.0300	1.00	1.60	.22
BA	4500	500.0	3000.00	3.312	.259	3.571	36553E-03	1331.097	192.28	5.65	6.92	.0300	1.00	2.25	.27
BA	5000	500.0	3000.00	3.457	3.25	3.783	48081E-03	1187.908	179.92	6.42	6.60	.0300	1.00	2.53	.31
BA	5500	500.0	3000.00	3.821	1.44	3.965	24818E-03	1786.673	306.40	5.72	5.83	.0300	1.00	1.68	.22
BA	6000	500.0	3000.00	3.824	.442	4.265	95368E-03	1019.716	205.85	4.83	4.95	.0300	1.00	2.94	.42
BA	6500	500.0	3000.00	4.356	.229	4.585	32390E-03	1415.983	206.76	6.64	6.85	.0300	1.00	2.12	.26
BA	7000	500.0	3000.00	4.516	.228	4.744	31301E-03	1417.959	201.95	6.80	7.02	.0300	1.00	2.12	.26
BA	7500	500.0	3000.00	4.640	.284	4.924	40696E-03	1272.444	186.91	6.57	6.81	.0300	1.00	2.36	.29
BA	8000	500.0	3000.00	4.781	.380	5.161	53917E-03	1099.349	161.24	6.62	6.82	.0300	1.00	2.73	.33
BA	8500	500.0	3000.00	5.205	.120	5.325	11803E-03	1954.764	213.40	8.72	9.16	.0300	1.00	1.53	.16
BA	9000	500.0	3000.00	5.203	.226	5.429	29976E-03	1425.411	195.32	6.96	7.30	.0300	1.00	2.10	.25
BA	9500	500.0	3000.00	5.365	.210	5.575	28169E-03	1478.622	203.92	6.91	7.25	.0300	1.00	2.03	.24
BA	10000	500.0	3000.00	5.501	.218	5.719	29425E-03	1452.389	202.21	6.87	7.13	.0300	1.00	2.07	.25
BA	10500	500.0	3000.00	5.672	.183	5.855	24929E-03	1585.862	223.89	6.81	7.08	.0300	1.00	1.89	.23
BA	11000	500.0	3000.00	5.792	.188	5.980	25096E-03	1564.769	216.89	6.92	7.21	.0300	1.00	1.92	.23
BA	11500	500.0	3000.00	5.871	.250	6.122	31809E-03	1354.185	180.06	7.19	7.52	.0300	1.00	2.22	.26
BA	12000	500.0	3000.00	6.110	.138	6.248	18687E-03	1821.132	257.29	6.87	7.08	.0300	1.00	1.65	.20
BA	12500	500.0	3000.00	6.137	.229	6.365	28200E-03	1416.904	183.63	7.36	7.72	.0300	1.00	2.12	.24
BA	13000	500.0	3000.00	6.298	.205	6.502	26623E-03	1497.302	203.91	7.07	7.34	.0300	1.00	2.00	.24
BA	13500	500.0	3000.00	6.440	.190	6.630	24562E-03	1554.253	211.25	7.10	7.36	.0300	1.00	1.93	.23
BA	14000	500.0	3000.00	6.562	.189	6.751	23605E-03	1558.106	206.41	7.29	7.55	.0300	1.00	1.93	.22
BA	14500	500.0	3000.00	6.698	.172	6.869	23851E-03	1635.641	239.44	6.73	6.83	.0300	1.00	1.83	.22
BA	15000	500.0	3000.00	6.817	.169	6.986	22885E-03	1648.370	235.07	6.86	7.01	.0300	1.00	1.82	.22
BA	15500	500.0	3000.00	6.893	.210	7.103	23892E-03	1479.367	181.20	7.29	7.52	.0300	1.00	2.03	.23
BA	16000	500.0	3000.00	6.990	.252	7.241	31439E-03	1350.089	179.50	7.29	7.52	.0300	1.00	2.22	.26
BA	16500	500.0	3000.00	7.172	.229	7.401	32381E-03	1415.904	206.74	6.64	6.85	.0300	1.00	2.12	.26
BA	17000	500.0	3000.00	7.206	.406	7.612	52152E-03	1063.120	143.41	7.14	7.41	.0300	1.00	2.82	.33
BA	17500	500.0	3000.00	7.532	.284	7.817	29553E-03	1270.503	142.09	8.36	8.94	.0300	1.00	2.36	.25
BA	18000	500.0	3000.00	7.670	.303	7.979	35400E-03	1218.603	147.52	7.78	8.26	.0300	1.00	2.46	.27
BA	18500	500.0	3000.00	7.861	.272	8.133	26051E-03	1299.840	138.58	8.89	9.38	.0300	1.00	2.31	.24
BA	19000	500.0	3000.00	7.991	.266	8.257	23693E-03	1313.184	127.64	9.40	10.29	.0300	1.00	2.28	.23
BA	19500	500.0	3000.00	8.124	.254	8.377	24504E-03	1345.858	142.94	8.83	9.42	.0300	1.00	2.23	.23
BA	20000	500.0	3000.00	8.236	.290	8.526	34813E-03	1258.865	163.86	7.50	7.58	.0300	1.00	2.38	.27
BA	20500	500.0	3000.00	8.491	.169	8.660	18820E-03	1648.146	199.75	7.94	8.25	.0300	1.00	1.82	.20
BA	21000	500.0	3000.00	8.347	.557	8.904	79017E-03	907.928	133.48	6.62	6.80	.0300	1.00	3.30	.40
BA	21500	500.0	3000.00	8.822	.404	9.226	49537E-03	1066.261	137.58	7.39	7.75	.0300	1.00	2.81	.32
BA	22000	500.0	3000.00	8.975	.508	9.483	53217E-03	950.938	105.58	8.31	9.01	.0300	1.00	3.15	.34
BA	22500	500.0	3000.00	9.254	.493	9.747	52394E-03	965.407	109.26	8.22	8.84	.0300	1.00	3.11	.33
BA	23000	500.0	3000.00	9.510	.511	10.020	56978E-03	948.357	112.18	7.93	8.45	.0300	1.00	3.16	.35
BA	23500	500.0	3000.00	9.641	.458	10.299	54462E-03	1001.513	126.99	7.56	7.89	.0300	1.00	3.00	.34
BA	24000	500.0	3000.00	10.233	.312	10.545	44156E-03	1212.336	178.87	6.64	6.78	.0300	1.00	2.47	.30
BA	24500	500.0	3000.00	10.323	.460	10.783	50992E-03	998.663	115.93	7.97	8.61	.0300	1.00	3.00	.33
BA	25000	500.0	3000.00	10.448	.638	11.086	70308E-03	848.043	98.47	8.01	8.61	.0300	1.00	3.54	.39
BA	25500	500.0	3000.00	10.934	.465	11.399	54676E-03	994.111	124.33	7.62	8.00	.0300	1.00	3.02	.34
BA	26000	500.0	3000.00	11.155	.545	11.700	65662E-03	917.783	117.14	7.49	7.83	.0300	1.00	3.27	.37
BA	26500	500.0	3000.00	11.727	.195	11.922	23247E-03	1534.724	193.47	7.54	7.93	.0300	1.00	1.95	.22
BA	27000	500.0	3000.00	11.564	.591	12.156	70203E-03	881.135	110.61	7.57	7.97	.0300	1.00	3.40	.39
BA	27500	500.0	3000.00	12.043	.394	12.437	42535E-03	1079.543	126.86	8.13	8.51	.0300	1.00	2.78	.30
BA	28000	500.0	3000.00	12.143	.546	12.689	58212E-03	916.719	103.82	8.21	8.83	.0300	1.00	3.27	.35
BA	28500	500.0	3000.00	12.345	.660	13.005	68253E-03	833.829	89.20	8.40	9.35	.0300	1.00	3.60	.38
BA	29000	500.0	3000.00	12.641	.727	13.368	76769E-03	795.003	89.58	8.26	8.88	.0300	1.00	3.77	.40

BA	29500	500.0	3000.00	13.144	.573	13.716	.62591E-03	895.312	105.84	8.05	8.46	.0300	1.00	3.35	.37
BA	30000	500.0	3000.00	13.517	.500	14.017	.57546E-03	958.304	118.25	7.75	8.10	.0300	1.00	3.13	.35
BA	30500	500.0	3000.00	13.961	.285	14.246	.34147E-03	1289.316	154.90	7.52	7.70	.0300	1.00	2.36	.27
BA	31000	500.0	3000.00	13.878	.627	14.505	.69436E-03	855.920	102.49	7.97	8.35	.0300	1.00	3.51	.39
BA	31500	500.0	3000.00	14.243	.637	14.880	.80488E-03	849.178	113.45	7.22	7.48	.0300	1.00	3.53	.41
BA	32000	500.0	3000.00	14.887	.296	15.183	.40727E-03	1245.179	179.12	6.78	6.95	.0300	1.00	2.41	.29
BA	32500	500.0	3000.00	14.763	.772	15.535	.10033E-02	771.068	102.66	7.07	7.51	.0300	1.00	3.89	.45
BA	33000	500.0	3000.00	15.376	.609	15.985	.79459E-03	868.553	119.18	7.05	7.29	.0300	1.00	3.45	.41
BA	33500	500.0	2676.00	15.659	.762	16.421	.94985E-03	692.607	89.61	7.29	7.73	.0300	1.00	3.86	.44
BA	33715	215.0	2676.00	16.122	.462	16.585	.57335E-03	888.820	116.09	7.33	7.66	.0300	1.00	3.01	.35
BA	34000	285.0	2676.00	16.077	.721	16.798	.92294E-03	712.007	94.41	7.15	7.54	.0300	1.00	3.76	.44
BA	34500	500.0	2676.00	16.434	.890	17.323	.11790E-02	640.789	85.35	6.97	7.51	.0300	1.00	4.18	.49
BA	35000	500.0	2676.00	17.070	.817	17.886	.10724E-02	668.867	90.59	7.02	7.38	.0300	1.00	4.00	.47



\*\*\* Legend \*\*\*

NAME ..... Section Name  
DELTX ..... Distance (M)  
Q ..... Discharge (M3/S)  
H ..... Stage (M)  
V.H ..... Velocity Head (M) :  $V.H = ALPHA * V^2 / 19.6$   
TOTAL E ... Total Energy Head (M) :  $TOTAL E = H + V.H.$   
IE ..... Energy Gradient :  $IE = (N*Q/(A*R^{2/3}))^{*2}$   
A ..... Discharge Area (M2)  
B ..... Width of Water Surface (M)  
R ..... Hydraulic Radius (M)  
A/B ..... Hydraulic Depth (M)  
N ..... Roughness Coefficient  
ALPHA .... Rectification Coefficient  
V ..... Velocity (M/S) :  $V = Q / A$   
FR ..... Froude Number :  $FR = V/SORT(9.8*(A/B)/ALPHA)$

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"Non-Uniform Flow, 5000m3/s, Ba"

NAME	DELTX (M)	Q (M3/S)	H (M)	V.H (M)	TOTAL E (M)	IE	A (M2)	B (M)	R (M)	A/B (M)	N	ALPHA	V (M/S)	FR
BA 400	0	5000.00	1.000	.934	1.934	.95056E-02	1168.649	363.91	3.19	3.21	.0300	1.00	4.28	.76
BA 1000	600.0	5000.00	2.682	.656	3.338	.11733E-02	1394.376	245.02	5.57	5.69	.0300	1.00	3.59	.48
BA 1500	500.0	5000.00	3.127	.774	3.902	.10826E-02	1283.533	184.41	6.69	6.96	.0300	1.00	3.90	.47
BA 2000	500.0	5000.00	3.818	.539	4.357	.73862E-03	1538.574	218.97	6.79	7.03	.0300	1.00	3.25	.39
BA 2500	500.0	5000.00	4.021	.743	4.764	.89167E-03	1309.997	166.84	7.51	7.85	.0300	1.00	3.82	.44
BA 3000	500.0	5000.00	4.850	.199	5.050	.24982E-03	2529.051	338.70	7.27	7.47	.0300	1.00	1.98	.23
BA 3500	500.0	5000.00	4.995	.176	5.171	.23422E-03	2692.685	380.51	6.94	7.08	.0300	1.00	1.86	.22

BA	4000	500.0	5000.00	5.098	199	5.296	26953E-03	2532.938	361.61	6.87	7.00	.0300	1.00	1.97	.24
BA	4500	500.0	5000.00	5.025	463	5.488	.49612E-03	1660.499	192.28	8.17	8.64	.0300	1.00	3.01	.33
BA	5000	500.0	5000.00	5.203	565	5.768	62589E-03	1501.953	179.92	7.98	8.35	.0300	1.00	3.33	.37
BA	5500	500.0	5000.00	5.767	225	5.991	26692E-03	2382.819	306.40	7.56	7.78	.0300	1.00	2.10	.24
BA	6000	500.0	5000.00	5.638	657	6.295	94723E-03	1393.102	205.85	6.54	6.77	.0300	1.00	3.59	.44
BA	6500	500.0	5000.00	6.242	391	6.633	40469E-03	1805.936	206.76	8.39	8.73	.0300	1.00	2.77	.30
BA	7000	500.0	5000.00	6.442	391	6.833	39395E-03	1806.967	201.95	8.55	8.95	.0300	1.00	2.77	.30
BA	7500	500.0	5000.00	6.578	477	7.056	49883E-03	1634.675	186.91	8.33	8.75	.0300	1.00	3.06	.33
BA	8000	500.0	5000.00	6.709	640	7.349	67361E-03	1411.631	162.06	8.28	8.71	.0300	1.00	3.54	.38
BA	8500	500.0	5000.00	7.339	220	7.559	16336E-03	2410.235	213.40	10.65	11.29	.0300	1.00	2.07	.20
BA	9000	500.0	5000.00	7.313	378	7.691	36343E-03	1837.482	195.32	8.86	9.41	.0300	1.00	2.72	.28
BA	9500	500.0	5000.00	7.518	347	7.865	33413E-03	1917.820	203.92	8.85	9.40	.0300	1.00	2.61	.27
BA	10000	500.0	5000.00	7.679	356	8.035	34425E-03	1892.759	202.21	8.83	9.36	.0300	1.00	2.64	.28
BA	10500	500.0	5000.00	7.898	294	8.192	28291E-03	2084.240	223.89	8.85	9.31	.0300	1.00	2.40	.25
BA	11000	500.0	5000.00	8.031	303	8.334	28765E-03	2050.331	216.89	8.96	9.45	.0300	1.00	2.44	.25
BA	11500	500.0	5000.00	8.087	415	8.502	38301E-03	1753.098	180.06	9.14	9.74	.0300	1.00	2.85	.29
BA	12000	500.0	5000.00	8.431	218	8.649	20422E-03	2418.297	257.29	9.04	9.40	.0300	1.00	2.07	.22
BA	12500	500.0	5000.00	8.405	379	8.784	33360E-03	1833.447	183.63	9.37	9.98	.0300	1.00	2.73	.28
BA	13000	500.0	5000.00	8.616	329	8.945	30317E-03	1970.106	203.91	9.14	9.66	.0300	1.00	2.54	.26
BA	13500	500.0	5000.00	8.787	304	9.090	27783E-03	2049.917	211.25	9.20	9.70	.0300	1.00	2.44	.25
BA	14000	500.0	5000.00	8.922	305	9.227	27124E-03	2045.422	206.41	9.40	9.91	.0300	1.00	2.44	.25
BA	14500	500.0	5000.00	9.098	260	9.358	25051E-03	2217.006	243.59	8.84	9.10	.0300	1.00	2.26	.24
BA	15000	500.0	5000.00	9.221	260	9.481	24416E-03	2213.459	235.07	9.03	9.42	.0300	1.00	2.26	.24
BA	15500	500.0	5000.00	9.266	350	9.616	29241E-03	1909.240	181.20	9.85	10.34	.0300	1.00	2.52	.26
BA	16000	500.0	5000.00	9.376	403	9.779	36050E-03	1778.373	179.50	9.36	9.91	.0300	1.00	2.81	.29
BA	16500	500.0	5000.00	9.606	346	9.953	33512E-03	1919.211	206.74	8.82	9.28	.0300	1.00	2.61	.27
BA	17000	500.0	5000.00	9.538	651	10.188	60687E-03	1400.183	144.87	9.07	9.67	.0300	1.00	3.57	.37
BA	17500	500.0	5000.00	9.945	490	10.435	38131E-03	1613.384	142.09	10.39	11.35	.0300	1.00	3.10	.29
BA	18000	500.0	5000.00	10.126	510	10.636	42298E-03	1580.947	147.52	9.91	10.72	.0300	1.00	3.16	.31
BA	18500	500.0	5000.00	10.361	468	10.829	34592E-03	1650.838	141.44	10.80	11.67	.0300	1.00	3.03	.28
BA	19000	500.0	5000.00	10.727	475	10.998	33149E-03	1639.073	129.08	11.27	12.70	.0300	1.00	3.05	.27
BA	19500	500.0	5000.00	10.727	432	11.159	31233E-03	1717.891	142.94	10.98	12.02	.0300	1.00	2.91	.27
BA	20000	500.0	5000.00	10.893	438	11.332	37886E-03	1705.690	169.35	9.60	10.07	.0300	1.00	2.93	.30
BA	20500	500.0	5000.00	11.213	265	11.479	20904E-03	2191.942	199.75	10.30	10.97	.0300	1.00	2.28	.22
BA	21000	500.0	5000.00	10.943	788	11.730	79805E-03	1272.663	142.52	8.52	8.93	.0300	1.00	3.93	.42
BA	21500	500.0	5000.00	11.442	625	12.067	54667E-03	1428.574	138.36	9.52	10.33	.0300	1.00	3.50	.35
BA	22000	500.0	5000.00	11.546	838	12.384	72238E-03	1233.506	116.35	9.62	10.60	.0300	1.00	4.05	.40
BA	22500	500.0	5000.00	11.917	808	12.725	64142E-03	1256.327	109.26	10.24	11.50	.0300	1.00	3.98	.37
BA	23000	500.0	5000.00	12.240	910	13.050	65889E-03	1254.602	112.18	10.05	11.18	.0300	1.00	3.99	.38
BA	23500	500.0	5000.00	12.691	670	13.361	58446E-03	1379.729	134.80	9.54	10.24	.0300	1.00	3.62	.36
BA	24000	500.0	5000.00	13.185	418	13.603	38372E-03	1747.288	181.97	9.17	9.60	.0300	1.00	2.86	.29
BA	24500	500.0	5000.00	13.117	729	13.846	58855E-03	1322.556	115.93	10.11	11.41	.0300	1.00	3.92	.36
BA	25000	500.0	5000.00	13.194	1008	14.202	83730E-03	1125.000	102.46	9.89	10.98	.0300	1.00	4.44	.43
BA	25500	500.0	5000.00	13.874	679	14.554	56767E-03	1370.385	129.65	9.85	10.57	.0300	1.00	3.65	.36
BA	26000	500.0	5000.00	14.096	774	14.870	69674E-03	1283.819	130.29	9.31	9.85	.0300	1.00	3.89	.40
BA	26500	500.0	5000.00	14.822	278	15.100	22489E-03	2142.844	197.80	10.08	10.83	.0300	1.00	2.33	.23
BA	27000	500.0	5000.00	14.501	845	15.347	76212E-03	1228.389	124.73	9.30	9.85	.0300	1.00	4.07	.41
BA	27500	500.0	5000.00	15.063	589	15.652	45974E-03	1471.698	131.86	10.36	11.16	.0300	1.00	3.40	.32
BA	28000	500.0	5000.00	15.104	832	15.935	67310E-03	1238.504	112.56	10.09	11.00	.0300	1.00	4.04	.39
BA	28500	500.0	5000.00	15.241	1069	16.311	82799E-03	1092.189	89.20	10.43	12.24	.0300	1.00	4.58	.42
BA	29000	500.0	5000.00	15.643	1097	16.740	88743E-03	1078.328	97.54	10.09	11.06	.0300	1.00	4.64	.45

BA	29500	500.0	5000.00	16.303	.823	17.126	.65726E-03	1245.258	114.07	10.18	10.92	.0300	1.00	4.02	.39
BA	30000	500.0	5000.00	16.756	.677	17.433	.57160E-03	1373.096	130.27	9.77	10.54	.0300	1.00	3.64	.36
BA	30500	500.0	5000.00	17.276	.377	17.652	.30623E-03	1840.325	175.79	10.05	10.47	.0300	1.00	2.72	.27
BA	31000	500.0	5000.00	17.028	.886	17.914	.74033E-03	1199.940	114.16	9.85	10.51	.0300	1.00	4.17	.41
BA	31500	500.0	5000.00	17.441	.843	18.284	.74073E-03	1230.046	122.26	9.48	10.06	.0300	1.00	4.06	.41
BA	32000	500.0	5000.00	18.178	.373	18.551	.32727E-03	1848.348	185.01	9.50	9.99	.0300	1.00	2.71	.27
BA	32500	500.0	5000.00	17.833	1.047	18.880	.98712E-03	1103.609	114.28	9.00	9.66	.0300	1.00	4.53	.47
BA	33000	500.0	5000.00	18.523	.787	19.310	.73387E-03	1273.045	133.75	9.07	9.52	.0300	1.00	3.93	.41
BA	33500	500.0	4460.00	18.678	1.060	19.738	.97873E-03	978.332	99.35	9.14	9.85	.0300	1.00	4.56	.46
BA	33715	215.0	4460.00	19.273	.629	19.902	.54668E-03	1269.766	125.06	9.57	10.15	.0300	1.00	3.51	.35
BA	34000	285.0	4460.00	19.086	1.023	20.109	.90147E-03	996.025	94.41	9.46	10.55	.0300	1.00	4.48	.44
BA	34500	500.0	4460.00	19.375	1.257	20.632	.11920E-02	898.548	89.92	8.96	9.99	.0300	1.00	4.96	.50
BA	35000	500.0	4460.00	20.143	1.056	21.199	.10748E-02	990.373	109.16	8.49	8.98	.0300	1.00	4.55	.48

\*\*\* Legend \*\*\*

NAME ..... Section Name  
 DELTX .... Distance (M)  
 Q ..... Discharge (M3/S)  
 H ..... Stage (M)  
 V,H ..... Velocity Head (M) :  $V,H = ALPHA * V^2 / 19.6$   
 TOTAL E .... Total Energy Head (M) :  $TOTAL E = H + V,H$   
 IE ..... Energy Gradient :  $IE = (N*Q/(A*R^{2/3}))^{**2}$   
 A ..... Discharge Area (M2)  
 B ..... Width of Water Surface (M)  
 R ..... Hydraulic Radius (M)  
 A/B ..... Hydraulic Depth (M)  
 N ..... Roughness Coefficient  
 ALPHA ..... Rectification Coefficient  
 V ..... Velocity (M/S) :  $V = Q / A$   
 FR ..... Froude Number :  $FR = V/SQRT(9.8*(A/B)/ALPHA)$

\*Non-Uniform Flow, 10.000m3/s, Ba\*

NAME	DELTX (M)	Q (M3/S)	H (M)	V,H (M)	TOTAL E (M)	IE	A (M2)	B (M)	R (M)	A/B (M)	N	ALPHA	V (M/S)	FR
BA	400	0	10000.00	2.044	4.172	.55259E-02	1548.541	363.91	4.21	4.26	.0300	1.00	6.46	1.00
BA	1000	600.0	10000.00	4.955	6.295	.15512E-02	1951.364	245.02	7.71	7.96	.0300	1.00	5.12	.58
BA	1500	500.0	10000.00	5.341	7.123	.17637E-02	1691.675	184.41	8.68	9.17	.0300	1.00	5.91	.62
BA	2000	500.0	10000.00	6.723	7.802	.95001E-03	2174.669	218.97	9.47	9.93	.0300	1.00	4.60	.47
BA	2500	500.0	10000.00	6.737	8.378	.13563E-02	1763.124	166.84	9.93	10.57	.0300	1.00	5.67	.56
BA	3000	500.0	10000.00	8.421	8.786	.27494E-03	3738.459	338.70	10.65	11.04	.0300	1.00	2.67	.26
BA	3500	500.0	10000.00	8.606	8.915	.23903E-03	4066.815	380.51	10.42	10.69	.0300	1.00	2.46	.24

BA	4000	500.0	10000.00	8.695	347	9.042	27205E-03	3833.872	361.61	10.33	10.60	0300	1.00	2.61	26
BA	4500	500.0	10000.00	8.313	971	9.284	69368E-03	2292.767	192.28	11.07	11.92	0300	1.00	4.36	40
BA	5000	500.0	10000.00	8.508	1.161	9.669	84697E-03	2096.720	179.92	10.90	11.65	0300	1.00	4.77	45
BA	5500	500.0	10000.00	9.546	407	9.952	28825E-03	3540.750	306.40	11.15	11.56	0300	1.00	2.82	27
BA	6000	500.0	10000.00	9.119	1.146	10.265	96042E-03	2109.656	205.85	9.83	10.25	0300	1.00	4.74	47
BA	6500	500.0	10000.00	9.851	783	10.634	51761E-03	2552.221	206.76	11.74	12.34	0300	1.00	3.92	36
BA	7000	500.0	10000.00	10.105	787	10.892	51097E-03	2546.726	201.95	11.90	12.61	0300	1.00	2.93	35
BA	7500	500.0	10000.00	10.228	951	11.178	63517E-03	2316.742	186.91	11.65	12.39	0300	1.00	4.32	39
BA	8000	500.0	10000.00	10.274	1.289	11.563	90330E-03	1989.344	162.06	11.24	12.28	0300	1.00	5.03	46
BA	8500	500.0	10000.00	11.372	477	11.849	24280E-03	3270.966	213.40	14.28	15.33	0300	1.00	3.06	25
BA	9000	500.0	10000.00	11.277	748	12.025	45853E-03	2611.655	195.32	12.42	13.37	0300	1.00	3.83	33
BA	9500	500.0	10000.00	11.564	678	12.242	41222E-03	2742.835	203.92	12.50	13.45	0300	1.00	3.65	32
BA	10000	500.0	10000.00	11.760	691	12.450	41982E-03	2717.968	202.21	12.50	13.44	0300	1.00	3.68	32
BA	10500	500.0	10000.00	12.079	559	12.639	33379E-03	3020.442	223.89	12.68	13.49	0300	1.00	3.31	29
BA	11000	500.0	10000.00	12.226	582	12.808	34372E-03	2960.198	216.89	12.78	13.65	0300	1.00	3.38	29
BA	11500	500.0	10000.00	12.194	821	13.016	48609E-03	2492.719	180.06	12.75	13.84	0300	1.00	4.01	34
BA	12000	500.0	10000.00	12.788	407	13.195	23229E-03	3539.394	257.29	13.11	13.76	0300	1.00	2.83	24
BA	12500	500.0	10000.00	12.609	752	13.360	42867E-03	2605.399	183.63	13.12	14.19	0300	1.00	3.84	33
BA	13000	500.0	10000.00	12.930	628	13.558	36252E-03	2849.720	203.91	13.00	13.98	0300	1.00	3.51	30
BA	13500	500.0	10000.00	13.154	577	13.731	32997E-03	2972.521	211.25	13.10	14.07	0300	1.00	3.36	29
BA	14000	500.0	10000.00	13.310	586	13.896	32769E-03	2951.026	206.41	13.31	14.30	0300	1.00	3.39	29
BA	14500	500.0	10000.00	13.580	466	14.046	27497E-03	3308.800	243.59	12.79	13.58	0300	1.00	3.02	26
BA	15000	500.0	10000.00	13.706	478	14.184	27420E-03	3267.689	235.07	13.05	13.90	0300	1.00	3.06	26
BA	15500	500.0	10000.00	13.649	698	14.347	37929E-03	2703.499	181.20	13.60	14.92	0300	1.00	3.70	31
BA	16000	500.0	10000.00	13.779	773	14.552	44044E-03	2568.767	179.50	13.13	14.31	0300	1.00	3.89	33
BA	16500	500.0	10000.00	14.127	626	14.754	36652E-03	2853.860	206.74	12.87	13.80	0300	1.00	3.50	30
BA	17000	500.0	10000.00	13.781	1.257	15.037	76805E-03	2014.867	144.87	12.45	13.91	0300	1.00	4.96	43
BA	17500	500.0	10000.00	14.343	1.018	15.362	52847E-03	2238.274	142.09	14.08	15.75	0300	1.00	4.47	36
BA	18000	500.0	10000.00	14.615	1.014	15.629	54016E-03	2243.107	147.52	13.80	15.21	0300	1.00	4.46	37
BA	18500	500.0	10000.00	14.920	968	15.888	49745E-03	2295.730	141.44	14.18	16.23	0300	1.00	4.36	35
BA	19000	500.0	10000.00	15.116	1.024	16.141	51273E-03	2231.979	129.08	14.46	17.29	0300	1.00	4.48	34
BA	19500	500.0	10000.00	15.488	887	16.375	42593E-03	2398.539	142.94	14.92	16.78	0300	1.00	4.17	33
BA	20000	500.0	10000.00	15.796	793	16.590	43178E-03	2536.042	169.35	13.58	14.98	0300	1.00	3.94	33
BA	20500	500.0	10000.00	16.261	498	16.759	24601E-03	3200.243	199.75	14.61	16.02	0300	1.00	3.12	25
BA	21000	500.0	10000.00	15.685	1.344	17.029	83285E-03	1948.518	142.52	12.32	13.67	0300	1.00	5.13	44
BA	21500	500.0	10000.00	16.236	1.166	17.402	63863E-03	2091.903	138.36	13.21	15.12	0300	1.00	4.78	39
BA	22000	500.0	10000.00	16.182	1.621	17.803	94457E-03	1774.230	116.64	12.90	15.21	0300	1.00	5.64	46
BA	22500	500.0	10000.00	16.631	1.626	18.257	87423E-03	1771.457	109.26	13.71	16.21	0300	1.00	5.65	45
BA	23000	500.0	10000.00	17.113	1.572	18.685	83779E-03	1801.283	112.18	13.80	16.06	0300	1.00	5.55	44
BA	23500	500.0	10000.00	17.876	1.181	19.057	64823E-03	2078.708	134.80	13.50	15.42	0300	1.00	4.81	39
BA	24000	500.0	10000.00	18.629	681	19.310	36441E-03	2737.998	181.97	13.75	15.05	0300	1.00	3.65	30
BA	24500	500.0	10000.00	18.189	1.398	19.586	74137E-03	1910.552	115.93	13.85	16.48	0300	1.00	5.23	41
BA	25000	500.0	10000.00	18.123	1.920	20.043	10853E-02	1629.933	102.46	13.21	15.91	0300	1.00	6.14	49
BA	25500	500.0	10000.00	19.282	1.189	20.471	62767E-03	2071.534	129.65	13.90	15.98	0300	1.00	4.83	39
BA	26000	500.0	10000.00	19.518	1.288	20.806	71151E-03	1990.295	130.29	13.43	15.28	0300	1.00	5.02	41
BA	26500	500.0	10000.00	20.568	474	21.042	23251E-03	3279.277	197.80	14.70	16.58	0300	1.00	3.05	24
BA	27000	500.0	10000.00	19.888	1.409	21.297	78845E-03	1902.601	125.18	13.31	15.20	0300	1.00	5.26	43
BA	27500	500.0	10000.00	20.571	1.056	21.627	53119E-03	2197.956	131.86	14.41	16.67	0300	1.00	4.55	36
BA	28000	500.0	10000.00	20.466	1.494	21.960	79849E-03	1848.050	113.75	13.77	16.25	0300	1.00	5.41	43
BA	28500	500.0	10000.00	20.299	2.142	22.441	11273E-02	1543.322	89.20	13.93	17.30	0300	1.00	6.48	50
BA	29000	500.0	10000.00	21.046	1.943	22.989	10662E-02	1620.309	103.07	13.50	15.72	0300	1.00	6.17	50

BA	29500	500.0	10000.00	22.045	1.390	23.435	.71787E-03	1915.599	117.33	14.13	16.33	.0300	1.00	5.22	.41
BA	30000	500.0	10000.00	22.643	1.114	23.757	.56986E-03	2139.974	130.27	14.23	16.43	.0300	1.00	4.67	.37
BA	30500	500.0	10000.00	23.370	.602	23.972	.28691E-03	2911.576	175.79	15.00	16.56	.0300	1.00	3.43	.27
BA	31000	500.0	10000.00	22.864	1.377	24.241	.79113E-03	1925.124	132.75	13.04	14.50	.0300	1.00	5.19	.44
BA	31500	500.0	10000.00	23.278	1.340	24.618	.71637E-03	1951.024	123.63	13.77	15.78	.0300	1.00	5.13	.41
BA	32000	500.0	10000.00	24.293	.575	24.868	.28386E-03	2979.760	185.01	14.61	16.11	.0300	1.00	3.36	.27
BA	32500	500.0	10000.00	23.558	1.614	25.172	.93081E-03	1778.035	120.29	13.01	14.78	.0300	1.00	5.62	.47
BA	33000	500.0	10000.00	24.409	1.158	25.567	.65128E-03	2098.595	142.11	13.26	14.77	.0300	1.00	4.77	.40
BA	33500	500.0	8920.00	24.348	1.626	25.974	.97611E-03	1580.236	108.67	12.62	14.54	.0300	1.00	5.64	.47
BA	33715	215.0	8920.00	25.134	1.002	26.136	.53084E-03	2012.534	126.88	13.86	15.86	.0300	1.00	4.43	.36
BA	34000	285.0	8920.00	24.579	1.770	26.348	.95924E-03	1514.636	94.41	13.62	16.04	.0300	1.00	5.89	.47
BA	34500	500.0	8920.00	24.839	2.064	26.904	.12623E-02	1402.336	92.63	12.45	15.14	.0300	1.00	6.36	.52
BA	35000	500.0	8920.00	25.991	1.452	27.443	.89577E-03	1672.038	121.67	12.37	13.74	.0300	1.00	5.33	.46

\*\*\* Legend \*\*\*

NAME ..... Section Name  
DELTX ..... Distance (M)  
Q ..... Discharge (M3/S)  
H ..... Stage (M)  
V.H ..... Velocity Head (M) :  $V.H = ALPHA * V^2 / 19.6$   
TOTAL E ... Total Energy Head (M) :  $TOTAL E = H + V.H.$   
IE ..... Energy Gradient :  $IE = (H+Q/(A*R^{2/3}))^{2/3}$   
A ..... Discharge Area (M2)  
B ..... Width of Water Surface (M)  
R ..... Hydraulic Radius (M)  
A/B ..... Hydraulic Depth (M)  
N ..... Roughness Coefficient  
ALPHA ..... Rectification Coefficient  
V ..... Velocity (M/S) :  $V = Q / A$   
FR ..... Froude Number :  $FR = V/SORT(9.8*(A/B)/ALPHA)$

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"Non-Uniform Flow, 20,000m3/s, Ba"

NAME	DELTX (M)	Q (M3/S)	H (M)	V.H (M)	TOTAL E (M)	IE	A (M2)	B (M)	R (M)	A/B (M)	N	ALPHA	V (M/S)	FR
BA	400	0	20000.00	4.543	3.377	7.921	.47777E-02	2458.156	363.91	6.64	.0300	1.00	8.14	1.00
BA	1000	600.0	20000.00	6.727	3.586	10.313	.31957E-02	2385.484	245.02	9.39	.0300	1.00	8.38	.86
BA	1500	500.0	20000.00	7.060	5.058	12.118	.40233E-02	2008.769	184.41	10.22	.0300	1.00	9.96	.96
BA	2000	500.0	20000.00	11.394	1.996	13.390	.10669E-02	3197.518	218.97	13.77	.0300	1.00	6.25	.52
BA	2500	500.0	20000.00	10.640	3.501	14.141	.19381E-02	2414.336	166.84	13.41	.0300	1.00	8.28	.70
BA	3000	500.0	20000.00	14.056	.640	14.696	.28055E-03	5647.043	338.70	15.98	.0300	1.00	3.54	.28
BA	3500	500.0	20000.00	14.299	.525	14.824	.23168E-03	6232.935	380.51	15.90	.0300	1.00	3.21	.25

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BA	4000	500.0	20000.00	14.358	590	14.948	26283E-03	5881.481	361.61	15.78	16.26	0300	1.00	3.40	27
BA	4500	500.0	20000.00	13.305	1.929	15.234	38175E-03	3252.546	192.28	15.48	16.92	0300	1.00	6.15	48
BA	5000	500.0	20000.00	13.426	2.296	15.722	10708E-02	2981.528	179.92	15.25	16.57	0300	1.00	6.71	53
BA	5500	500.0	20000.00	15.343	722	16.065	29595E-03	5316.885	306.40	16.65	17.35	0300	1.00	3.76	29
BA	6000	500.0	20000.00	14.381	2.002	16.383	97223E-03	3192.819	205.85	14.80	15.51	0300	1.00	6.26	51
BA	6500	500.0	20000.00	15.267	1.513	16.781	62163E-03	3672.082	206.76	16.78	17.76	0300	1.00	5.45	41
BA	7000	500.0	20000.00	15.559	1.533	17.093	62494E-03	3648.213	201.95	16.87	18.06	0300	1.00	5.48	41
BA	7500	500.0	20000.00	15.590	1.853	17.443	77644E-03	3319.113	186.91	16.52	17.76	0300	1.00	6.03	46
BA	8000	500.0	20000.00	15.354	2.580	17.934	11863E-02	2812.669	162.06	15.41	17.36	0300	1.00	7.11	55
BA	8500	500.0	20000.00	17.323	990	18.313	32949E-03	4540.771	213.40	19.64	21.28	0300	1.00	4.40	31
BA	9000	500.0	20000.00	17.080	1.455	18.535	55888E-03	3745.103	195.32	17.64	19.17	0300	1.00	5.34	39
BA	9500	500.0	20000.00	17.491	1.307	18.798	49408E-03	3951.418	203.92	17.85	19.38	0300	1.00	5.06	37
BA	10000	500.0	20000.00	17.721	1.326	19.047	50051E-03	3923.353	202.21	17.87	19.40	0300	1.00	5.10	37
BA	10500	500.0	20000.00	18.211	1.057	19.269	38722E-03	4393.249	223.89	18.28	19.62	0300	1.00	4.55	33
BA	11000	500.0	20000.00	18.357	1.109	19.466	40367E-03	4290.051	216.89	18.37	19.78	0300	1.00	4.66	33
BA	11500	500.0	20000.00	18.106	1.613	19.718	60332E-03	3557.072	180.06	17.95	19.75	0300	1.00	5.62	40
BA	12000	500.0	20000.00	18.656	1.478	19.936	26277E-03	5182.940	257.29	19.08	20.14	0300	1.00	3.86	27
BA	12500	500.0	20000.00	19.175	1.200	20.134	53299E-03	3715.932	183.63	18.50	20.24	0300	1.00	5.38	38
BA	13000	500.0	20000.00	19.481	1.099	20.580	43017E-03	4123.099	203.91	18.59	20.22	0300	1.00	4.85	34
BA	13500	500.0	20000.00	19.651	1.125	20.776	38940E-03	4309.133	211.25	18.74	20.40	0300	1.00	4.64	33
BA	14000	500.0	20000.00	20.099	851	20.950	39232E-03	4259.886	206.41	18.96	20.64	0300	1.00	4.69	33
BA	14500	500.0	20000.00	20.218	886	21.105	30699E-03	4896.729	243.59	18.49	20.10	0300	1.00	4.08	29
BA	15000	500.0	20000.00	19.919	1.384	21.303	31061E-03	4798.604	235.07	18.90	20.41	0300	1.00	4.17	29
BA	15500	500.0	20000.00	20.065	1.493	21.558	48273E-03	3339.583	181.20	18.97	21.19	0300	1.00	5.21	36
BA	16000	500.0	20000.00	20.639	1.157	21.796	53820E-03	3697.210	179.50	18.50	20.60	0300	1.00	5.41	38
BA	16500	500.0	20000.00	19.654	2.482	22.147	41138E-03	4200.064	206.74	18.69	20.32	0300	1.00	4.76	34
BA	17000	500.0	20000.00	20.463	2.113	22.576	99237E-03	2867.224	144.87	17.12	19.79	0300	1.00	6.98	50
BA	17500	500.0	20000.00	20.900	2.031	22.950	69383E-03	3170.300	147.52	19.26	21.49	0300	1.00	6.31	43
BA	18000	500.0	20000.00	21.282	1.998	23.281	77544E-03	3050.631	141.44	18.75	22.59	0300	1.00	6.26	42
BA	18500	500.0	20000.00	21.459	2.193	23.652	70775E-03	3195.615	129.08	18.77	23.63	0300	1.00	6.56	43
BA	19000	500.0	20000.00	22.175	1.814	23.988	57220E-03	3354.265	142.94	20.45	23.47	0300	1.00	5.96	39
BA	20000	500.0	20000.00	22.783	1.475	24.258	50701E-03	3719.213	169.35	19.18	21.96	0300	1.00	5.38	37
BA	20500	500.0	20000.00	23.514	944	24.458	29101E-03	4648.940	199.75	20.81	23.27	0300	1.00	4.30	28
BA	21000	500.0	20000.00	22.332	2.434	24.766	94031E-03	2895.846	142.52	17.56	20.32	0300	1.00	6.91	49
BA	21500	500.0	20000.00	22.972	2.232	25.204	81224E-03	3023.898	133.36	18.37	21.86	0300	1.00	6.61	45
BA	22000	500.0	20000.00	23.001	3.352	25.728	12838E-02	2509.772	116.64	17.23	21.52	0300	1.00	7.97	55
BA	22500	500.0	20000.00	23.795	3.136	26.931	12175E-02	2467.395	109.26	18.40	22.58	0300	1.00	8.11	54
BA	23000	500.0	20000.00	25.227	2.166	27.393	10955E-02	2550.898	112.18	18.94	22.74	0300	1.00	7.84	53
BA	23500	500.0	20000.00	26.501	1.173	27.674	75145E-03	3069.653	134.80	19.04	22.77	0300	1.00	6.52	44
BA	24000	500.0	20000.00	25.268	2.736	28.004	37255E-03	4170.341	131.97	20.35	22.92	0300	1.00	4.80	32
BA	24500	500.0	20000.00	24.800	3.811	28.611	14801E-02	2314.074	102.46	17.50	22.59	0300	1.00	7.32	48
BA	25000	500.0	20000.00	26.999	2.163	29.161	72250E-03	3071.988	129.65	19.59	23.69	0300	1.00	8.64	58
BA	25500	500.0	20000.00	28.958	837	29.537	77983E-03	3000.265	130.29	19.16	23.03	0300	1.00	6.51	43
BA	26000	500.0	20000.00	27.594	2.483	30.076	24948E-03	4938.815	197.80	21.33	24.97	0300	1.00	4.05	26
BA	26500	500.0	20000.00	27.594	2.483	30.076	87729E-03	2867.191	125.18	18.78	22.90	0300	1.00	6.98	47
BA	27000	500.0	20000.00	28.514	1.938	30.452	62564E-03	3245.315	131.86	20.10	24.61	0300	1.00	6.16	40
BA	27500	500.0	20000.00	28.084	2.769	30.853	97984E-03	2714.587	113.75	18.76	23.86	0300	1.00	7.37	48
BA	28000	500.0	20000.00	27.066	4.427	31.494	15826E-02	2146.958	89.20	18.62	24.07	0300	1.00	9.32	61
BA	28500	500.0	20000.00	28.732	3.487	32.219	13198E-02	2419.236	104.00	17.84	23.26	0300	1.00	8.27	55



BA	29500	500.0	20000.00	30.302	2.453	32.755	.82328E-03	2884.404	117.33	19.52	24.58	.0300	1.00	6.93	.45
BA	30000	500.0	20000.00	31.181	1.929	33.111	.60086E-03	3252.250	130.27	20.67	24.97	.0300	1.00	6.15	.39
BA	30500	500.0	20000.00	32.318	1.015	33.333	.28731E-03	4484.612	175.79	22.18	25.51	.0300	1.00	4.46	.28
BA	31000	500.0	20000.00	31.427	2.171	33.598	.77364E-03	3066.080	133.26	18.66	23.01	.0300	1.00	6.52	.43
BA	31500	500.0	20000.00	31.699	2.279	33.979	.74952E-03	2992.219	123.63	19.82	24.20	.0300	1.00	6.68	.43
BA	32000	500.0	20000.00	33.287	.946	34.233	.26919E-03	4643.687	185.01	22.10	25.10	.0300	1.00	4.31	.27
BA	32500	500.0	20000.00	31.973	2.566	34.539	.95339E-03	2820.142	126.76	18.09	22.25	.0300	1.00	7.09	.48
BA	33000	500.0	20000.00	33.094	1.837	34.931	.61437E-03	3332.826	142.11	19.57	23.45	.0300	1.00	6.00	.40
BA	33500	500.0	17840.00	32.707	2.622	35.329	.97798E-03	2488.590	108.67	18.03	22.90	.0300	1.00	7.17	.48
BA	33715	215.0	17840.00	33.818	1.674	35.492	.53980E-03	3114.425	126.88	20.12	24.55	.0300	1.00	5.73	.37
BA	34000	285.0	17840.00	32.563	3.156	35.719	.10482E-02	2268.421	94.41	19.67	24.03	.0300	1.00	7.86	.51
BA	34500	500.0	17840.00	32.775	3.554	36.329	.13950E-02	2137.422	92.63	17.36	23.07	.0300	1.00	8.35	.56
BA	35000	500.0	17840.00	34.701	2.176	36.877	.79455E-03	2731.740	121.67	18.32	22.45	.0300	1.00	6.53	.44

## **DATA 4**

### **RUNOFF ANALYSIS BY STORAGE FUNCTION MODEL**

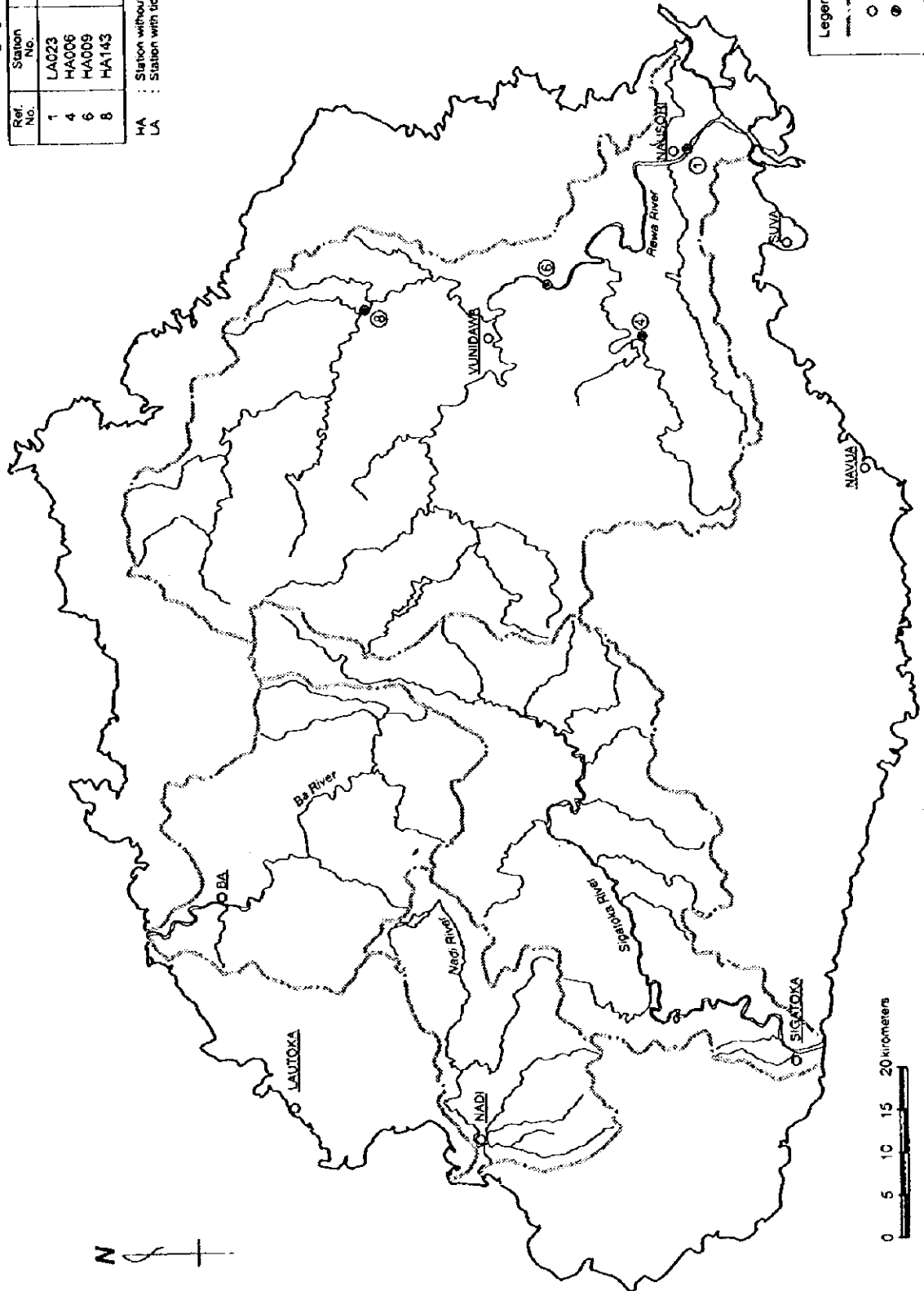


# Gauging Stations Adopted

Ref. No.	Station No.	Station Name
1	LA023	Nausori-crt
4	HA006	Nabukaluka
6	HA009	Navolau
8	HA143	Nayavu

HA : Station without tidal influence  
LA : Station with tidal influence

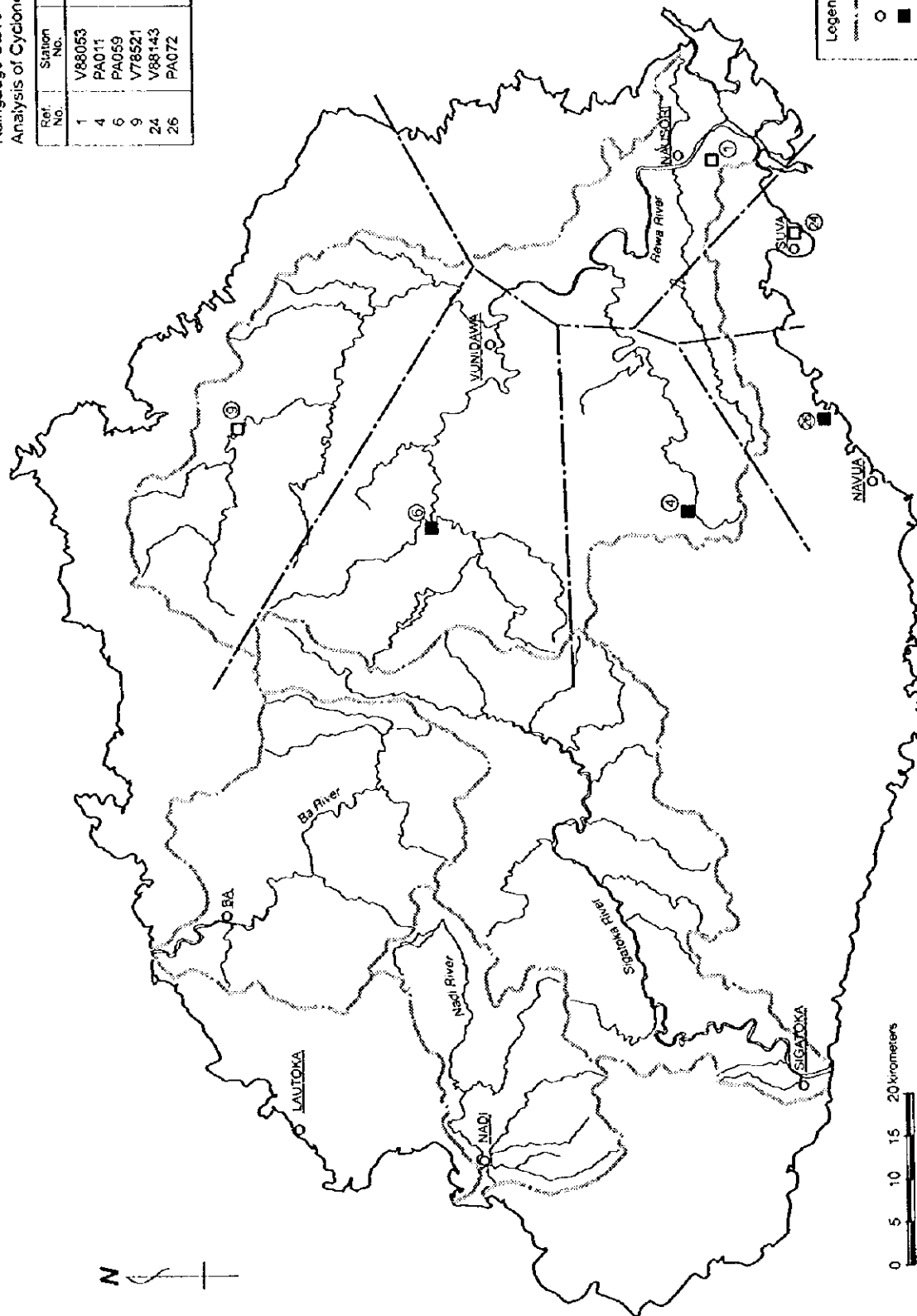
Legend	
—	Boundary of Watershed
○	City, Town, Village
●	Gauging Station Operated



Locations of Gauging Stations

# Raingauge Stations available for Runoff Analysis of Cyclone Nigel in Rewa Watershed

Ref. No.	Station No.	Station Name	River Basin
1	V88053	Koroniya	Rewa
4	PA011	Namosi Mission	Rewa
6	PA059	Laselevu	Rewa
9	V78521	Dobulevu	Rewa
24	V88143	Laukata Bay	Others
26	PA072	Nabukavesi	Others



**Legend**

--- : Boundary of Watershed

○ : City, Town, Village

■ : Raingauge Station

□ : Meteorological Station

Locations of Raingauge Stations

Fiji flood analysis (1) < REWA River (Nigel) >  
Rain

Original Data								
	Date	Time	V78521	PA059	PA011	V88053	PA072	V88143
	17-Jan-85	17-Jan 0.00						
1	17-Jan-85	1:00	0.0	0.0	0.0	0.0	0.0	0.0
2	17-Jan-85	2:00	0.0	0.0	0.0	0.0	0.0	0.0
3	17-Jan-85	3:00	0.0	0.0	0.0	0.0	0.0	0.0
4	17-Jan-85	4:00	0.0	0.0	1.0	0.0	0.0	0.0
5	17-Jan-85	5:00	0.0	0.0	3.0	0.0	0.0	0.0
6	17-Jan-85	6:00	0.0	0.0	11.0	0.0	0.0	0.0
7	17-Jan-85	7:00	9.0	0.5	3.0	0.2	0.0	0.1
8	17-Jan-85	8:00	5.1	6.0	0.0	3.2	3.5	4.6
9	17-Jan-85	9:00	0.0	10.0	0.0	8.4	1.5	6.9
10	17-Jan-85	10:00	0.0	8.0	0.0	15.4	0.0	30.1
11	17-Jan-85	11:00	0.0	2.0	10.0	11.6	10.0	6.3
12	17-Jan-85	12:00	0.0	4.0	3.0	8.6	0.0	7.4
13	17-Jan-85	13:00	0.0	17.0	11.0	25.5	10.0	9.2
14	17-Jan-85	14:00	0.0	9.0	7.0	19.9	12.0	17.4
15	17-Jan-85	15:00	0.0	12.0	17.0	10.1	15.0	13.4
16	17-Jan-85	16:00	0.0	11.2	4.0	18.3	11.0	1.9
17	17-Jan-85	17:00	0.0	5.8	1.0	9.2	9.5	10.7
18	17-Jan-85	18:00	0.0	8.0	3.0	8.4	3.5	16.6
19	17-Jan-85	19:00	15.7	10.0	8.0	7.1	6.0	5.5
20	17-Jan-85	20:00	7.0	25.5	30.0	15.2	37.0	25.9
21	17-Jan-85	21:00	1.6	9.5	25.0	7.1	5.0	4.3
22	17-Jan-85	22:00	8.7	36.0	35.0	6.6	9.0	18.3
23	17-Jan-85	23:00	6.2	15.0	29.0	10.8	28.0	28.4
24	18-Jan-85	18-Jan 0.00	3.9	9.0	9.0	0.1	1.0	3.9
25	18-Jan-85	1:00	7.0	2.0	2.0	2.2	0.2	0.0
26	18-Jan-85	2:00	23.5	0.0	5.0	2.8	0.0	0.0
27	18-Jan-85	3:00	2.3	0.0	3.0	0.1	0.0	0.0
28	18-Jan-85	4:00	8.7	0.0	1.0	0.4	0.8	0.0
29	18-Jan-85	5:00	13.4	0.0	0.0	0.4	0.5	0.0
30	18-Jan-85	6:00	5.5	0.0	1.0	0.1	0.0	0.4
31	18-Jan-85	7:00	10.1	0.0	1.0	1.2	1.0	0.3
32	18-Jan-85	8:00	16.4	0.0	2.0	0.5	2.0	0.0
33	18-Jan-85	9:00	0.0	0.0	2.0	3.9	1.0	0.0
34	18-Jan-85	10:00	0.0	1.0	0.0	0.7	0.0	0.0
35	18-Jan-85	11:00	0.0	1.0	0.0	0.1	0.0	0.4
36	18-Jan-85	12:00	0.0	0.0	0.0	0.0	0.0	0.0
37	18-Jan-85	13:00	0.0	0.0	0.0	0.0	0.0	0.0
38	18-Jan-85	14:00	0.0	0.0	0.0	0.0	0.0	0.0
39	18-Jan-85	15:00	0.0	0.0	0.0	0.0	0.0	0.0
40	18-Jan-85	16:00	0.0	0.0	2.0	0.0	0.0	0.0
41	18-Jan-85	17:00	0.0	0.0	0.0	0.0	0.0	0.0
42	18-Jan-85	18:00	0.0	0.0	0.0	0.0	0.0	0.0
43	18-Jan-85	19:00	0.0	0.0	0.0	0.0	0.0	0.0
44	18-Jan-85	20:00	0.0	0.0	0.0	0.0	0.0	0.0
45	18-Jan-85	21:00	0.0	0.0	0.0	0.0	0.0	0.0
46	18-Jan-85	22:00	0.0	0.0	0.0	0.0	0.0	0.0
47	18-Jan-85	23:00	0.0	0.0	0.0	0.0	0.0	0.0
48	19-Jan-85	19-Jan 0.00	0.0	0.0	0.0	0.0	0.4	0.0
49	19-Jan-85	1:00	0.0	0.0	0.0	0.0	0.0	0.0
50	19-Jan-85	2:00	0.0	0.0	0.0	0.0	0.0	0.0
51	19-Jan-85	3:00	1.0	0.0	0.0	0.0	0.6	0.0
52	19-Jan-85	4:00	5.0	0.0	0.0	0.0	0.5	0.0
53	19-Jan-85	5:00	0.3	0.0	0.0	0.0	0.0	0.0
54	19-Jan-85	6:00	0.0	0.0	0.0	0.0	0.0	0.0
55	19-Jan-85	7:00	0.0	0.0	0.0	0.0	0.0	0.0
56	19-Jan-85	8:00	0.0	0.0	0.0	0.0	0.5	0.0
57	19-Jan-85	9:00	0.0	0.0	0.0	0.0	1.0	0.0
58	19-Jan-85	10:00	8.6	0.5	4.0	3.4	4.0	6.5
59	19-Jan-85	11:00	7.6	7.0	4.0	4.2	3.0	3.6
60	19-Jan-85	12:00	0.4	2.0	1.0	1.1	2.0	0.6
61	19-Jan-85	13:00	6.0	3.0	2.0	1.8	3.0	1.0
62	19-Jan-85	14:00	7.0	8.0	8.0	6.5	8.0	5.8
63	19-Jan-85	15:00	17.5	20.0	17.0	14.2	21.0	24.2
64	19-Jan-85	16:00	6.7	35.0	20.0	38.7	29.0	45.1
65	19-Jan-85	17:00	7.0	7.0	6.0	17.9	13.0	12.1
66	19-Jan-85	18:00	16.8	11.0	9.0	21.5	11.0	8.0
67	19-Jan-85	19:00	17.1	62.0	17.0	28.1	16.0	14.9
68	19-Jan-85	20:00	6.5	38.0	16.0	41.1	20.0	30.1
69	19-Jan-85	21:00	0.0	8.5	3.0	10.3	4.0	7.1
70	19-Jan-85	22:00	0.0	0.0	0.0	0.2	0.0	0.0
71	19-Jan-85	23:00	0.0	0.0	0.0	0.0	0.0	0.0
72	20-Jan-85	20-Jan 0.00	0.0	0.0	0.0	0.2	2.0	0.1
73	20-Jan-85	1:00	0.0	0.0	0.0	0.3	0.0	3.0
74	20-Jan-85	2:00	0.0	0.0	1.0	1.0	1.0	0.0
75	20-Jan-85	3:00	0.0	0.0	0.0	0.0	0.0	0.0
76	20-Jan-85	4:00	0.0	0.0	0.0	0.0	0.0	0.0

Fiji flood analysis (1) < REWA River (Nigel) >  
Rain

Original Data								
	Date	Time	V78521	PA059	PA011	V88053	PA072	V88143
77	20-Jan-85	5:00	0.0	0.0	0.0	0.0	0.0	0.0
78	20-Jan-85	6:00	0.0	0.0	0.0	0.0	0.0	0.0
79	20-Jan-85	7:00	0.0	0.0	0.0	0.0	0.0	0.0
80	20-Jan-85	8:00	0.0	0.0	0.0	0.0	0.0	0.0
81	20-Jan-85	9:00	0.0	0.0	0.0	0.0	0.0	0.0
82	20-Jan-85	10:00	0.0	0.0	0.0	0.0	0.0	0.0
83	20-Jan-85	11:00	0.0	0.0	0.0	0.0	0.0	0.0
84	20-Jan-85	12:00	0.0	0.0	0.0	0.0	0.0	0.0
85	20-Jan-85	13:00	0.0	0.0	0.0	0.0	0.0	0.0
86	20-Jan-85	14:00	0.0	0.0	0.0	0.0	0.0	0.0
87	20-Jan-85	15:00	0.0	0.0	0.0	0.0	0.0	0.0
88	20-Jan-85	16:00	0.0	0.0	0.0	0.0	0.0	0.0
89	20-Jan-85	17:00	0.0	0.0	0.0	0.0	0.0	0.0
90	20-Jan-85	18:00	0.0	0.0	0.0	0.0	0.0	0.0
91	20-Jan-85	19:00	0.0	0.0	0.0	0.0	0.0	0.0
92	20-Jan-85	20:00	0.0	0.0	0.0	0.0	0.0	0.0
93	20-Jan-85	21:00	0.0	0.4	0.0	0.0	0.0	0.0
94	20-Jan-85	22:00	0.0	0.0	0.0	0.0	0.0	0.0
95	20-Jan-85	23:00	0.0	0.0	0.0	0.0	0.0	0.0
96	21-Jan-85	21-Jan 0:00	0.0	0.0	0.0	0.0	0.0	0.0
97	21-Jan-85	1:00	0.0	0.0	0.0	0.0	0.0	0.0
98	21-Jan-85	2:00	0.0	0.0	0.0	0.0	0.0	0.0
99	21-Jan-85	3:00	0.0	0.0	0.0	0.0	0.0	0.0
100	21-Jan-85	4:00	0.0	0.0	0.0	0.0	0.0	0.0
101	21-Jan-85	5:00	0.0	0.0	0.0	0.0	0.0	0.0
102	21-Jan-85	6:00	0.0	0.0	0.0	0.0	0.0	0.0
103	21-Jan-85	7:00	0.0	0.0	0.0	0.0	0.0	0.0
104	21-Jan-85	8:00	0.0	0.0	0.0	0.0	0.0	0.0
105	21-Jan-85	9:00	0.0	0.0	0.0	0.0	0.0	0.0
106	21-Jan-85	10:00	0.0	0.0	0.0	0.0	0.0	0.0
107	21-Jan-85	11:00	0.0	0.0	1.0	0.0	0.0	0.0
108	21-Jan-85	12:00	0.0	0.0	0.0	0.0	0.0	0.0
109	21-Jan-85	13:00	0.0	0.0	0.0	0.0	0.0	0.0
110	21-Jan-85	14:00	0.0	0.0	0.0	0.0	0.0	0.0
111	21-Jan-85	15:00	0.0	0.0	0.0	0.0	0.0	0.0
112	21-Jan-85	16:00	0.0	0.0	0.0	0.0	0.0	0.0
113	21-Jan-85	17:00	0.0	0.0	0.0	0.0	0.0	0.0
114	21-Jan-85	18:00	0.0	0.0	0.0	0.0	0.0	0.0
115	21-Jan-85	19:00	0.0	0.0	0.0	0.0	0.0	0.0
116	21-Jan-85	20:00	0.0	0.0	0.0	0.0	0.0	0.0
117	21-Jan-85	21:00	0.0	0.0	0.0	0.0	0.0	0.0
118	21-Jan-85	22:00	0.0	0.0	0.0	0.0	0.0	0.0
119	21-Jan-85	23:00	0.0	0.0	0.0	0.0	0.0	0.0
Total			251.6	404.9	338.0	388.6	307.5	374.1

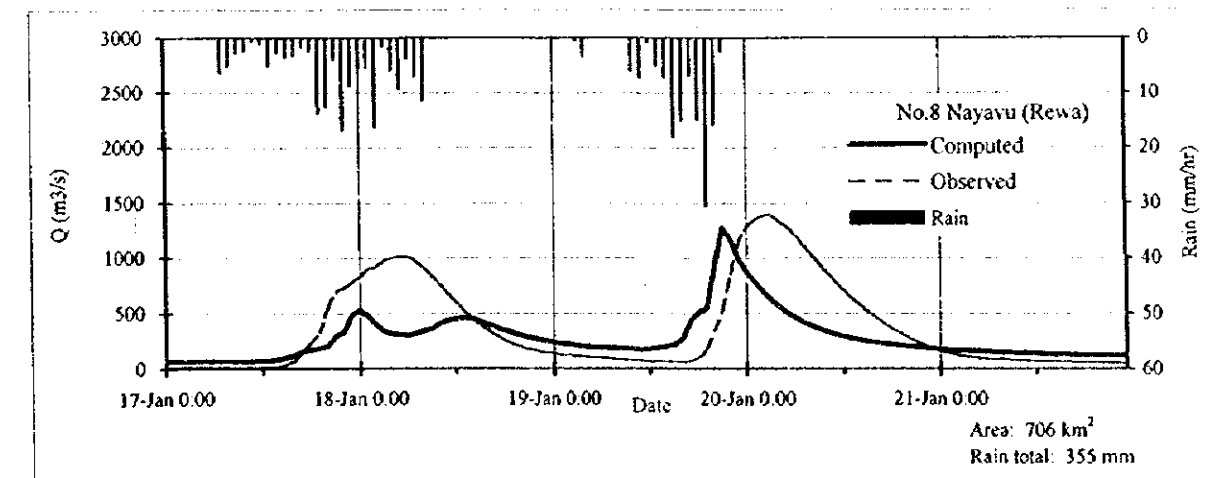
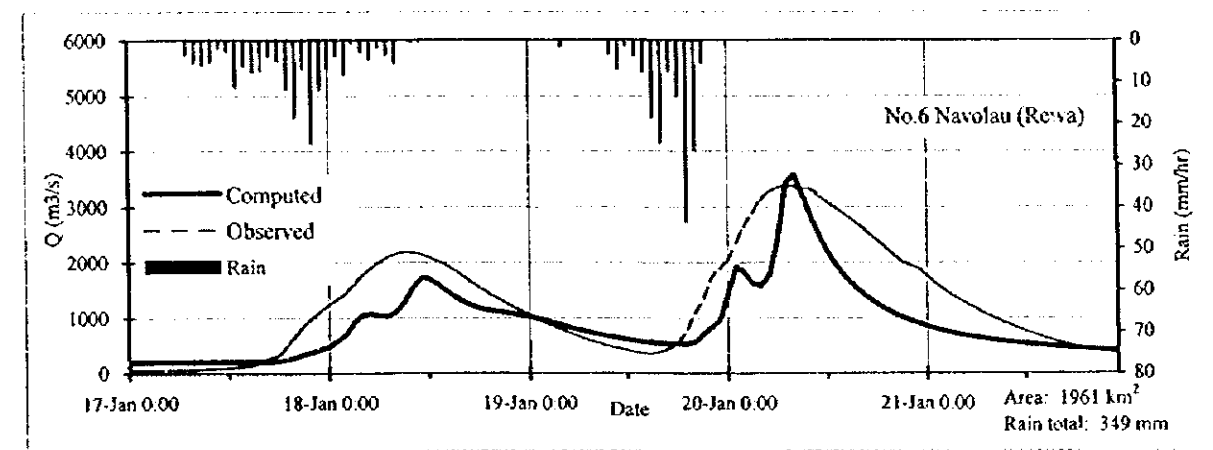
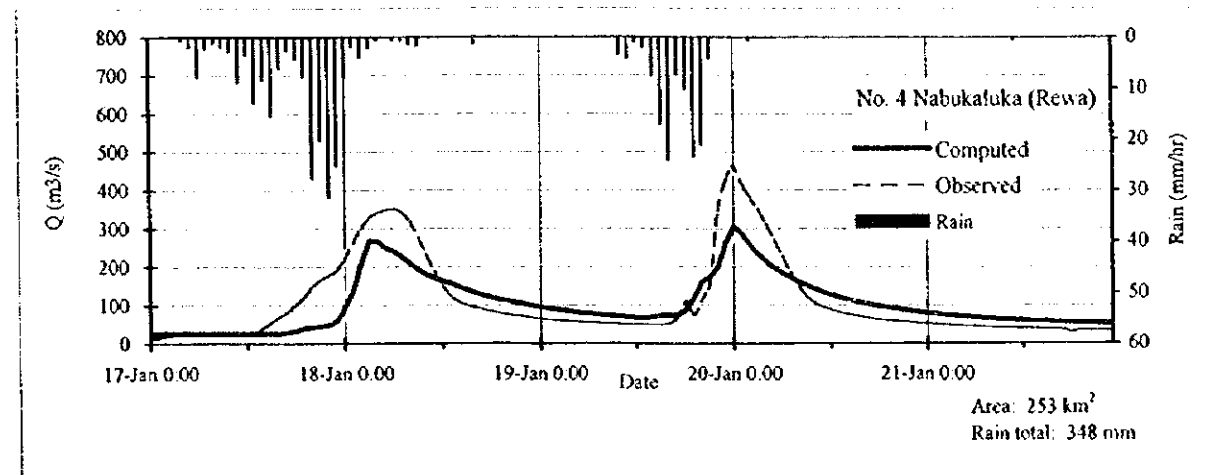
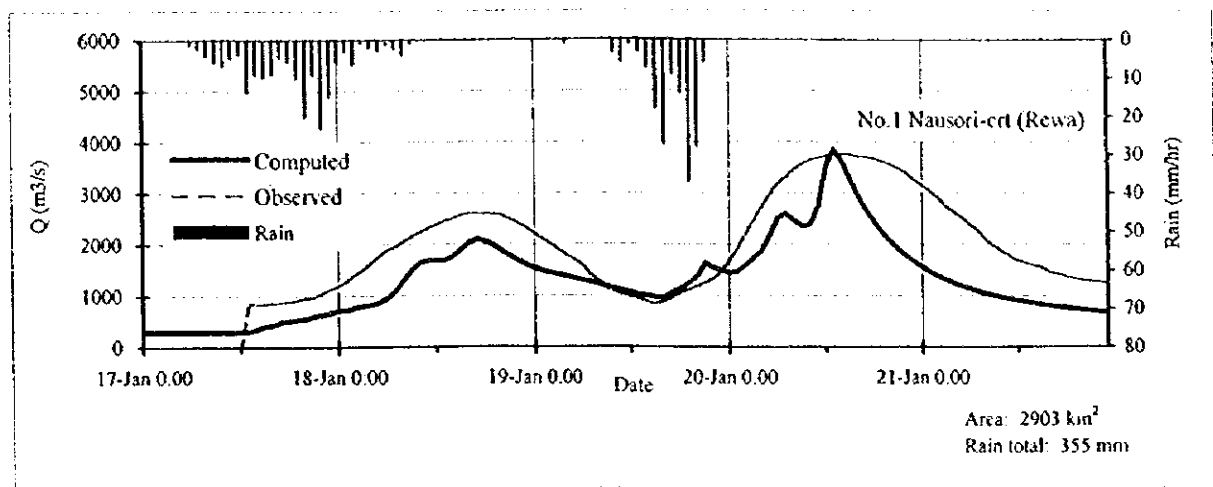
Fiji Flood Analysis < Rewa River (Nigel) >

		Nausori-ert			Nabukalaka			Navolau			Nayavu		
		Area (km <sup>2</sup> )	2903		Area (km <sup>2</sup> )	253		Area (km <sup>2</sup> )	1961		Area (km <sup>2</sup> )	706	
		Rain total (mm)	355		Rain total (mm)	348		Rain total (mm)	349		Rain total (mm)	298	
		Q total (mm)			Q total (mm) (fm REWA-Dis vls file)			Q total (mm) (fm REWA-Dis vls file)			Q total (mm)		
		Runoff coefficient	0.0		Runoff coefficient	0.0		Runoff coefficient	0.0		Runoff coefficient	0.0	
Date	Time	Computed Q(m <sup>3</sup> /s)	Rain (mm)	Observed	Computed Q(m <sup>3</sup> /s)	Rain (mm)	Observed	Computed Q(m <sup>3</sup> /s)	Rain (mm)	Observed	Computed Q(m <sup>3</sup> /s)	Rain (mm)	Observed
17-Jan-85	17-Jan 0:00	290.5		0.0	25.3		12.1	196.1		61.6	70.4		10.8
17-Jan-85	1:00	290.5	0.0	0.0	25.3	0.0	14.7	196.1	0.0	61.6	70.4	0.0	11.2
17-Jan-85	2:00	290.5	0.0	0.0	25.3	0.0	19.1	196.1	0.0	60.6	70.4	0.0	12.1
17-Jan-85	3:00	290.5	0.0	0.0	25.3	0.0	22.4	196.1	0.0	60.6	70.5	0.0	12.1
17-Jan-85	4:00	290.5	0.1	0.0	25.3	0.7	22.8	196.1	0.0	60.6	70.5	0.0	12.1
17-Jan-85	5:00	290.5	0.4	0.0	25.3	2.2	22.8	196.1	0.1	60.6	70.5	0.0	12.1
17-Jan-85	6:00	290.5	1.5	0.0	25.3	8.0	22.8	196.1	0.2	60.6	70.5	0.0	12.5
17-Jan-85	7:00	290.5	2.6	0.0	25.3	2.3	22.8	196.1	3.6	62.6	70.5	6.5	12.5
17-Jan-85	8:00	290.5	4.3	0.0	25.3	1.3	22.4	196.1	5.5	66.7	70.5	5.4	12.9
17-Jan-85	9:00	290.5	5.8	0.0	25.3	2.2	21.9	196.1	6.2	71.8	70.5	3.0	13.3
17-Jan-85	10:00	290.8	6.9	0.0	25.4	3.0	21.0	196.1	5.4	78.2	71.4	2.4	13.8
17-Jan-85	11:00	293.9	4.8	0.0	25.4	8.9	21.4	196.1	2.0	82.5	73.7	0.6	15.1
17-Jan-85	12:00	300.2	3.8	0.0	25.4	3.6	23.8	196.1	2.8	88.1	75.3	1.2	16.9
17-Jan-85	13:00	308.0	13.8	805.6	25.5	12.9	30.0	196.2	11.4	102.9	77.4	5.1	19.9
17-Jan-85	14:00	351.5	9.1	822.8	25.7	8.6	40.1	196.9	6.3	123.3	91.1	2.7	25.2
17-Jan-85	15:00	405.8	9.8	840.2	26.3	15.5	56.7	199.2	7.8	151.4	108.1	3.6	43.5
17-Jan-85	16:00	431.9	9.0	857.8	27.1	6.2	71.5	202.1	7.5	202.5	131.9	3.4	87.7
17-Jan-85	17:00	499.2	4.6	881.8	29.6	2.7	83.9	207.1	3.9	281.3	160.4	1.7	171.5
17-Jan-85	18:00	517.4	5.7	893.9	33.0	4.4	103.9	222.4	5.1	333.7	173.8	2.4	248.4
17-Jan-85	19:00	534.9	10.2	918.5	39.6	7.9	124.0	249.3	11.9	517.5	187.6	14.0	338.0
17-Jan-85	20:00	549.9	20.1	949.8	43.0	27.8	150.0	288.7	18.7	701.3	209.3	12.6	555.6
17-Jan-85	21:00	613.9	9.3	981.9	44.8	20.3	167.5	340.2	7.0	867.2	300.3	4.0	694.1
17-Jan-85	22:00	627.8	23.1	1054.9	48.5	31.5	179.4	387.9	24.9	996.4	332.3	16.9	728.7
17-Jan-85	23:00	669.6	14.9	1131.4	60.0	25.4	192.7	431.0	12.0	1125.5	488.0	8.8	782.1
18-Jan-85	18-Jan 0:00	718.4	5.9	1189.3	94.9	7.9	224.5	483.5	6.8	1232.9	526.2	5.4	835.6
18-Jan-85	1:00	717.7	3.0	1279.7	137.2	2.0	263.8	590.5	3.8	1340.6	478.3	5.5	906.1
18-Jan-85	2:00	771.6	6.5	1407.1	211.4	4.0	300.6	702.8	8.4	1445.0	400.4	16.5	923.2
18-Jan-85	3:00	798.9	0.9	1508.0	268.2	2.2	329.3	905.3	0.9	1607.1	337.8	1.6	981.6
18-Jan-85	4:00	823.1	2.1	1640.7	266.8	0.7	341.1	1053.9	3.0	1769.3	317.5	6.1	1000.7
18-Jan-85	5:00	875.2	3.0	1781.0	249.9	0.0	348.6	1075.5	4.7	1898.3	311.0	9.4	1015.2
18-Jan-85	6:00	960.0	1.3	1898.7	239.6	0.7	350.1	1040.3	1.9	2004.4	303.9	3.9	1007.1
18-Jan-85	7:00	1100.4	2.5	1959.4	225.0	0.8	341.1	1031.9	3.6	2094.8	324.5	7.1	968.9
18-Jan-85	8:00	1308.4	4.0	2063.2	208.3	1.5	316.2	1103.5	5.7	2149.9	343.7	11.5	909.2
18-Jan-85	9:00	1510.2	1.1	2149.0	192.7	1.9	275.8	1288.4	0.2	2182.4	366.5	0.0	832.5
18-Jan-85	10:00	1644.4	0.5	2237.2	180.8	0.2	231.9	1542.4	0.6	2177.7	413.0	0.3	753.3
18-Jan-85	11:00	1686.5	0.4	2316.3	171.1	0.1	187.1	1707.5	0.6	2149.9	440.0	0.3	674.1
18-Jan-85	12:00	1686.3	0.0	2385.5	164.2	0.0	151.0	1710.7	0.0	2099.4	451.0	0.0	596.1
18-Jan-85	13:00	1693.7	0.0	2456.0	157.6	0.0	124.0	1616.2	0.0	2035.8	462.2	0.0	523.6
18-Jan-85	14:00	1757.7	0.0	2503.7	148.5	0.0	109.8	1500.6	0.0	1959.9	449.6	0.0	456.8
18-Jan-85	15:00	1891.5	0.0	2564.1	140.2	0.0	100.5	1393.2	0.0	1872.1	424.8	0.0	394.9
18-Jan-85	16:00	2030.9	0.3	2600.8	132.6	1.5	94.0	1303.0	0.0	1769.3	396.4	0.0	342.7
18-Jan-85	17:00	2095.0	0.0	2600.8	125.8	0.0	88.5	1231.1	0.0	1652.6	368.8	0.0	295.3
18-Jan-85	18:00	2067.6	0.0	2600.8	119.6	0.0	83.9	1175.6	0.0	1557.5	343.2	0.0	254.7
18-Jan-85	19:00	1983.7	0.0	2588.5	114.7	0.0	79.4	1137.2	0.0	1462.5	320.3	0.0	220.0
18-Jan-85	20:00	1880.2	0.0	2564.1	111.9	0.0	75.7	1114.4	0.0	1367.2	300.0	0.0	196.3
18-Jan-85	21:00	1777.5	0.0	2491.7	107.1	0.0	72.9	1096.2	0.0	1287.8	282.1	0.0	175.3
18-Jan-85	22:00	1684.8	0.0	2420.6	102.8	0.0	70.1	1075.4	0.0	1204.3	266.2	0.0	160.4
18-Jan-85	23:00	1604.9	0.0	2327.7	98.8	0.0	67.3	1051.0	0.0	1131.1	252.1	0.0	145.2
19-Jan-85	19-Jan 0:00	1539.9	0.0	2214.9	95.1	0.0	65.2	1021.8	0.0	1057.3	239.5	0.0	141.7
19-Jan-85	1:00	1489.9	0.0	2105.7	91.7	0.0	62.5	987.8	0.0	983.5	228.3	0.0	122.8
19-Jan-85	2:00	1449.1	0.0	2010.8	88.6	0.0	60.7	950.0	0.0	909.2	218.3	0.0	122.8
19-Jan-85	3:00	1412.7	0.2	1898.7	85.7	0.0	58.9	910.1	0.4	851.6	209.2	0.7	113.7
19-Jan-85	4:00	1377.5	1.1	1800.3	83.1	0.0	57.8	869.5	1.8	785.3	201.0	3.5	108.0
19-Jan-85	5:00	1341.6	0.1	1695.9	80.6	0.0	56.1	829.7	0.1	726.5	194.3	0.2	102.3
19-Jan-85	6:00	1304.1	0.0	1595.6	78.3	0.0	55.0	791.6	0.0	667.6	191.6	0.0	96.6
19-Jan-85	7:00	1264.3	0.0	1423.6	76.2	0.0	53.9	755.4	0.0	616.4	188.9	0.0	91.6
19-Jan-85	8:00	1222.7	0.0	1303.0	74.2	0.0	52.9	721.7	0.0	565.2	184.6	0.0	84.3
19-Jan-85	9:00	1180.0	0.0	1152.9	72.3	0.0	51.8	690.2	0.0	521.2	181.9	0.0	82.5
19-Jan-85	10:00	1137.3	3.6	1082.3	70.5	3.5	50.7	661.1	3.6	482.5	178.8	6.2	78.3
19-Jan-85	11:00	1099.4	6.1	1027.9	68.9	4.4	49.9	634.2	7.1	446.7	175.5	7.4	75.0
19-Jan-85	12:00	1064.2	1.2	981.9	67.3	1.1	49.3	609.2	1.4	415.8	183.5	0.9	71.7
19-Jan-85	13:00	1029.7	3.3	949.8	66.8	2.2	49.1	586.3	3.9	387.7	195.4	5.1	69.3
19-Jan-85	14:00	997.5	7.4	887.8	69.9	7.7	49.1	565.4	7.6	366.1	202.6	7.3	70.1
19-Jan-85	15:00	972.9	18.0	851.9	73.1	17.2	49.1	547.6	18.7	362.3	220.4	18.3	66.9
19-Jan-85	16:00	970.2	27.5	893.9	73.1	24.2	52.3	536.0	24.9	395.7	276.6	15.2	68.5
19-Jan-85	17:00	1086.3	9.2	975.4	75.7	7.4	68.0	527.2	7.6	452.9	437.1	7.0	76.7
19-Jan-85	18:00	1140.2	14.1	1068.5	88.4	10.3	109.8	520.6	13.6	560.8	509.5	15.1	100.8
19-Jan-85	19:00	1254.1	37.2	1117.2	119.8	23.6	75.7	523.8	43.7	797.9	545.6	30.6	184.7
19-Jan-85	20:00	1383.2	28.0	1189.3	161.8	21.3	116.8	567.1	26.7	1092.3	951.7	16.0	349.6
19-Jan-85	21:00	1632.0	6.1	1249.0	173.1	4.4	159.2	711.4	5.5	1361.3	1272.5	2.6	542.2
19-Jan-85	22:00	1548.9	0.0	1334.5	199.9	0.0	347.1	834.0	0.0	1718.8	1170.8	0.0	863.0
19-Jan-85	23:00	1493.1	0.0	1482.4	262.3	0.0	426.3	953.3	0.0	1889.5	989.0	0.0	1141.5
20-Jan-85	20-Jan 0:00	1450.6	0.0	1677.4	305.5	0.0	460.2	1433.2	0.0	2049.4	875.7	0.0	1284.2
20-Jan-85	1:00	1474.1	0.2	1918.8	287.1	0.1	417.4	1917.6	0.0	2357.6	788.3	0.0	1346.9
20-Jan-85	2:00	1592.4	0.3	2192.8	258.2	0.8	381.2	1821.5	0.1	2654.7	703.0	0.0	1382.1
20-Jan-85	3:00	1724.7	0.0	2467.8	234.3	0.0	348.3	1619.6	0.0	2904.2	625.9	0.0	1389.2
20-Jan-85	4:00	1864.8	0.0	2725.8	214.4	0.0	311.0	1578.3	0.0	3120.0	559.8	0.0	1332.8
20-Jan-85	5:00	2155.2	0.0	2974.7	198.0	0.0	270.2	1770.3	0.0	3263.8	504.3	0.0	1280.7
20-Jan-85	6:00	2510.5	0.0	3181.1	185.2	0.0	227.0	2428.5	0.0	3342.4	457.8	0.0	1195.3
20-Jan-85	7:00	2598.2	0.0	3323.5	172.1	0.0	183.8	3423.4	0.0	3370.7	418.6	0.0	1108.2
20-Jan-85	8:00	2475.4	0.0	3470.6	160.8	0.0	148.2	3572.5	0.0	3365.0	385.4	0.0	1016.8



Fiji Flood Analysis < Rewa River (Nigel) >

		Nausori-crt			Nabukaluka			Navolau			Nayavu		
		Area (km <sup>2</sup> )	2903		Area (km <sup>2</sup> )	253		Area (km <sup>2</sup> )	1961		Area (km <sup>2</sup> )	706	
		Rain total (mm)	355		Rain total (mm)	348		Rain total (mm)	349		Rain total (mm)	298	
		Q total (mm)			Q total (mm) (fin REWA-Dis s/s file)			Q total (mm) (fin REWA-Dis s/s file)			Q total (mm)		
		Runoff coeff	0.0		Runoff coeff	0.0		Runoff coeff	0.0		Runoff coeff	0.0	
Date	Time	Computed Q(m <sup>3</sup> /s)	Rain (mm)	Observed	Computed Q(m <sup>3</sup> /s)	Rain (mm)	Observed	Computed Q(m <sup>3</sup> /s)	Rain (mm)	Observed	Computed Q(m <sup>3</sup> /s)	Rain (mm)	Observed
20-Jan-85	9:00	2359.7	0.0	3576.1	150.8	0.0	122.1	3199.3	0.0	3319.8	357.1	0.0	935.3
20-Jan-85	10:00	2387.3	0.0	3652.7	142.0	0.0	104.4	2801.1	0.0	3314.2	332.7	0.0	853.8
20-Jan-85	11:00	2754.3	0.0	3699.1	134.2	0.0	94.6	2463.9	0.0	3180.5	311.6	0.0	778.6
20-Jan-85	12:00	3506.8	0.0	3730.3	127.2	0.0	88.4	2185.7	0.0	3082.4	293.1	0.0	708.4
20-Jan-85	13:00	3858.0	0.0	3761.7	120.9	0.0	82.2	1955.0	0.0	2984.3	276.8	0.0	637.5
20-Jan-85	14:00	3637.0	0.0	3761.7	115.3	0.0	77.1	1762.1	0.0	2872.4	262.5	0.0	577.0
20-Jan-85	15:00	3289.3	0.0	3761.7	110.2	0.0	72.8	1599.6	0.0	2767.8	249.7	0.0	515.8
20-Jan-85	16:00	2966.0	0.0	3730.3	105.5	0.0	69.4	1461.7	0.0	2644.6	238.3	0.0	462.7
20-Jan-85	17:00	2687.3	0.0	3714.7	101.3	0.0	66.0	1343.7	0.0	2529.0	228.0	0.0	409.6
20-Jan-85	18:00	2449.2	0.0	3683.6	97.4	0.0	63.5	1241.9	0.0	2399.8	218.7	0.0	361.3
20-Jan-85	19:00	2245.2	0.0	3637.3	93.8	0.0	60.9	1153.7	0.0	2266.8	210.4	0.0	320.7
20-Jan-85	20:00	2069.4	0.0	3576.1	90.6	0.0	58.3	1076.7	0.0	2131.5	202.7	0.0	280.1
20-Jan-85	21:00	1917.1	0.2	3500.5	87.5	0.1	56.5	1008.9	0.2	2008.9	195.8	0.1	244.3
20-Jan-85	22:00	1784.3	0.0	3411.2	84.7	0.0	54.7	949.2	0.0	1942.2	190.1	0.0	214.0
20-Jan-85	23:00	1667.8	0.0	3280.4	82.2	0.0	52.9	896.1	0.0	1880.8	184.5	0.0	186.6
21-Jan-85	21-Jan 0:00	1565.2	0.0	3167.1	79.8	0.0	51.7	848.6	0.0	1765.0	179.0	0.0	158.6
21-Jan-85	1:00	1474.2	0.0	3056.2	77.6	0.0	50.6	806.3	0.0	1632.1	174.0	0.0	143.4
21-Jan-85	2:00	1393.2	0.0	2921.2	75.5	0.0	48.9	768.6	0.0	1526.1	169.3	0.0	127.0
21-Jan-85	3:00	1320.7	0.0	2764.2	73.5	0.0	47.8	734.5	0.0	1414.9	165.0	0.0	113.7
21-Jan-85	4:00	1255.6	0.0	2650.2	71.7	0.0	46.7	703.3	0.0	1333.4	160.9	0.0	104.0
21-Jan-85	5:00	1196.8	0.0	2539.8	69.9	0.0	45.6	674.8	0.0	1251.8	157.2	0.0	95.7
21-Jan-85	6:00	1143.7	0.0	2397.1	68.3	0.0	44.5	648.8	0.0	1170.3	153.7	0.0	90.4
21-Jan-85	7:00	1095.5	0.0	2282.2	66.8	0.0	43.4	625.0	0.0	1089.5	150.4	0.0	86.0
21-Jan-85	8:00	1051.7	0.0	2105.7	65.4	0.0	42.9	603.2	0.0	1019.2	147.4	0.0	86.0
21-Jan-85	9:00	1011.6	0.0	1979.9	64.0	0.0	41.8	583.3	0.0	948.8	144.5	0.0	79.2
21-Jan-85	10:00	974.8	0.0	1878.8	62.7	0.0	41.3	565.0	0.0	883.6	141.8	0.0	75.8
21-Jan-85	11:00	940.8	0.1	1781.0	61.5	0.7	40.3	548.0	0.0	818.3	139.2	0.0	73.4
21-Jan-85	12:00	909.6	0.0	1686.6	60.4	0.0	39.3	532.3	0.0	760.3	136.9	0.0	70.9
21-Jan-85	13:00	890.6	0.0	1640.7	59.3	0.0	38.8	517.8	0.0	706.2	134.6	0.0	69.3
21-Jan-85	14:00	853.9	0.0	1595.6	58.4	0.0	37.8	504.1	0.0	656.2	132.5	0.0	66.9
21-Jan-85	15:00	829.1	0.0	1551.4	58.0	0.0	37.3	491.3	0.0	606.3	130.4	0.0	65.4
21-Jan-85	16:00	806.1	0.0	1465.4	57.1	0.0	36.3	479.4	0.0	565.9	128.6	0.0	64.6
21-Jan-85	17:00	784.7	0.0	1423.6	56.1	0.0	35.8	468.2	0.0	525.6	126.8	0.0	61.5
21-Jan-85	18:00	764.7	0.0	1382.6	55.3	0.0	31.1	457.6	0.0	488.9	125.1	0.0	59.6
21-Jan-85	19:00	746.1	0.0	1342.4	54.4	0.0	34.9	447.7	0.0	457.1	123.4	0.0	57.8
21-Jan-85	20:00	728.9	0.0	1303.0	53.6	0.0	33.9	438.3	0.0	432.2	121.9	0.0	55.9
21-Jan-85	21:00	712.6	0.0	1287.4	52.8	0.0	33.5	429.5	0.0	405.7	120.4	0.0	54.0
21-Jan-85	22:00	697.3	0.0	1264.3	52.1	0.0	33.0	421.2	0.0	385.7	119.0	0.0	51.2
21-Jan-85	23:00	682.8	0.0	1249.0	51.4	0.0	32.6	413.3	0.0	368.1	117.6	0.0	49.0
Max		3858.0	37.2	3761.7	305.5	31.5	460.2	3572.5	43.7	3370.7	1272.5	30.6	1389.2
Rain Total			355.2			347.9			349.4			298.1	

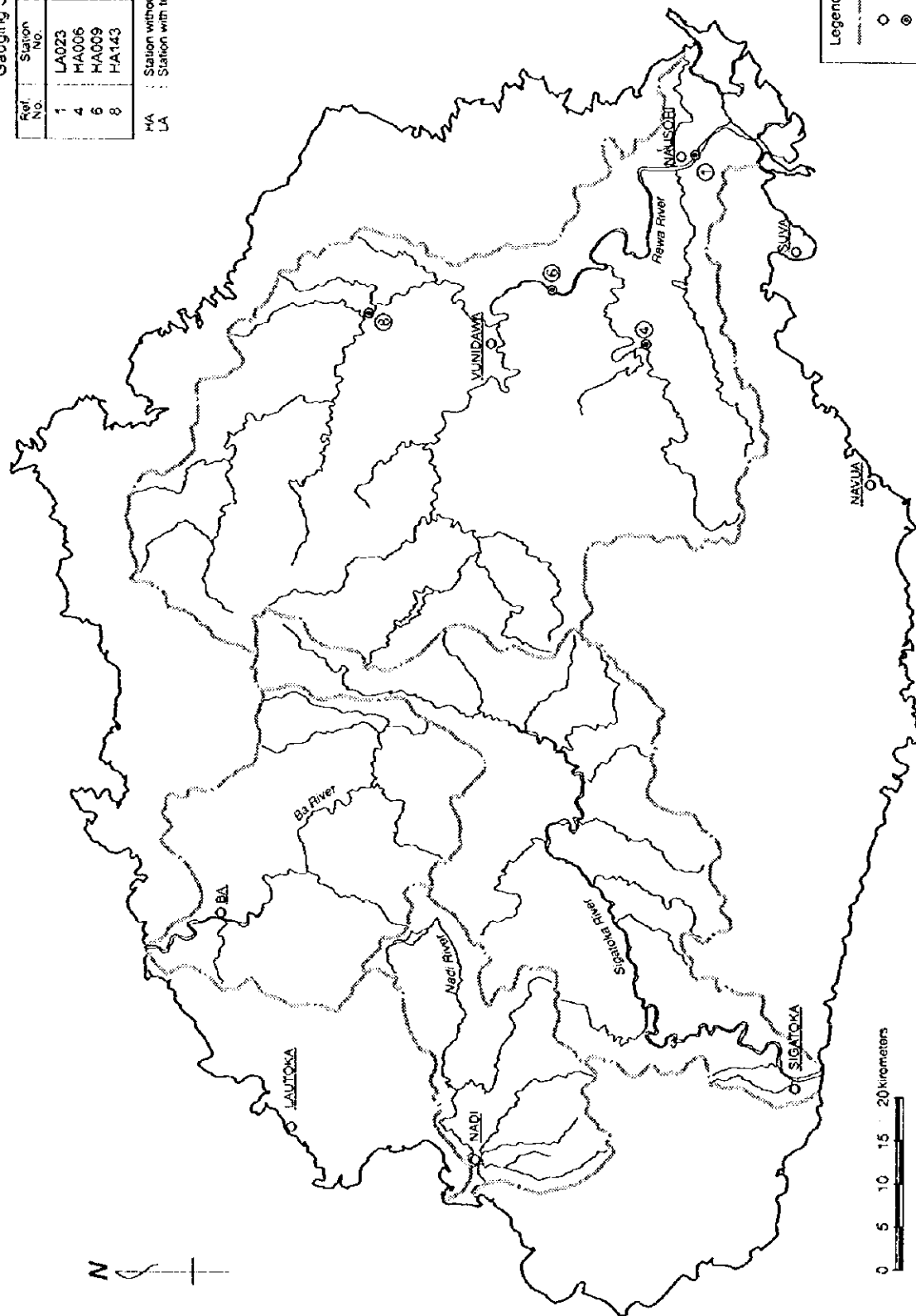


# Gauging Stations Adopted

Ref. No.	Station No.	Station Name
1	LA023	Nausori-rt
4	HA006	Nabukaluka
6	HA009	Navolau
8	HA143	Nayavu

HA : Station without tidal influence  
LA : Station with tidal influence

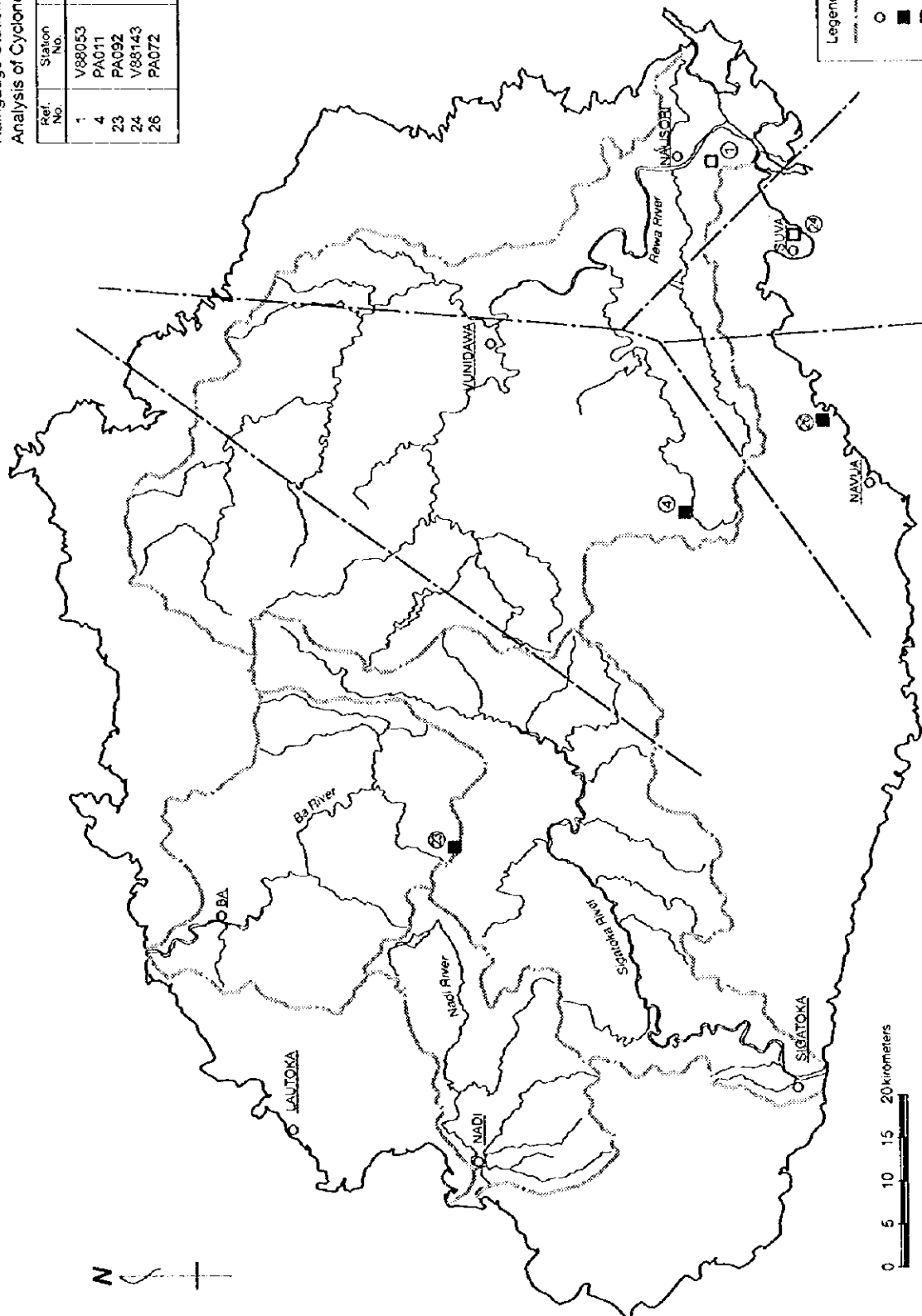
Legend	
	Boundary of Watershed
	City, Town, Village
	Gauging Station Operated



Locations of Gauging Stations

# Raingauge Stations available for Runoff Analysis of Cyclone Kina in Rewa Watershed

Ref. No.	Station No.	Station Name	River Basin
1	V88053	Koronivia	Rewa
4	PA011	Namosi Mission	Rewa
23	PA092	Bukuya	Ba
24	V88143	Laucaia Bay	Others
26	PA072	Nabukavesi	Others



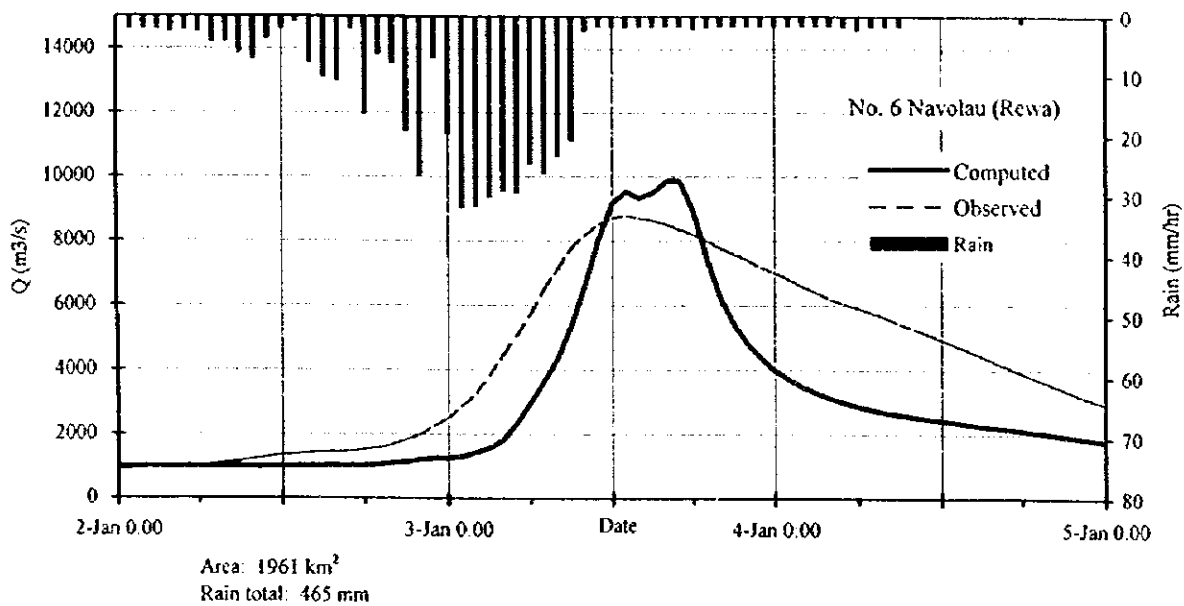
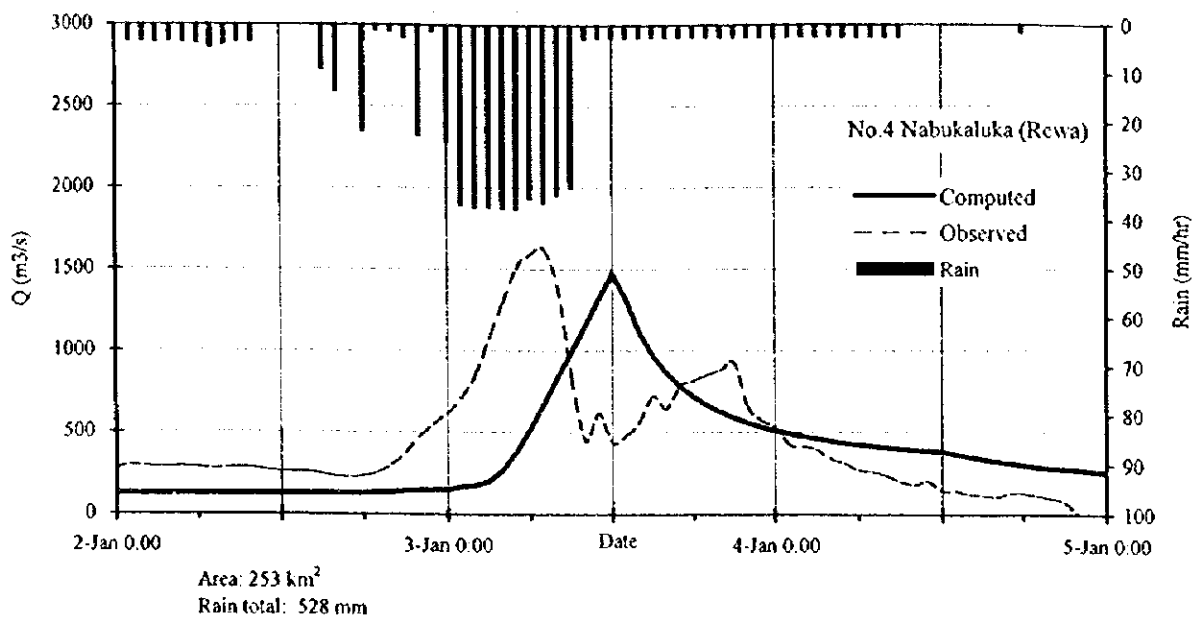
Locations of Raingauge Stations

Fiji flood analysis (1) < REWA River (Kina) >  
Rain

Original Data							
	Date	Time	PA092	PA011	V88053	PA072	V88143
	02-Jan-93	2-Jan 0:00					
1	02-Jan-93	1:00	0.0	4.0	0.2	0.7	0.0
2	02-Jan-93	2:00	0.0	4.0	0.2	0.0	0.1
3	02-Jan-93	3:00	0.0	4.0	0.8	1.0	0.3
4	02-Jan-93	4:00	1.6	4.0	0.2	0.0	0.0
5	02-Jan-93	5:00	0.0	4.0	1.1	0.0	0.9
6	02-Jan-93	6:00	0.0	4.0	2.5	10.0	0.0
7	02-Jan-93	7:00	0.4	4.0	11.4	4.5	9.6
8	02-Jan-93	8:00	4.4	4.0	4.6	1.5	9.7
9	02-Jan-93	9:00	14.0	4.0	0.0	2.0	0.3
10	02-Jan-93	10:00	17.6	4.0	0.0	5.0	0.0
11	02-Jan-93	11:00	12.8	0.0	0.0	1.3	0.0
12	02-Jan-93	12:00	7.0	0.0	0.0	0.0	0.0
13	02-Jan-93	13:00	3.2	0.0	0.0	0.0	0.0
14	02-Jan-93	14:00	25.0	0.0	2.1	0.0	0.1
15	02-Jan-93	15:00	13.0	10.0	5.4	0.7	1.7
16	02-Jan-93	16:00	5.8	15.0	5.4	1.0	4.2
17	02-Jan-93	17:00	6.2	0.0	1.1	7.0	0.9
18	02-Jan-93	18:00	10.0	25.0	0.5	6.0	0.6
19	02-Jan-93	19:00	17.0	0.0	8.5	8.0	7.1
20	02-Jan-93	20:00	20.0	0.0	10.7	12.0	10.7
21	02-Jan-93	21:00	53.0	0.0	20.6	18.0	19.3
22	02-Jan-93	22:00	43.0	25.0	4.5	18.0	4.6
23	02-Jan-93	23:00	17.0	0.0	11.1	10.0	7.1
24	03-Jan-93	3-Jan 0:00	10.0	25.0	18.1	17.0	9.1
25	03-Jan-93	1:00	17.0	38.0	37.9	5.0	20.3
26	03-Jan-93	2:00	17.0	38.0	36.7	16.5	35.5
27	03-Jan-93	3:00	12.0	38.0	36.3	16.5	30.4
28	03-Jan-93	4:00	6.0	38.0	40.8	16.5	30.4
29	03-Jan-93	5:00	3.6	38.0	46.2	16.5	10.1
30	03-Jan-93	6:00	1.6	38.0	21.4	16.5	13.2
31	03-Jan-93	7:00	2.0	38.0	30.7	16.5	13.0
32	03-Jan-93	8:00	0.6	38.0	16.4	16.5	1.6
33	03-Jan-93	9:00	1.0	38.0	1.6	16.5	1.5
34	03-Jan-93	10:00	1.0	3.0	2.4	0.4	2.3
35	03-Jan-93	11:00	0.0	3.0	0.6	0.4	1.9
36	03-Jan-93	12:00	0.0	3.0	0.6	0.4	2.2
37	03-Jan-93	13:00	0.2	3.0	0.6	0.4	0.0
38	03-Jan-93	14:00	0.2	3.0	0.2	0.4	0.0
39	03-Jan-93	15:00	0.4	3.0	0.0	0.4	0.3
40	03-Jan-93	16:00	0.2	3.0	0.0	0.4	0.0
41	03-Jan-93	17:00	0.2	3.0	0.1	0.4	0.0
42	03-Jan-93	18:00	1.2	3.0	0.5	0.4	0.0
43	03-Jan-93	19:00	0.6	3.0	0.2	0.4	0.1
44	03-Jan-93	20:00	0.0	3.0	0.1	0.4	1.3
45	03-Jan-93	21:00	0.0	3.0	0.4	0.4	0.6
46	03-Jan-93	22:00	0.4	3.0	0.0	0.4	0.0
47	03-Jan-93	23:00	0.4	3.0	0.1	0.4	0.0
48	04-Jan-93	4-Jan 0:00	0.0	3.0	0.0	0.4	0.0
49	04-Jan-93	1:00	0.0	3.0	0.2	0.4	0.0
50	04-Jan-93	2:00	0.2	3.0	0.0	0.4	0.3
51	04-Jan-93	3:00	0.0	3.0	0.0	0.4	0.0
52	04-Jan-93	4:00	0.0	3.0	0.0	0.4	0.0
53	04-Jan-93	5:00	0.2	3.0	0.0	0.4	0.0
54	04-Jan-93	6:00	2.2	3.0	0.0	0.4	0.0
55	04-Jan-93	7:00	0.4	3.0	0.0	0.4	0.0
56	04-Jan-93	8:00	0.0	3.0	0.0	0.4	0.0
57	04-Jan-93	9:00	0.0	3.0	0.0	0.4	0.0
58	04-Jan-93	10:00	0.0	0.0	0.0	0.1	0.0
59	04-Jan-93	11:00	0.0	0.0	0.0	0.1	0.0
60	04-Jan-93	12:00	0.0	0.0	0.0	0.1	0.0
61	04-Jan-93	13:00	0.0	0.0	0.0	0.1	0.0
62	04-Jan-93	14:00	0.0	0.0	0.0	0.1	0.2
63	04-Jan-93	15:00	0.0	0.0	0.0	0.1	0.0
64	04-Jan-93	16:00	0.0	0.0	0.0	0.1	0.0
65	04-Jan-93	17:00	0.0	0.0	0.0	0.1	0.0
66	04-Jan-93	18:00	0.0	2.0	0.0	0.1	0.0
67	04-Jan-93	19:00	0.0	0.0	0.0	0.1	0.0
68	04-Jan-93	20:00	0.0	0.0	0.0	0.1	0.0
69	04-Jan-93	21:00	0.0	0.0	0.0	0.1	0.0
70	04-Jan-93	22:00	0.0	0.0	0.0	0.1	0.0
71	04-Jan-93	23:00	0.0	0.0	0.0	0.1	0.0
72	05-Jan-93	5-Jan 0:00	0.0	0.0	0.0	0.1	0.0
Total			349.6	556.0	383.0	271.8	251.5

Fiji Flood Analysis < Rewa River (Kina) >

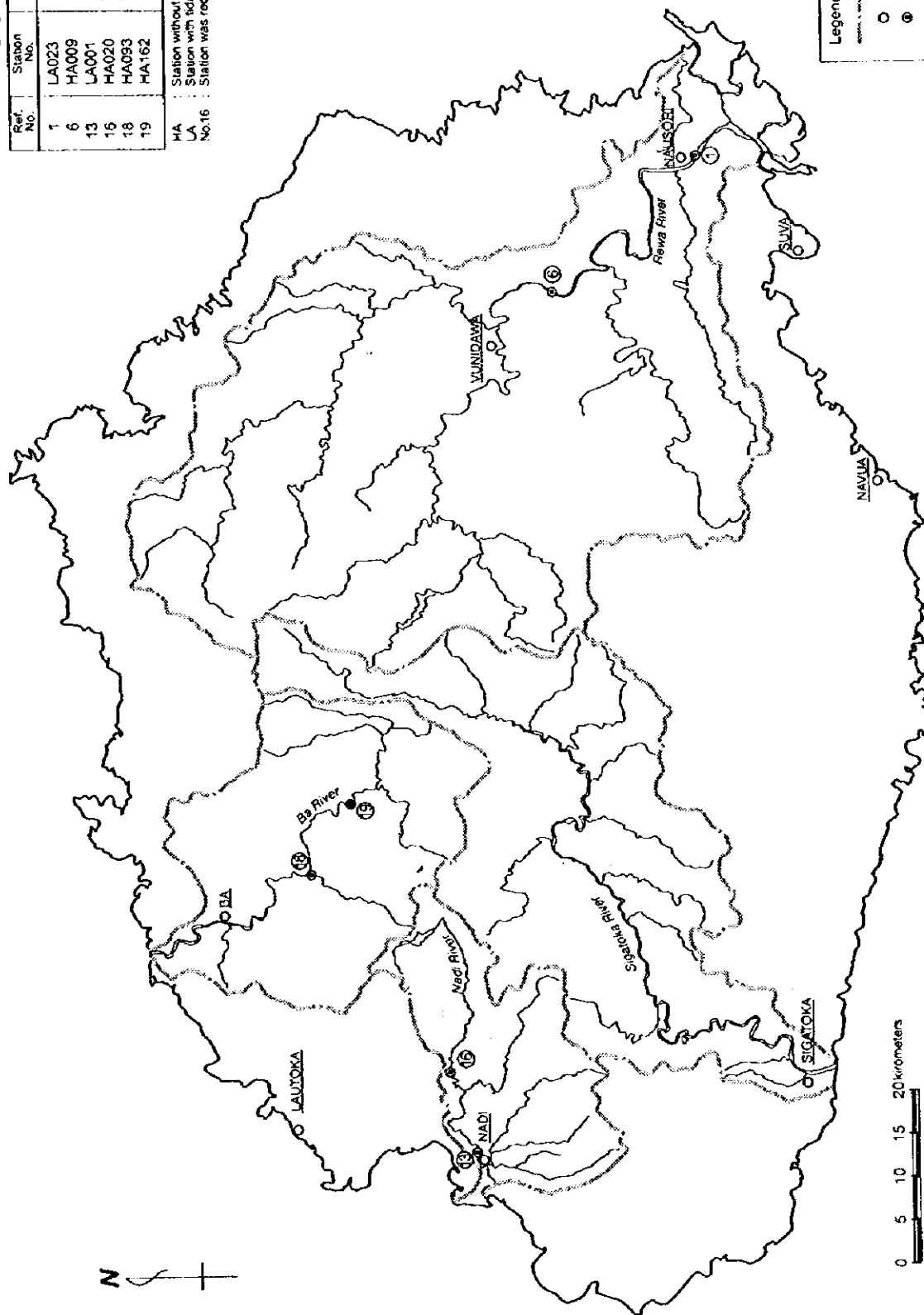
		Nabukaluka			Navolau		
		Area (km <sup>2</sup> )	253	Area (km <sup>2</sup> )	1961		
		Rain total (mm)	528	Rain total (mm)	465		
		Q total (mm)		Q total (mm) (for REWA-Dis.xls file)			
		Runoff coeff	0.0	Runoff coeff	0.0		
Date	Time	Computed Q(m <sup>3</sup> /s)	Rain (mm)	Observed	Computed Q(m <sup>3</sup> /s)	Rain (mm)	Observed
02-Jan-85	2-Jan 0:00	126.4		278.7	980.4		897.3
02-Jan-85	1:00	126.4	3.5	298.3	980.4	2.1	926.4
02-Jan-85	2:00	126.4	3.5	293.6	980.4	2.1	944.1
02-Jan-85	3:00	126.4	3.6	287.7	980.4	2.2	960.3
02-Jan-85	4:00	126.4	3.5	288.8	980.3	2.6	969.3
02-Jan-85	5:00	126.4	3.6	289.6	980.3	2.3	979.8
02-Jan-85	6:00	126.4	3.9	285.3	980.5	2.6	1007.7
02-Jan-85	7:00	126.5	4.8	277.8	981.0	4.3	1050.0
02-Jan-85	8:00	126.6	4.1	284.1	982.1	4.2	1101.9
02-Jan-85	9:00	126.7	3.5	287.6	984.0	6.2	1159.6
02-Jan-85	10:00	127.0	3.6	283.3	987.0	7.2	1222.0
02-Jan-85	11:00	127.4	0.0	273.4	991.4	3.7	1287.0
02-Jan-85	12:00	127.9	0.0	264.8	997.5	2.0	1340.6
02-Jan-85	13:00	128.4	0.0	260.9	1005.1	0.9	1383.9
02-Jan-85	14:00	128.6	0.2	256.7	1013.9	7.7	1419.4
02-Jan-85	15:00	128.5	9.2	247.5	1019.6	10.1	1446.2
02-Jan-85	16:00	128.5	13.7	235.2	1023.1	10.7	1457.4
02-Jan-85	17:00	128.5	0.2	229.7	1026.5	2.0	1481.7
02-Jan-85	18:00	129.9	21.9	236.0	1032.6	16.3	1523.2
02-Jan-85	19:00	133.8	1.1	256.7	1053.8	6.4	1585.1
02-Jan-85	20:00	135.4	1.4	303.8	1097.4	7.7	1689.3
02-Jan-85	21:00	144.5	2.7	380.3	1133.4	19.1	1847.5
02-Jan-85	22:00	149.3	22.7	475.1	1213.4	26.6	2000.0
02-Jan-85	23:00	149.8	1.3	552.3	1255.2	6.9	2260.2
03-Jan-85	3-Jan 0:00	151.2	23.9	620.4	1266.0	19.5	2522.0
03-Jan-85	1:00	168.5	37.0	711.1	1302.2	31.8	2873.0
03-Jan-85	2:00	176.3	37.4	852.1	1437.9	31.6	3308.6
03-Jan-85	3:00	202.3	37.3	1079.9	1572.0	30.1	3546.0
03-Jan-85	4:00	274.3	37.7	1298.7	1831.9	29.1	4480.7
03-Jan-85	5:00	386.1	37.8	1511.5	2350.3	29.4	5086.1
03-Jan-85	6:00	523.4	35.6	1589.9	2996.6	24.5	5739.0
03-Jan-85	7:00	675.7	36.5	1622.5	3650.0	26.2	6521.4
03-Jan-85	8:00	836.6	34.9	1397.8	4359.2	23.3	7150.8
03-Jan-85	9:00	990.6	33.5	845.4	5392.2	20.7	7791.4
03-Jan-85	10:00	1154.3	2.8	450.0	6679.2	2.3	8184.7
03-Jan-85	11:00	1318.3	2.7	616.9	8078.7	1.7	8511.6
03-Jan-85	12:00	1473.0	2.7	437.6	9186.5	1.7	8692.1
03-Jan-85	13:00	1318.5	2.7	479.1	9523.0	1.8	8777.8
03-Jan-85	14:00	1114.5	2.6	564.3	9340.2	1.7	8704.3
03-Jan-85	15:00	970.5	2.6	718.2	9497.4	1.7	8638.1
03-Jan-85	16:00	864.0	2.6	644.2	9868.6	1.7	8523.7
03-Jan-85	17:00	782.2	2.6	784.3	9862.6	1.7	8361.1
03-Jan-85	18:00	717.6	2.6	817.0	8887.5	2.0	8202.5
03-Jan-85	19:00	665.6	2.6	851.4	7415.0	1.8	8004.1
03-Jan-85	20:00	623.0	2.6	880.2	6226.1	1.6	7779.8
03-Jan-85	21:00	587.7	2.6	927.0	5395.2	1.7	7600.2
03-Jan-85	22:00	557.9	2.6	655.1	4802.7	1.7	7417.6
03-Jan-85	23:00	532.5	2.6	573.5	4148.9	1.7	7181.1
04-Jan-85	4-Jan 0:00	510.7	2.6	533.3	3991.0	1.6	7029.4
04-Jan-85	1:00	491.6	2.6	427.3	3703.8	1.6	6810.3
04-Jan-85	2:00	474.9	2.6	412.0	3469.3	1.7	6596.7
04-Jan-85	3:00	460.1	2.6	397.1	3277.5	1.6	6409.2
04-Jan-85	4:00	447.1	2.6	339.7	3119.3	1.6	6200.0
04-Jan-85	5:00	435.6	2.6	311.3	2986.0	1.7	6056.4
04-Jan-85	6:00	425.2	2.6	270.8	2871.2	2.2	5905.5
04-Jan-85	7:00	415.9	2.6	261.9	2772.3	1.7	5767.9
04-Jan-85	8:00	407.5	2.6	239.0	2686.7	1.6	5616.8
04-Jan-85	9:00	400.0	2.6	199.8	2611.6	1.6	5428.0
04-Jan-85	10:00	393.1	0.0	180.0	2545.4	0.0	5283.9
04-Jan-85	11:00	386.9	0.0	200.4	2486.6	0.0	5106.6
04-Jan-85	12:00	381.2	0.0	143.2	2434.5	0.0	4930.1
04-Jan-85	13:00	366.8	0.0	142.2	2384.7	0.0	4771.0
04-Jan-85	14:00	350.3	0.0	123.4	2321.9	0.0	4596.1
04-Jan-85	15:00	335.7	0.0	115.7	2261.8	0.0	4420.9
04-Jan-85	16:00	322.6	0.0	106.4	2211.0	0.0	4238.7
04-Jan-85	17:00	310.8	0.0	127.1	2167.0	0.0	4060.7
04-Jan-85	18:00	300.1	1.7	130.5	2123.4	1.1	3892.5
04-Jan-85	19:00	290.5	0.0	115.7	2074.2	0.0	3725.2
04-Jan-85	20:00	281.7	0.0	100.3	2016.8	0.0	3565.3
04-Jan-85	21:00	278.1	0.0	78.5	1955.3	0.0	3396.8
04-Jan-85	22:00	272.1	0.0	0.0	1898.7	0.0	3228.7
04-Jan-85	23:00	264.9	0.0	0.0	1841.2	0.0	3078.4
05-Jan-85	5-Jan 0:00	258.2	0.0	0.0	1784.9	0.0	2920.6
Max		1473.0	37.8	1622.5	9868.6	31.8	8777.8
Rain Total			528.2			464.9	



# Gauging Stations Adopted

Ref. No.	Station No.	Station Name
1	LA023	Nausori-crt
6	HA009	Navolau
13	LA001	Nadi-Bridge
15	HA020	Votualevu
18	HA093	Toge
19	HA162	Navala

HA : Station without tidal influence  
 LA : Station with tidal influence  
 No.16 : Station was reopened in January, 1997



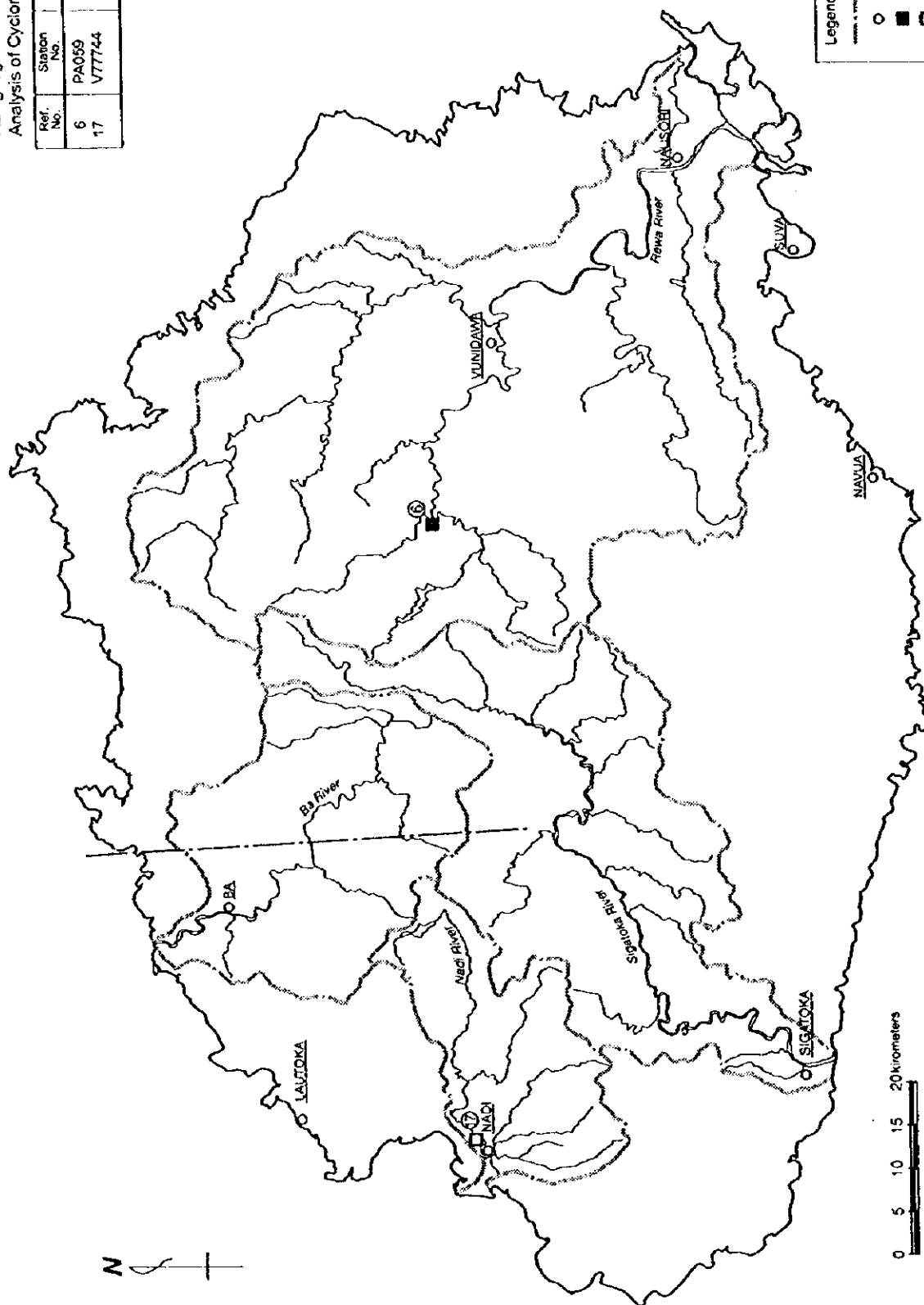
Legend  
 --- : Boundary of Watershed  
 ○ : City, Town, Village  
 ○ : Gauging Station Operated  
 ● : Gauging Station Closed

Locations of Gauging Stations



# Raingauge Stations available for Runoff Analysis of Cyclone Nigel in Ba Watershed

Ref. No.	Station No.	Station Name	River Basin
6	PA059	Laselevu	Rewa
17	V77744	Nadi Airport	Nadi



**Legend**

Boundary of Watershed

City, Town, Village

Raingauge Station

Meteorological Station

Locations of Raingauge Stations

Fiji flood analysis (1) < BA River (Nigel) >

Rain

Original Data				
	Date	Time	PA059 V77744	
	16-Jan-85	16-Jan 0.00		
1	16-Jan-85	1.00	0.0	0.0
2	16-Jan-85	2.00	0.0	0.0
3	16-Jan-85	3.00	0.0	0.0
4	16-Jan-85	4.00	0.0	0.0
5	16-Jan-85	5.00	0.0	0.0
6	16-Jan-85	6.00	0.0	0.0
7	16-Jan-85	7.00	0.0	0.0
8	16-Jan-85	8.00	0.0	0.0
9	16-Jan-85	9.00	0.0	0.0
10	16-Jan-85	10.00	0.0	0.0
11	16-Jan-85	11.00	0.0	0.0
12	16-Jan-85	12.00	0.0	0.0
13	16-Jan-85	13.00	0.0	0.0
14	16-Jan-85	14.00	0.0	4.9
15	16-Jan-85	15.00	0.0	18.2
16	16-Jan-85	16.00	0.0	2.3
17	16-Jan-85	17.00	4.0	4.6
18	16-Jan-85	18.00	6.0	2.5
19	16-Jan-85	19.00	4.0	1.1
20	16-Jan-85	20.00	0.5	0.0
21	16-Jan-85	21.00	0.0	0.2
22	16-Jan-85	22.00	0.0	0.2
23	16-Jan-85	23.00	0.0	0.0
24	17-Jan-85	17-Jan 0.00	0.0	0.0
25	17-Jan-85	1.00	0.0	0.0
26	17-Jan-85	2.00	0.0	0.1
27	17-Jan-85	3.00	0.0	0.0
28	17-Jan-85	4.00	0.0	0.0
29	17-Jan-85	5.00	0.0	0.3
30	17-Jan-85	6.00	0.0	3.5
31	17-Jan-85	7.00	0.5	6.0
32	17-Jan-85	8.00	0.6	15.7
33	17-Jan-85	9.00	10.0	6.5
34	17-Jan-85	10.00	8.0	6.9
35	17-Jan-85	11.00	2.0	7.2
36	17-Jan-85	12.00	4.0	48.2
37	17-Jan-85	13.00	17.0	6.5
38	17-Jan-85	14.00	9.0	2.2
39	17-Jan-85	15.00	12.0	0.0
40	17-Jan-85	16.00	11.2	0.1
41	17-Jan-85	17.00	5.8	13.6
42	17-Jan-85	18.00	8.0	5.5
43	17-Jan-85	19.00	10.0	19.3
44	17-Jan-85	20.00	25.5	16.8
45	17-Jan-85	21.00	9.5	2.3
46	17-Jan-85	22.00	36.0	0.0
47	17-Jan-85	23.00	15.0	0.0
48	18-Jan-85	18-Jan 0.00	9.0	0.3
49	18-Jan-85	1.00	2.0	0.0
50	18-Jan-85	2.00	0.0	0.0
51	18-Jan-85	3.00	0.0	0.0
52	18-Jan-85	4.00	0.0	0.0
53	18-Jan-85	5.00	0.0	0.0
54	18-Jan-85	6.00	0.0	0.0
55	18-Jan-85	7.00	0.0	0.0
56	18-Jan-85	8.00	0.0	0.0
57	18-Jan-85	9.00	0.0	0.0
58	18-Jan-85	10.00	1.0	0.0
59	18-Jan-85	11.00	1.0	0.0
60	18-Jan-85	12.00	0.0	0.0
61	18-Jan-85	13.00	0.0	0.0
62	18-Jan-85	14.00	0.0	0.0
63	18-Jan-85	15.00	0.0	0.0
64	18-Jan-85	16.00	0.0	0.0
65	18-Jan-85	17.00	0.0	0.0
66	18-Jan-85	18.00	0.0	0.0

Fiji flood analysis (1) < BA River (Nigel) >  
Rain

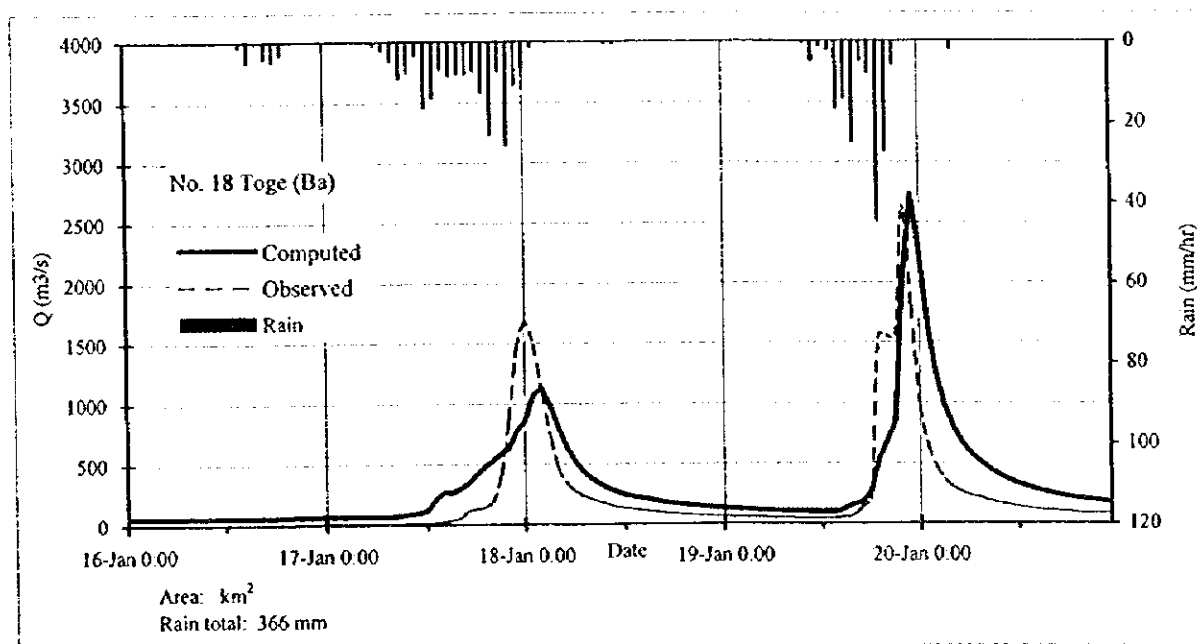
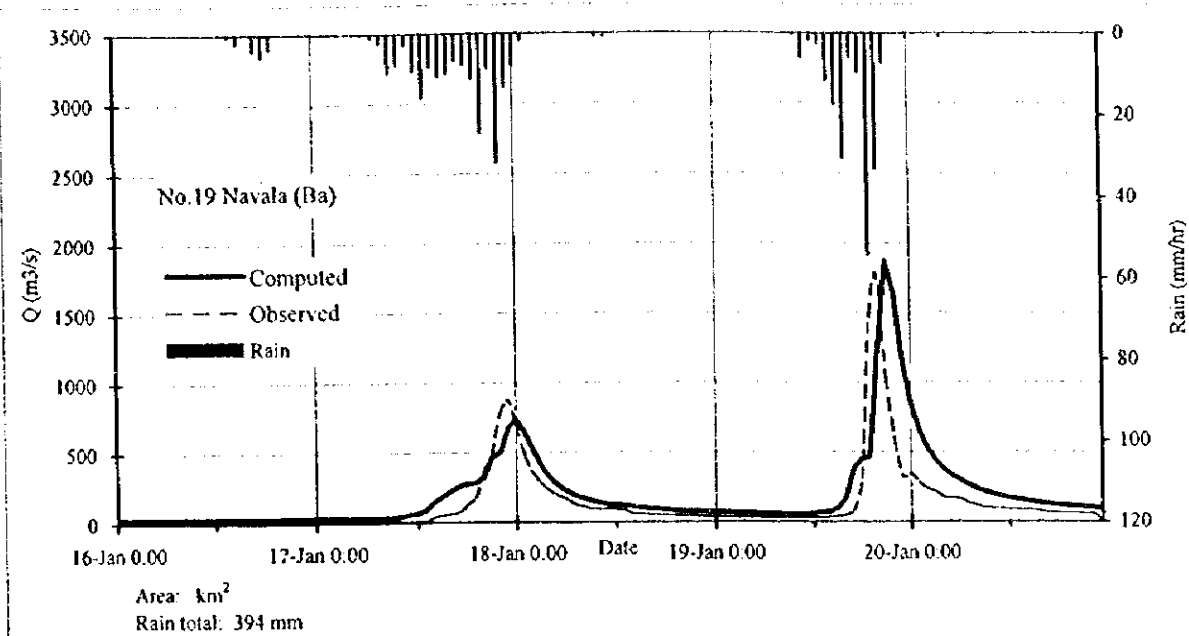
Original Data				
	Date	Time	PA059	V77744
67	18-Jan-85	19.00	0.0	0.0
68	18-Jan-85	20.00	0.0	0.0
69	18-Jan-85	21.00	0.0	0.0
70	18-Jan-85	22.00	0.0	0.0
71	18-Jan-85	23.00	0.0	0.0
72	19-Jan-85	19-Jan 0.00	0.0	0.0
73	19-Jan-85	1.00	0.0	0.0
74	19-Jan-85	2.00	0.0	0.0
75	19-Jan-85	3.00	0.0	0.0
76	19-Jan-85	4.00	0.0	0.0
77	19-Jan-85	5.00	0.0	0.0
78	19-Jan-85	6.00	0.0	0.0
79	19-Jan-85	7.00	0.0	0.0
80	19-Jan-85	8.00	0.0	0.0
81	19-Jan-85	9.00	0.0	0.0
82	19-Jan-85	10.00	0.5	0.7
83	19-Jan-85	11.00	7.0	0.0
84	19-Jan-85	12.00	2.0	0.0
85	19-Jan-85	13.00	3.0	0.0
86	19-Jan-85	14.00	8.0	39.6
87	19-Jan-85	15.00	20.0	0.0
88	19-Jan-85	16.00	35.0	0.0
89	19-Jan-85	17.00	7.0	0.0
90	19-Jan-85	18.00	11.0	0.0
91	19-Jan-85	19.00	62.0	0.0
92	19-Jan-85	20.00	38.0	0.0
93	19-Jan-85	21.00	8.5	0.0
94	19-Jan-85	22.00	0.0	0.0
95	19-Jan-85	23.00	0.0	0.0
96	20-Jan-85	20-Jan 0.00	0.0	0.0
97	20-Jan-85	1.00	0.0	0.0
98	20-Jan-85	2.00	0.0	0.0
99	20-Jan-85	3.00	0.0	0.0
100	20-Jan-85	4.00	0.0	7.9
101	20-Jan-85	5.00	0.0	0.0
102	20-Jan-85	6.00	0.0	0.0
103	20-Jan-85	7.00	0.0	0.0
104	20-Jan-85	8.00	0.0	0.0
105	20-Jan-85	9.00	0.0	0.0
106	20-Jan-85	10.00	0.0	0.0
107	20-Jan-85	11.00	0.0	0.0
108	20-Jan-85	12.00	0.0	0.0
109	20-Jan-85	13.00	0.0	0.0
110	20-Jan-85	14.00	0.0	0.0
111	20-Jan-85	15.00	0.0	0.0
112	20-Jan-85	16.00	0.0	0.0
113	20-Jan-85	17.00	0.0	0.0
114	20-Jan-85	18.00	0.0	0.0
115	20-Jan-85	19.00	0.0	0.0
116	20-Jan-85	20.00	0.0	0.0
117	20-Jan-85	21.00	0.4	0.0
118	20-Jan-85	22.00	0.0	0.0
119	20-Jan-85	23.00	0.0	0.0
Total			414.0	243.2

Fiji Flood Analysis < Ba River (Nigel) >

		No.19 Navala			No.18 Toge		
		Area (km <sup>2</sup> )	323		Area (km <sup>2</sup> )	579	
		Rain total (mm)	394		Rain total (mm)	366	
		Q total (mm)			Q total (mm) (Im RFWA Dis.xls file)		
		Runoff coefficient	0.0		Runoff coefficient	0.0	
Date	Time	Computed Q(m <sup>3</sup> /s)	Rain (mm)	Observed	Computed Q(m <sup>3</sup> /s)	Rain (mm)	Observed
16-Jan-85	16-Jan 0:00	32.4		3.8	57.8		5.6
16-Jan-85	1:00	32.4	0.0	3.8	57.8	0.0	5.6
16-Jan-85	2:00	32.4	0.0	3.8	57.8	0.0	5.6
16-Jan-85	3:00	32.4	0.0	3.8	57.8	0.0	5.6
16-Jan-85	4:00	32.4	0.0	3.8	57.8	0.0	5.6
16-Jan-85	5:00	32.4	0.0	3.8	57.8	0.0	5.6
16-Jan-85	6:00	32.4	0.0	3.8	57.8	0.0	5.6
16-Jan-85	7:00	32.4	0.0	3.8	57.8	0.0	5.6
16-Jan-85	8:00	32.4	0.0	3.8	57.8	0.0	5.6
16-Jan-85	9:00	32.4	0.0	3.8	57.8	0.0	5.6
16-Jan-85	10:00	32.4	0.0	3.8	57.8	0.0	5.6
16-Jan-85	11:00	32.4	0.0	3.8	57.8	0.0	5.6
16-Jan-85	12:00	32.4	0.0	3.8	57.8	0.0	5.6
16-Jan-85	13:00	32.4	0.0	3.8	57.8	0.0	5.6
16-Jan-85	14:00	32.4	0.6	3.8	57.8	1.4	5.6
16-Jan-85	15:00	32.4	2.2	3.8	57.8	5.1	5.6
16-Jan-85	16:00	32.4	0.3	3.6	58.6	0.6	5.6
16-Jan-85	17:00	32.5	4.1	3.8	60.1	4.2	5.6
16-Jan-85	18:00	32.7	5.6	6.0	61.2	5.0	6.0
16-Jan-85	19:00	33.6	3.6	6.1	62.4	3.2	7.6
16-Jan-85	20:00	35.1	0.4	6.3	63.2	0.4	8.1
16-Jan-85	21:00	35.6	0.0	6.4	63.9	0.1	9.4
16-Jan-85	22:00	35.6	0.0	6.5	65.0	0.1	9.9
16-Jan-85	23:00	35.6	0.0	7.8	66.1	0.0	9.9
17-Jan-85	17-Jan 0:00	35.5	0.0	7.0	66.6	0.0	9.9
17-Jan-85	1:00	35.5	0.0	7.0	66.8	0.0	9.9
17-Jan-85	2:00	35.4	0.0	7.0	66.8	0.0	9.9
17-Jan-85	3:00	35.4	0.0	6.5	66.7	0.0	9.9
17-Jan-85	4:00	35.3	0.0	6.5	66.6	0.0	9.9
17-Jan-85	5:00	35.3	0.0	6.5	66.5	0.1	9.9
17-Jan-85	6:00	35.3	0.4	6.5	66.3	1.0	9.9
17-Jan-85	7:00	35.4	1.1	6.5	67.2	2.1	9.9
17-Jan-85	8:00	36.0	2.4	6.5	69.7	4.8	9.9
17-Jan-85	9:00	37.5	9.6	6.5	79.4	9.0	9.9
17-Jan-85	10:00	46.3	7.8	6.5	90.0	7.7	9.9
17-Jan-85	11:00	60.8	2.7	6.3	98.8	3.4	9.9
17-Jan-85	12:00	68.2	9.3	7.9	113.2	16.4	10.2
17-Jan-85	13:00	91.1	15.8	12.5	211.3	14.0	12.2
17-Jan-85	14:00	151.1	8.2	39.2	268.2	7.1	19.8
17-Jan-85	15:00	188.8	10.6	51.1	263.0	8.6	39.1
17-Jan-85	16:00	226.3	9.9	63.8	297.0	8.1	55.2
17-Jan-85	17:00	261.9	6.7	75.3	345.3	8.0	111.8
17-Jan-85	18:00	275.8	7.7	129.0	417.0	7.3	124.9
17-Jan-85	19:00	286.5	11.1	184.2	477.3	12.6	143.9
17-Jan-85	20:00	322.6	24.4	371.1	532.4	23.1	192.3
17-Jan-85	21:00	466.9	8.7	491.4	587.4	7.4	407.7
17-Jan-85	22:00	500.8	31.7	775.3	635.1	25.9	879.3
17-Jan-85	23:00	678.6	13.2	873.9	781.5	10.8	1456.5
18-Jan-85	18-Jan 0:00	736.1	7.9	694.4	858.3	6.6	1671.7
18-Jan-85	1:00	644.9	1.8	479.9	1077.1	1.4	1491.1
18-Jan-85	2:00	518.0	0.0	354.6	1125.1	0.0	1112.0
18-Jan-85	3:00	401.6	0.0	278.4	985.6	0.0	734.2
18-Jan-85	4:00	320.3	0.0	232.0	804.7	0.0	465.2
18-Jan-85	5:00	265.3	0.0	192.4	643.3	0.0	340.8
18-Jan-85	6:00	225.9	0.0	169.8	525.5	0.0	280.1
18-Jan-85	7:00	196.5	0.0	133.5	442.0	0.0	240.0
18-Jan-85	8:00	173.9	0.0	116.0	380.8	0.0	209.4
18-Jan-85	9:00	156.1	0.0	100.2	334.4	0.0	181.7
18-Jan-85	10:00	141.8	0.9	97.0	298.1	0.7	165.8
18-Jan-85	11:00	132.2	0.9	95.0	269.1	0.7	143.9
18-Jan-85	12:00	126.0	0.0	93.9	245.8	0.0	133.0
18-Jan-85	13:00	118.6	0.0	85.5	228.5	0.0	124.9
18-Jan-85	14:00	110.6	0.0	62.9	216.0	0.0	114.1
18-Jan-85	15:00	103.7	0.0	59.0	204.3	0.0	106.0
18-Jan-85	16:00	97.8	0.0	56.0	192.2	0.0	99.4
18-Jan-85	17:00	92.7	0.0	53.0	181.1	0.0	93.0
18-Jan-85	18:00	88.2	0.0	51.8	171.2	0.0	87.9
18-Jan-85	19:00	84.2	0.0	48.0	162.5	0.0	82.0
18-Jan-85	20:00	80.7	0.0	45.0	154.9	0.0	78.0

Fiji Flood Analysis < Ba River (Nigel) >

		No.19 Navala			No.18 Toge		
		Area (km <sup>2</sup> )	323		Area (km <sup>2</sup> )	579	
		Rain total (mm)	394		Rain total (mm)	366	
		Q total (mm)			Q total (mm) (fin REWA-Dis.xls file)		
		Runoff coefficient	0.0		Runoff coefficient	0.0	
Date	Time	Computed Q(m <sup>3</sup> /s)	Rain (mm)	Observed	Computed Q(m <sup>3</sup> /s)	Rain (mm)	Observed
18-Jan-85	21:00	77.6	0.0	43.6	148.2	0.0	74.2
18-Jan-85	22:00	74.8	0.0	40.0	142.1	0.0	71.0
18-Jan-85	23:00	72.3	0.0	37.0	136.8	0.0	68.0
19-Jan-85	19-Jan 00:00	70.0	0.0	34.9	132.0	0.0	65.0
19-Jan-85	1:00	67.9	0.0	33.0	127.6	0.0	62.6
19-Jan-85	2:00	66.0	0.0	32.0	123.7	0.0	59.0
19-Jan-85	3:00	64.3	0.0	31.0	120.1	0.0	56.8
19-Jan-85	4:00	62.7	0.0	30.0	116.8	0.0	54.0
19-Jan-85	5:00	61.2	0.0	31.0	113.7	0.0	53.6
19-Jan-85	6:00	59.9	0.0	30.0	111.0	0.0	51.0
19-Jan-85	7:00	58.6	0.0	29.5	108.5	0.0	49.7
19-Jan-85	8:00	57.5	0.0	29.1	106.1	0.0	48.0
19-Jan-85	9:00	56.4	0.0	29.0	104.0	0.0	47.5
19-Jan-85	10:00	55.4	0.5	28.5	102.0	0.6	46.0
19-Jan-85	11:00	55.0	6.2	28.5	100.3	5.0	46.0
19-Jan-85	12:00	61.7	1.8	29.0	98.8	1.4	46.0
19-Jan-85	13:00	68.8	2.6	29.7	97.9	2.2	46.0
19-Jan-85	14:00	72.8	11.8	32.3	101.9	16.9	49.7
19-Jan-85	15:00	100.1	17.6	39.1	133.9	14.4	60.0
19-Jan-85	16:00	172.9	30.8	50.0	161.3	25.2	78.0
19-Jan-85	17:00	383.7	6.2	85.5	183.5	5.0	142.6
19-Jan-85	18:00	451.6	9.7	312.8	272.8	7.9	220.7
19-Jan-85	19:00	464.3	54.6	1473.0	531.7	44.6	1556.7
19-Jan-85	20:00	1219.6	33.4	1780.4	685.3	27.4	1556.0
19-Jan-85	21:00	1867.0	7.5	1044.3	843.2	6.1	1556.7
19-Jan-85	22:00	1644.1	0.0	601.9	2068.7	0.0	2628.8
19-Jan-85	23:00	1170.4	0.0	326.5	2729.8	0.0	1803.0
20-Jan-85	20-Jan 00:00	847.3	0.0	340.5	2243.6	0.0	978.7
20-Jan-85	1:00	655.2	0.0	284.0	1631.4	0.0	642.6
20-Jan-85	2:00	529.2	0.0	241.0	1225.7	0.0	462.6
20-Jan-85	3:00	441.2	0.0	216.1	971.1	0.0	356.4
20-Jan-85	4:00	376.6	0.9	176.2	798.3	2.2	300.3
20-Jan-85	5:00	335.4	0.0	170.0	679.4	0.0	262.5
20-Jan-85	6:00	299.1	0.0	165.2	590.3	0.0	234.5
20-Jan-85	7:00	266.6	0.0	138.0	527.1	0.0	220.7
20-Jan-85	8:00	240.2	0.0	121.0	473.6	0.0	195.3
20-Jan-85	9:00	218.4	0.0	104.0	425.6	0.0	179.0
20-Jan-85	10:00	200.2	0.0	100.0	385.7	0.0	164.4
20-Jan-85	11:00	184.8	0.0	97.0	352.6	0.0	147.9
20-Jan-85	12:00	171.6	0.0	91.0	324.6	0.0	136.0
20-Jan-85	13:00	160.2	0.0	91.4	300.8	0.0	126.1
20-Jan-85	14:00	150.3	0.0	88.0	280.3	0.0	117.6
20-Jan-85	15:00	141.7	0.0	86.6	262.6	0.0	111.0
20-Jan-85	16:00	134.0	0.0	74.2	247.1	0.0	106.0
20-Jan-85	17:00	127.2	0.0	70.0	233.4	0.0	100.0
20-Jan-85	18:00	121.1	0.0	66.9	221.4	0.0	94.1
20-Jan-85	19:00	115.7	0.0	65.0	210.6	0.0	89.0
20-Jan-85	20:00	110.7	0.0	64.8	201.0	0.0	84.8
20-Jan-85	21:00	106.3	0.4	60.9	192.3	0.3	84.8
20-Jan-85	22:00	103.2	0.0	55.3	184.5	0.0	84.8
20-Jan-85	23:00	100.2	0.0	0.0	177.5	0.0	84.8
Max		1867.0	54.6	1780.4	2729.8	44.6	2628.8
Rain Total			393.6			366.1	



# Gauging Stations Adopted

Ref. No.	Station No.	Station Name
1	LA023	Nausori-ert
6	HA009	Navolau
13	LA001	Nadi-Bridge
16	HA020	Votualevu
18	HA093	Toge
19	HA162	Navala

HA : Station without tidal influence  
 LA : Station with tidal influence  
 No.16 : Station was reopened in January, 1997

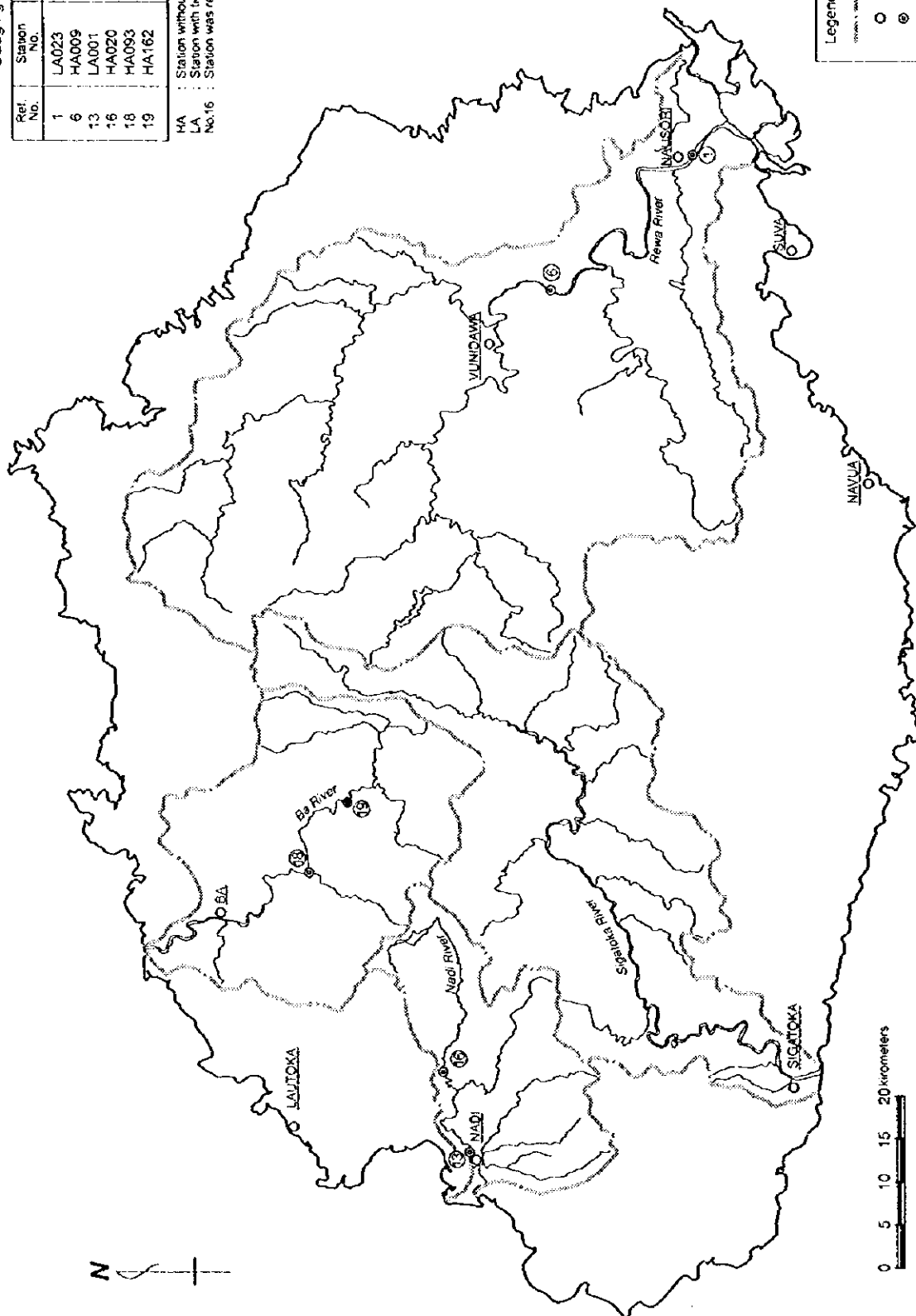
Legend

Boundary of Watershed

City, Town, Village

Gauging Station Operated

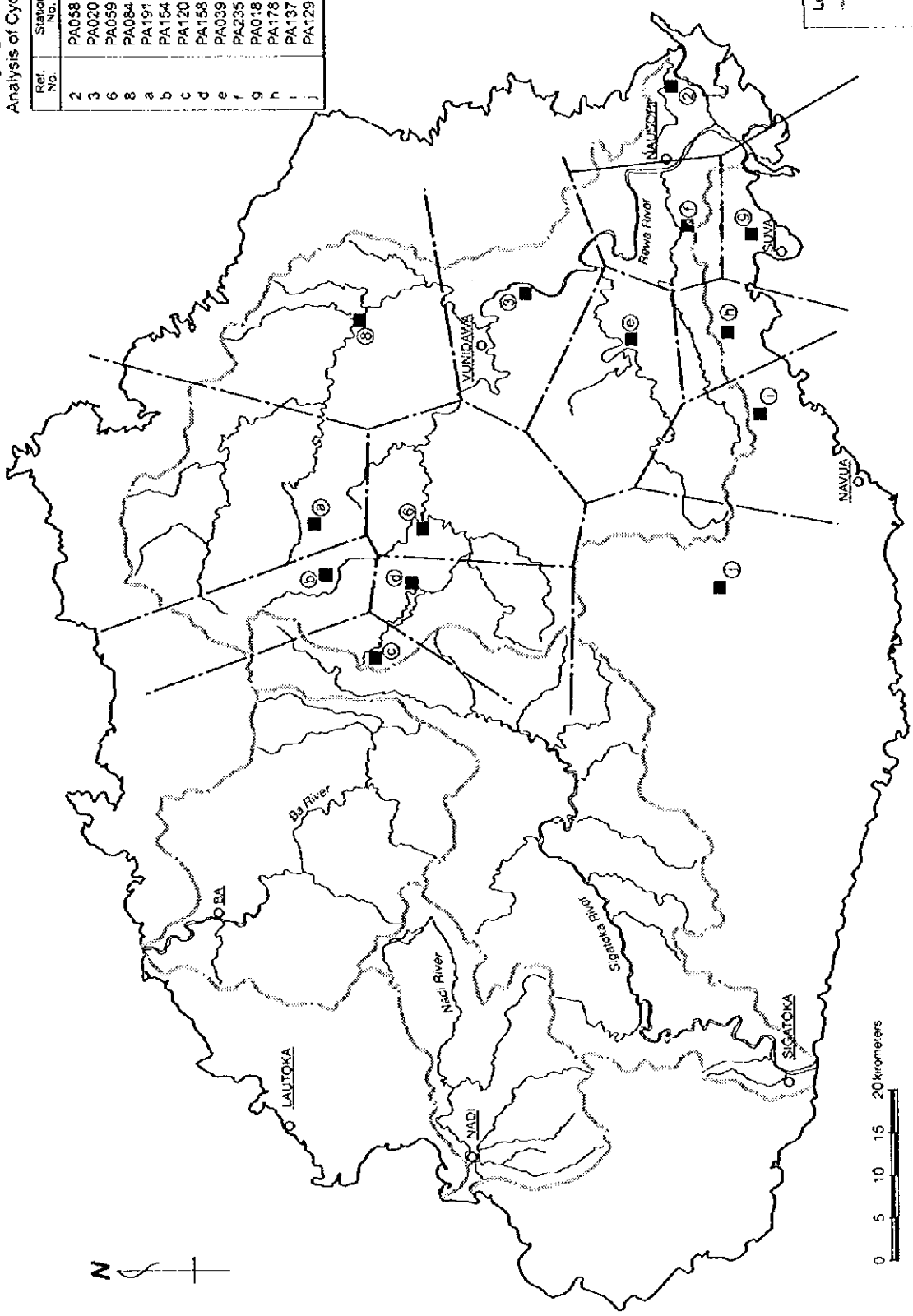
Gauging Station Closed



Locations of Gauging Stations

**Raingauge Stations available for Runoff  
Analysis of Cyclone Gavin in Rewa Watershed**

Ref. No.	Station No.	Station Name	River Basin
2	PA058	Dravo Res. Stn.	Rewa
3	PA020	Navolau	Rewa
6	PA059	Lasolevu	Rewa
8	PA084	Nayavu	Rewa
a	PA191	Nukulau	Rewa
b	PA154	Nasoqo	Rewa
c	PA120	Qualinasavu	Rewa
d	PA158	Monasavu	Rewa
e	PA039	Nabukaluka	Rewa
f	PA235	Waimanu	Rewa
9	PA018	Tamavua	Others
h	PA178	Wainiura	Others
i	PA137	Wainaboro	Others
j	PA129	Wainakavou	Others



**Legend**

○ : Boundary of Watershed

● : City, Town, Village

■ : Raingauge Station

□ : Meteorological Station

Locations of Raingauge Stations



Fiji flood analysis (1) < REWA River (Gavin) >  
Rain

Original Data															
Date	Time	PA191	PA154	PA120	PA158	PA059	PA084	PA020	PA039	PA235	PA058	PA018	PA0178	PA137	PA129
04-Mar-97	4-Mar 00:00														
1 04-Mar-97	1.00	0.0	6.2	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 04-Mar-97	2.00	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3 04-Mar-97	3.00	0.5	1.2	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 04-Mar-97	4.00	0.0	0.2	1.0	1.5	0.0	0.5	0.0	0.0	0.5	3.0	0.0	0.0	0.0	0.0
5 04-Mar-97	5.00	0.5	0.4	1.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 04-Mar-97	6.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 04-Mar-97	7.00	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 04-Mar-97	8.00	0.5	0.0	0.0	0.5	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
9 04-Mar-97	9.00	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 04-Mar-97	10.00	0.0	0.0	0.5	0.0	0.0	0.5	1.0	2.0	0.0	0.0	0.0	1.0	0.5	0.0
11 04-Mar-97	11.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.5
12 04-Mar-97	12.00	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13 04-Mar-97	13.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
14 04-Mar-97	14.00	0.0	0.0	0.0	0.0	1.0	0.0	0.5	0.0	4.5	2.0	1.0	0.5	0.0	0.0
15 04-Mar-97	15.00	0.5	0.0	0.0	2.0	1.0	0.0	1.5	0.0	0.0	0.0	1.0	1.0	4.0	0.0
16 04-Mar-97	16.00	0.0	0.0	1.0	0.0	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.5
17 04-Mar-97	17.00	0.0	0.0	2.0	18.0	0.3	0.0	1.0	0.0	1.0	0.0	0.3	1.0	0.0	1.0
18 04-Mar-97	18.00	0.0	4.4	1.0	5.5	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.5
19 04-Mar-97	19.00	0.5	0.4	1.0	2.5	0.0	8.5	7.0	4.5	1.5	0.0	0.0	0.0	0.0	0.0
20 04-Mar-97	20.00	7.5	1.4	8.0	6.0	0.0	9.5	0.0	7.5	0.0	0.0	13.0	2.5	0.0	0.0
21 04-Mar-97	21.00	0.0	0.0	0.0	6.0	1.0	9.0	2.5	0.5	0.5	0.0	1.0	0.5	1.0	0.5
22 04-Mar-97	22.00	0.5	15.2	0.0	0.0	0.5	1.0	1.0	0.0	3.5	0.0	0.5	0.0	0.0	0.5
23 04-Mar-97	23.00	0.0	1.4	0.0	0.0	1.4	0.0	0.5	0.5	3.0	0.0	1.4	6.0	4.5	0.0
24 05-Mar-97	5-Mar 00:00	3.5	0.0	0.5	1.0	0.0	10.0	0.0	0.0	20.5	2.0	0.0	9.0	5.5	6.5
25 05-Mar-97	1.00	1.5	0.2	0.5	23.0	0.0	22.5	0.0	1.5	18.0	6.0	0.0	10.0	16.0	1.0
26 05-Mar-97	2.00	10.5	0.8	2.0	23.0	0.0	11.0	24.0	9.0	0.0	1.0	0.0	23.5	11.0	0.5
27 05-Mar-97	3.00	9.0	2.6	7.0	24.0	0.0	3.0	8.5	12.5	2.0	0.0	0.0	26.5	28.0	5.5
28 05-Mar-97	4.00	7.5	8.0	3.0	6.0	0.0	3.5	22.5	4.5	2.5	0.5	0.0	7.0	6.5	8.0
29 05-Mar-97	5.00	10.5	18.0	10.5	11.5	0.0	14.5	13.0	9.5	5.5	2.5	0.0	10.5	6.5	5.0
30 05-Mar-97	6.00	3.0	12.0	2.0	5.5	0.0	5.0	9.0	5.0	6.0	5.5	0.0	4.5	5.5	2.0
31 05-Mar-97	7.00	1.0	28.0	2.0	10.0	0.0	11.0	13.0	5.5	6.0	5.5	0.0	6.5	4.0	0.0
32 05-Mar-97	8.00	1.0	6.0	4.0	12.0	0.0	9.0	5.0	5.0	5.0	4.0	0.0	4.5	3.0	0.5
33 05-Mar-97	9.00	1.5	0.6	4.0	2.0	0.0	1.5	3.5	1.5	2.5	3.0	0.0	2.0	0.0	0.0
34 05-Mar-97	10.00	1.0	8.4	2.0	0.5	0.0	2.5	0.5	0.0	0.5	1.5	0.0	0.0	0.0	0.0
35 05-Mar-97	11.00	0.0	3.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
36 05-Mar-97	12.00	0.0	1.2	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37 05-Mar-97	13.00	0.0	0.8	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38 05-Mar-97	14.00	0.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 05-Mar-97	15.00	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 05-Mar-97	16.00	0.0	0.6	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41 05-Mar-97	17.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42 05-Mar-97	18.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
43 05-Mar-97	19.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.5	0.5	0.0
44 05-Mar-97	20.00	0.0	0.0	0.5	0.3	0.0	0.0	0.0	0.0	0.5	0.0	0.0	1.5	0.5	0.0
45 05-Mar-97	21.00	0.0	0.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.5	0.0
46 05-Mar-97	22.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
47 05-Mar-97	23.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48 06-Mar-97	6-Mar 00:00	0.5	0.2	1.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.5	0.0	0.0
49 06-Mar-97	1.00	0.0	0.2	1.0	0.0	7.6	3.0	0.0	0.0	0.0	0.0	7.6	0.5	0.5	0.0
50 06-Mar-97	2.00	0.0	0.2	0.0	3.5	26.0	3.0	0.0	3.0	0.0	0.0	26.0	0.0	1.0	0.4
51 06-Mar-97	3.00	0.5	0.2	1.0	0.3	6.0	0.0	1.5	1.5	0.0	0.0	6.0	0.0	0.0	1.6
52 06-Mar-97	4.00	6.0	0.2	5.5	4.2	4.0	3.0	2.5	2.5	0.0	1.0	4.0	0.0	0.0	0.0
53 06-Mar-97	5.00	2.0	0.8	2.0	2.5	6.0	5.5	1.5	0.0	1.0	0.5	6.0	1.0	0.5	0.0
54 06-Mar-97	6.00	2.0	0.0	2.0	4.0	4.0	1.5	7.5	7.0	3.0	0.0	4.0	10.0	0.0	0.0
55 06-Mar-97	7.00	0.0	4.0	2.0	1.0	4.0	0.0	1.0	0.0	0.0	0.0	4.0	0.0	0.5	0.0
56 06-Mar-97	8.00	1.5	2.4	1.0	0.5	5.0	0.0	1.0	0.5	1.5	0.0	5.0	4.0	3.0	0.0
57 06-Mar-97	9.00	0.0	1.8	0.0	1.5	0.0	0.0	2.5	4.0	1.0	0.0	0.0	0.5	1.0	0.0
58 06-Mar-97	10.00	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
59 06-Mar-97	11.00	0.0	1.6	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	2.5	2.0
60 06-Mar-97	12.00	0.0	0.0	1.0	0.5	5.0	4.0	1.0	2.5	2.0	0.0	5.0	0.0	0.0	0.0
61 06-Mar-97	13.00	2.0	0.0	1.5	4.5	3.3	0.0	2.5	1.0	0.0	0.0	3.3	8.5	4.5	2.0
62 06-Mar-97	14.00	0.0	0.0	0.0	0.0	0.1	0.5	2.5	1.0	7.5	1.0	0.1	6.0	2.0	2.0
63 06-Mar-97	15.00	2.0	2.8	8.5	9.0	1.0	5.5	1.5	3.0	0.5	3.0	1.0	5.5	2.5	0.5
64 06-Mar-97	16.00	2.0	0.0	12.0	13.0	2.1	4.5	2.5	5.5	1.5	1.5	2.1	3.5	2.0	6.0
65 06-Mar-97	17.00	6.0	1.8	14.0	22.0	3.5	9.0	3.0	2.0	3.5	1.5	3.5	4.0	4.0	1.0
66 06-Mar-97	18.00	1.5	9.4	5.0	6.0	1.8	0.5	2.0	1.5	0.5	2.0	1.8	1.0	1.5	4.0
67 06-Mar-97	19.00	0.0	6.0	1.5	9.0	0.2	2.0	1.5	0.5	1.0	8.0	0.2	0.0	0.0	4.5
68 06-Mar-97	20.00	1.5	14.6	3.5	14.0	1.0	3.0	8.5	4.5	3.0	1.0	1.0	1.5	1.5	3.0
69 06-Mar-97	21.00	1.0	0.6	4.0	16.0	7.0	1.5	1.0	1.5	1.5	1.5	7.0	4.5	7.0	16.0
70 06-Mar-97	22.00	1.0	0.6	3.0	8.0	3.0	7.0	1.0	0.5	0.5	5.0	3.0	2.0	12.0	6.5
71 06-Mar-97	23.00	5.5	4.6	13.0	10.0	1.0	9.0	14.5	5.0	1.0	2.0	1.0	3.0	5.0	21.5
72 07-Mar-97	7-Mar 00:00	1.5	1.4	9.0	21.0	2.0	2.0	8.5	1.0	0.5	1.0	2.0	1.0	1.5	2.5
73 07-Mar-97	1.00	0.0	5.0	9.0	6.0	0.0	3.5	1.0	0.5	0.5	1.5	0.0	1.0	0.5	1.5
74 07-Mar-97	2.00	3.0	11.0	6.5	8.0	2.0	1.5	2.0	2.0	0.5	1.0	2.0	2.0	2.5	1.0
75 07-Mar-97	3.00	2.0	5.0	5.0	4.0	3.0	3.5	3.0	0.5	0.5	0.5	3.0	2.5	1.5	2.0
76 07-Mar-97	4.00	1.0	9.0	2.5	2.5	0.0	1.5	0.5	0.5	0.5	1.5	0.0	0.5	0.0	0.5
77 07-Mar-97	5.00	1.5	3.0	6.0	2.5	2.0	6.5	4.5	4.5	1.0	1.0	2.0	2.5	2.5	0.0
78 07-Mar-97	6.00	1.0	3.4	7.0	6.0	1.0	6.5	1.0	0.5	0.5	1.0	1.0	0.5	0.5	3.0
79 07-Mar-97	7.00	5.0	1.6	12.0	9.0	2.0	18.5	9.0	5.5	10.0	1.5	2.0	5.0	6.5	1.5
80 07-Mar-97	8.00	9.0	4.6	26.0	31.0	8.0	16.0	17.5	28.5	23.5	1.0	8.0	28.0	16.5	6.0
81 07-Mar-97	9.00	0.5	4.6	5.0	20.0	24.0	2.0	6.0	7.0	6.5	4.0	24.0	16.5	17.0	22.0
82 07-Mar-97	10.00	1.0	17.0	4.0	20.0	1.5	3.5	2.0	2.5	4.0	13.0	1.5	5.5	7.5	9.0

Fiji flood analysis (1) < REWA River (Gavin) >  
Rain

Original Data															
Date	Time	PA191	PA154	PA120	PA158	PA059	PA081	PA020	PA039	PA235	PA058	PA018	PA0178	PA137	PA129
83 07-Mar-97	11:00	2.0	10.6	9.0	10.0	3.5	2.0	5.5	11.0	5.0	10.0	3.5	11.0	8.5	6.0
84 07-Mar-97	12:00	5.0	1.6	22.0	20.0	2.0	8.5	2.5	2.0	1.0	7.0	2.0	4.0	3.0	9.0
85 07-Mar-97	13:00	7.0	5.6	36.0	31.0	2.0	16.0	6.0	4.0	2.0	2.0	2.0	3.0	3.0	2.5
86 07-Mar-97	14:00	6.5	7.0	37.0	36.0	0.0	29.5	17.0	13.5	8.0	2.0	0.0	9.5	7.0	5.5
87 07-Mar-97	15:00	5.5	15.0	35.0	23.0	19.0	26.0	7.0	6.5	6.5	4.0	19.0	11.0	7.5	10.5
88 07-Mar-97	16:00	8.5	23.0	62.0	35.0	5.5	6.5	4.0	3.5	2.5	3.0	5.5	5.0	3.5	8.0
89 07-Mar-97	17:00	15.0	16.0	38.0	40.0	8.5	2.5	3.0	1.5	3.5	3.0	8.5	2.0	0.5	6.5
90 07-Mar-97	18:00	0.0	18.0	48.0	30.0	0.0	8.0	1.5	1.0	2.0	3.0	0.0	0.5	0.5	3.0
91 07-Mar-97	19:00	0.5	26.0	34.0	35.0	0.0	2.0	4.5	1.0	0.5	3.0	0.0	0.0	0.5	1.5
92 07-Mar-97	20:00	0.0	63.0	26.0	18.0	0.0	6.0	8.0	5.5	1.0	3.0	0.0	4.0	8.5	1.5
93 07-Mar-97	21:00	0.0	25.0	5.0	24.0	6.0	4.0	1.0	1.0	0.5	2.0	6.0	1.0	1.0	2.5
94 07-Mar-97	22:00	0.0	27.0	22.0	11.0	4.4	2.0	3.0	10.0	1.0	2.0	4.4	1.5	14.5	3.0
95 07-Mar-97	23:00	0.5	25.0	30.0	14.0	2.6	1.0	1.5	0.5	0.5	2.5	2.6	1.0	1.0	0.5
96 08-Mar-97	8-Mar 0:00	0.0	20.0	33.0	19.0	0.0	2.5	1.0	1.5	0.5	1.0	0.0	2.0	3.0	0.5
97 08-Mar-97	1:00	0.0	16.0	39.0	39.0	0.0	2.5	1.0	1.0	0.0	1.0	0.0	1.5	1.0	0.5
98 08-Mar-97	2:00	0.0	10.0	28.0	25.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.5	1.5	0.5
99 08-Mar-97	3:00	0.0	30.0	28.0	16.0	0.0	1.5	0.0	1.5	0.0	0.0	0.0	0.0	1.5	2.0
100 08-Mar-97	4:00	0.5	23.0	20.0	26.0	0.0	3.0	1.5	2.0	0.5	0.0	0.0	2.5	5.0	5.0
101 08-Mar-97	5:00	0.0	25.0	20.0	20.0	0.0	3.0	2.0	1.0	0.5	0.0	0.0	1.5	2.0	1.5
102 08-Mar-97	6:00	0.0	21.0	33.0	31.0	0.0	4.0	1.0	3.5	1.5	0.0	0.0	3.0	5.0	9.0
103 08-Mar-97	7:00	0.0	19.0	22.0	19.0	3.0	3.0	0.5	1.0	0.5	0.0	3.0	2.0	3.0	2.5
104 08-Mar-97	8:00	0.0	19.0	12.0	20.0	0.0	4.0	2.0	1.0	0.0	0.0	0.0	1.5	1.0	0.5
105 08-Mar-97	9:00	0.0	28.0	10.0	18.0	0.0	2.0	1.0	0.5	0.0	0.0	0.0	0.0	0.5	0.5
106 08-Mar-97	10:00	0.0	10.0	2.0	25.0	0.0	0.0	0.0	0.0	0.5	4.0	0.0	0.5	0.5	0.0
107 08-Mar-97	11:00	0.0	7.0	7.0	11.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.5
108 08-Mar-97	12:00	0.0	8.0	8.0	15.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109 08-Mar-97	13:00	0.0	16.0	7.0	6.0	0.0	0.0	0.5	0.5	1.0	0.0	0.0	0.0	1.0	1.0
110 08-Mar-97	14:00	0.0	6.8	9.0	5.0	0.0	0.5	0.5	0.5	2.0	0.5	0.0	1.0	4.0	0.0
111 08-Mar-97	15:00	0.0	15.2	10.0	20.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	7.0	1.0
112 08-Mar-97	16:00	0.0	12.0	9.0	4.0	0.0	7.5	0.5	8.0	0.5	4.0	0.0	4.0	9.0	0.0
113 08-Mar-97	17:00	0.0	14.0	1.0	4.0	0.0	9.0	7.5	3.5	4.5	8.0	0.0	7.0	1.5	0.0
114 08-Mar-97	18:00	0.0	20.0	8.0	3.0	0.0	2.0	1.5	0.5	0.5	8.0	0.0	1.0	1.5	0.0
115 08-Mar-97	19:00	0.0	4.0	3.0	1.0	0.0	5.5	0.0	0.0	0.5	10.0	0.0	1.0	1.5	0.0
116 08-Mar-97	20:00	0.0	3.0	13.0	4.0	0.0	3.0	1.5	0.5	1.0	6.0	0.0	0.0	0.0	0.5
117 08-Mar-97	21:00	0.0	6.6	31.0	27.0	0.0	0.5	0.0	0.5	0.0	4.0	0.0	1.0	2.0	3.5
118 08-Mar-97	22:00	0.0	2.6	8.0	2.0	0.0	6.0	3.0	26.0	2.5	1.5	0.0	15.0	18.5	0.0
119 08-Mar-97	23:00	0.0	12.4	15.0	9.0	0.0	3.5	2.0	4.5	3.0	1.0	0.0	1.5	1.0	1.0
120 09-Mar-97	9-Mar 0:00	0.0	42.0	14.0	8.0	0.0	8.0	1.0	1.0	0.0	1.0	0.0	2.5	0.0	1.5
121 09-Mar-97	1:00	0.0	11.2	9.0	4.0	0.0	0.0	1.0	1.0	0.5	1.0	0.0	0.5	2.0	3.0
122 09-Mar-97	2:00	0.0	3.2	23.5	12.0	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0	1.5	0.0
123 09-Mar-97	3:00	0.0	3.6	5.5	3.5	0.0	0.0	1.0	1.0	0.0	0.5	0.0	0.0	0.0	0.5
124 09-Mar-97	4:00	0.0	2.0	3.0	6.5	0.0	10.0	0.0	0.5	0.5	0.5	0.0	0.0	0.5	0.5
125 09-Mar-97	5:00	0.0	4.0	12.0	9.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0
126 09-Mar-97	6:00	0.0	3.8	3.0	6.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	1.0
127 09-Mar-97	7:00	0.0	6.2	1.0	0.5	0.0	1.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128 09-Mar-97	8:00	0.0	10.0	20.0	3.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129 09-Mar-97	9:00	0.0	17.0	2.0	2.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
130 09-Mar-97	10:00	0.0	1.8	11.0	7.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.5	0.5	2.5
131 09-Mar-97	11:00	0.0	1.2	10.0	8.5	0.0	1.5	0.5	6.0	2.0	0.0	0.0	0.5	0.0	0.0
132 09-Mar-97	12:00	0.0	6.0	1.0	6.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	1.8	0.0	0.0
133 09-Mar-97	13:00	0.0	7.0	6.0	5.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134 09-Mar-97	14:00	0.0	11.2	14.0	5.0	0.2	2.0	0.5	0.5	0.5	2.0	0.2	0.0	0.0	0.0
135 09-Mar-97	15:00	0.0	0.0	8.0	19.0	1.0	3.5	1.5	0.5	0.0	1.0	1.0	0.0	0.0	0.0
136 09-Mar-97	16:00	0.0	0.8	4.0	3.0	3.0	11.5	1.0	0.0	0.5	0.0	3.0	0.0	0.0	4.0
137 09-Mar-97	17:00	0.0	4.0	7.0	6.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	1.0
138 09-Mar-97	18:00	0.0	12.0	1.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.5	0.5	0.5
139 09-Mar-97	19:00	0.0	4.4	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
140 09-Mar-97	20:00	0.0	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
141 09-Mar-97	21:00	0.0	0.2	0.5	0.0	6.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0
142 09-Mar-97	22:00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143 09-Mar-97	23:00	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0
144 10-Mar-97	10-Mar 0:00	0.0	0.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total		172.5	1012.0	1167.0	1232.0	226.0	475.5	331.0	309.5	218.0	199.0	226.0	356.0	342.5	258.0

Fiji Flood Analysis < Rewa River (Gavin) >

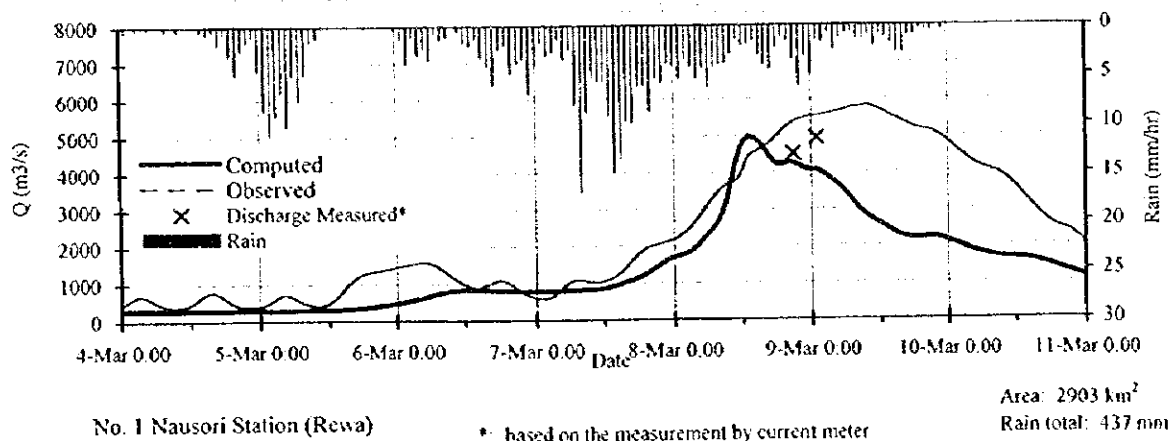
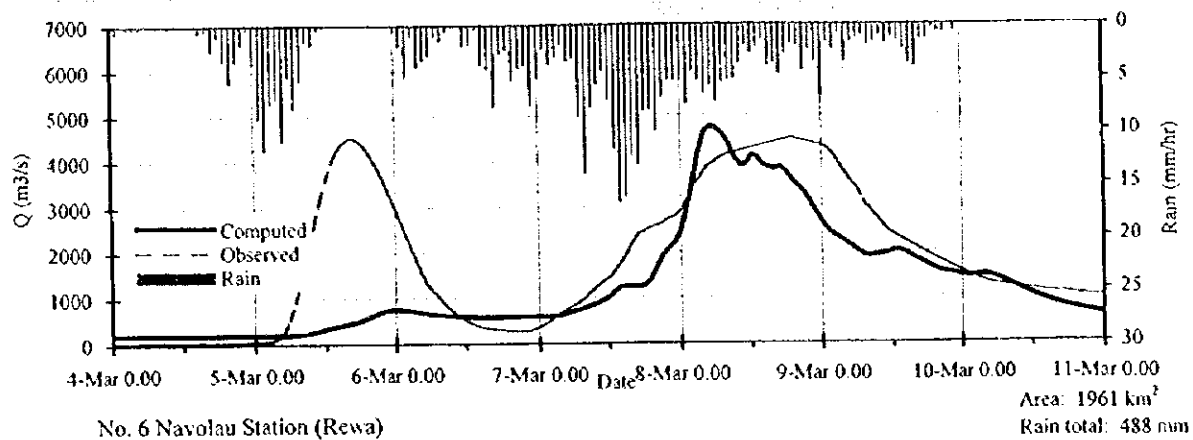
		Navofau			Nausori			
		Area (km <sup>2</sup> )	1961		Area (km <sup>2</sup> )	2903		
		Rain total (mm)	488		Rain total (mm)	437		
		Q total (mm)	658		Q total (mm)	385		
		Runoff coefficient	1.3		Runoff coefficient	0.9		
Date	Time	Computed	Rain	Observed	Computed	Rain	Observed	Discharge
		Q(m <sup>3</sup> /s)	(mm)		Q(m <sup>3</sup> /s)	(mm)		
04-Mar-97	4-Mar 0:00	196.1		37.7	290.5		436.6	
04-Mar-97	1:00	196.1	0.7	39.3	290.5	0.6	524.1	
04-Mar-97	2:00	196.1	0.0	40.3	290.5	0.0	614.8	
04-Mar-97	3:00	196.1	0.3	41.8	290.5	0.3	672.4	
04-Mar-97	4:00	196.1	0.3	42.7	290.5	0.2	666.3	
04-Mar-97	5:00	196.1	0.3	45.2	290.5	0.3	600.5	
04-Mar-97	6:00	196.1	0.0	47.4	290.5	0.0	513.4	
04-Mar-97	7:00	196.1	0.0	49.7	290.5	0.0	437.4	
04-Mar-97	8:00	196.1	0.2	52.2	290.5	0.5	396.6	
04-Mar-97	9:00	196.1	0.1	55.2	290.5	0.1	388.8	
04-Mar-97	10:00	196.1	0.2	55.7	290.5	0.4	388.8	
04-Mar-97	11:00	196.1	0.0	55.5	290.5	0.0	403.7	
04-Mar-97	12:00	196.1	0.0	54.7	290.5	0.0	467.4	
04-Mar-97	13:00	196.1	0.0	55.1	290.5	0.1	576.2	
04-Mar-97	14:00	196.1	0.2	53.9	290.5	0.5	687.9	
04-Mar-97	15:00	196.1	0.6	51.8	290.5	0.8	768.4	
04-Mar-97	16:00	196.1	0.5	48.9	290.5	0.5	780.3	
04-Mar-97	17:00	196.1	2.3	48.8	290.5	1.8	713.7	
04-Mar-97	18:00	196.1	1.1	49.5	290.5	0.8	605.3	
04-Mar-97	19:00	196.1	3.3	49.1	290.5	3.1	496.2	
04-Mar-97	20:00	196.1	5.4	48.9	290.5	5.0	418.3	
04-Mar-97	21:00	196.1	3.4	49.7	290.5	2.5	389.9	
04-Mar-97	22:00	196.1	1.8	52.0	290.5	1.6	388.8	
04-Mar-97	23:00	196.1	0.4	56.0	290.5	1.0	388.8	
05-Mar-97	5-Mar 0:00	196.3	3.6	58.4	290.5	4.5	393.0	
05-Mar-97	1:00	196.6	8.8	63.2	290.5	8.6	438.2	
05-Mar-97	2:00	197.2	11.8	66.2	290.5	11.1	532.8	
05-Mar-97	3:00	197.9	7.4	78.7	290.5	9.1	630.9	
05-Mar-97	4:00	198.7	6.9	138.0	290.6	6.8	698.9	
05-Mar-97	5:00	199.8	10.9	274.3	290.8	10.2	699.4	
05-Mar-97	6:00	202.6	4.8	549.1	291.3	5.0	631.4	
05-Mar-97	7:00	211.4	7.9	926.4	292.0	7.6	543.8	
05-Mar-97	8:00	224.3	5.2	1390.4	293.3	5.0	472.2	
05-Mar-97	9:00	245.0	1.5	1990.1	295.6	1.7	423.8	
05-Mar-97	10:00	274.7	1.8	2557.9	298.7	1.2	404.4	
05-Mar-97	11:00	306.4	0.4	3111.7	302.8	0.3	423.8	
05-Mar-97	12:00	342.4	0.2	3588.6	307.8	0.2	491.7	
05-Mar-97	13:00	376.6	0.1	3989.4	313.5	0.0	610.0	
05-Mar-97	14:00	404.0	0.1	4270.9	319.9	0.1	761.7	
05-Mar-97	15:00	426.9	0.0	4433.7	327.1	0.0	928.4	
05-Mar-97	16:00	451.0	0.0	4516.8	335.4	0.0	1083.4	
05-Mar-97	17:00	481.8	0.0	4509.7	345.6	0.0	1200.2	
05-Mar-97	18:00	521.8	0.0	4426.0	357.9	0.0	1273.5	
05-Mar-97	19:00	572.3	0.0	4277.2	373.0	0.0	1316.1	
05-Mar-97	20:00	629.3	0.0	4086.0	390.8	0.0	1345.8	
05-Mar-97	21:00	682.5	0.0	3846.0	411.3	0.0	1371.3	
05-Mar-97	22:00	723.2	0.0	3571.7	433.7	0.0	1399.0	
05-Mar-97	23:00	747.3	0.0	3274.4	457.5	0.0	1429.3	
06-Mar-97	6-Mar 0:00	755.4	0.5	2969.8	482.2	0.4	1459.1	
06-Mar-97	1:00	750.6	1.9	2647.6	507.9	1.3	1486.4	
06-Mar-97	2:00	736.9	4.8	2325.9	535.8	3.8	1513.0	
06-Mar-97	3:00	717.6	1.1	2012.5	566.7	1.1	1544.2	
06-Mar-97	4:00	695.4	3.9	1708.0	601.9	3.0	1572.7	
06-Mar-97	5:00	672.8	3.3	1425.4	641.3	2.3	1581.3	
06-Mar-97	6:00	653.4	2.8	1214.8	683.8	3.5	1552.6	
06-Mar-97	7:00	642.3	1.1	1093.9	725.6	0.8	1483.3	
06-Mar-97	8:00	632.2	1.5	938.0	763.5	1.4	1383.7	
06-Mar-97	9:00	621.2	0.6	805.5	794.6	1.1	1269.0	
06-Mar-97	10:00	611.9	0.0	692.4	817.1	0.0	1155.8	
06-Mar-97	11:00	606.0	0.1	599.3	830.9	0.6	1054.0	
06-Mar-97	12:00	598.6	1.9	519.0	837.1	1.7	968.3	
06-Mar-97	13:00	591.7	1.8	452.7	836.8	2.0	905.3	
06-Mar-97	14:00	586.4	0.4	399.7	832.8	1.4	880.0	
06-Mar-97	15:00	581.4	3.7	361.1	826.3	3.3	909.3	
06-Mar-97	16:00	578.0	4.1	334.5	818.7	4.1	981.2	
06-Mar-97	17:00	580.1	7.7	317.3	810.7	6.1	1057.8	
06-Mar-97	18:00	585.5	2.6	301.2	803.7	2.4	1088.9	
06-Mar-97	19:00	590.2	2.3	295.3	798.1	2.0	1046.3	
06-Mar-97	20:00	593.8	5.2	286.9	793.5	4.9	946.4	
06-Mar-97	21:00	596.9	4.0	281.5	789.7	3.9	828.5	
06-Mar-97	22:00	601.2	3.8	280.8	787.0	3.4	727.7	
06-Mar-97	23:00	601.7	7.6	307.3	786.6	7.0	653.7	

Fiji Flood Analysis < Rewa River (Gavin) >

		Navolau			Nausori		
		Area (km <sup>2</sup> )	1961	Area (km <sup>2</sup> )	2903		
		Rain total (mm)	488	Rain total (mm)	437		
		Q total (mm)	658	Q total (mm)	385		
		Runoff coefficient	1.3	Runoff coefficient	0.9		
Date	Time	Computed	Rain	Observed	Computed	Rain	Observed
		Q(m <sup>3</sup> /s)	(mm)		Q(m <sup>3</sup> /s)	(mm)	Discharge
07-Mar-97	7-Mar 0:00	599.1	4.9	365.7	786.0	4.1	604.8
07-Mar-97	1:00	600.4	2.3	439.6	786.6	1.7	581.8
07-Mar-97	2:00	603.5	3.7	528.2	789.9	3.1	595.8
07-Mar-97	3:00	611.5	3.1	612.5	794.7	2.7	667.8
07-Mar-97	4:00	640.1	1.9	699.1	800.5	1.4	792.8
07-Mar-97	5:00	680.8	3.4	774.3	806.9	3.4	938.8
07-Mar-97	6:00	717.6	3.2	852.7	812.9	2.5	1047.9
07-Mar-97	7:00	753.7	8.7	929.5	818.3	8.1	1092.8
07-Mar-97	8:00	797.2	14.1	1031.0	823.9	17.0	1084.2
07-Mar-97	9:00	842.9	7.8	1150.1	829.9	8.9	1054.0
07-Mar-97	10:00	895.5	5.6	1257.6	836.7	5.4	1034.2
07-Mar-97	11:00	954.8	4.4	1372.3	846.8	5.7	1040.3
07-Mar-97	12:00	1036.1	7.1	1445.6	862.8	5.7	1065.5
07-Mar-97	13:00	1145.2	11.7	1587.1	891.9	9.2	1109.5
07-Mar-97	14:00	1234.9	16.8	1770.1	938.2	15.0	1186.6
07-Mar-97	15:00	1256.9	16.3	1967.4	991.4	13.6	1304.2
07-Mar-97	16:00	1245.0	12.4	2217.9	1045.3	9.8	1463.1
07-Mar-97	17:00	1231.2	13.2	2392.8	1101.2	9.9	1635.5
07-Mar-97	18:00	1259.1	8.2	2463.7	1159.9	6.2	1794.6
07-Mar-97	19:00	1406.3	8.1	2534.9	1231.1	6.1	1919.3
07-Mar-97	20:00	1674.3	10.1	2583.4	1322.2	8.8	2002.5
07-Mar-97	21:00	1916.0	6.9	2631.9	1430.4	5.4	2053.8
07-Mar-97	22:00	2074.3	5.3	2730.5	1540.7	5.8	2087.2
07-Mar-97	23:00	2203.9	5.3	2780.2	1636.9	4.0	2123.8
08-Mar-97	8-Mar 0:00	2472.4	5.3	2909.5	1704.2	4.1	2184.7
08-Mar-97	1:00	3006.9	7.5	3172.2	1748.0	5.5	2274.4
08-Mar-97	2:00	3610.7	4.5	3444.7	1794.1	3.5	2395.5
08-Mar-97	3:00	4251.3	5.3	3606.7	1873.9	4.2	2549.1
08-Mar-97	4:00	4666.6	6.5	3808.1	2009.1	5.4	2730.7
08-Mar-97	5:00	4747.7	5.8	3916.8	2181.6	4.4	2942.8
08-Mar-97	6:00	4706.1	7.3	4026.8	2353.4	6.3	3160.5
08-Mar-97	7:00	4596.4	5.5	4097.8	2523.2	4.3	3359.5
08-Mar-97	8:00	4382.6	5.3	4151.1	2763.7	4.0	3526.7
08-Mar-97	9:00	4099.1	5.2	4181.7	3174.6	3.9	3657.9
08-Mar-97	10:00	3913.1	3.8	4213.0	3769.6	2.9	3748.9
08-Mar-97	11:00	3915.0	2.0	4244.4	4418.5	1.5	3808.4
08-Mar-97	12:00	4107.5	2.7	4275.9	4837.9	2.1	4087.3
08-Mar-97	13:00	4067.2	2.2	4307.5	4962.8	1.9	4420.2
08-Mar-97	14:00	3914.8	1.5	4339.2	4926.9	1.6	4529.4
08-Mar-97	15:00	3841.4	3.9	4371.0	4804.6	3.2	4612.0
08-Mar-97	16:00	3816.3	3.7	4403.0	4600.2	4.1	4711.7
08-Mar-97	17:00	3860.1	4.7	4435.0	4378.2	4.5	4837.4
08-Mar-97	18:00	3758.1	2.9	4467.1	4228.0	2.3	4982.6
08-Mar-97	19:00	3580.3	1.9	4499.4	4216.6	1.3	5137.2
08-Mar-97	20:00	3447.5	2.0	4467.1	4278.7	1.6	5275.2
08-Mar-97	21:00	3317.9	4.4	4435.0	4253.8	3.5	5377.7
08-Mar-97	22:00	3111.6	2.4	4403.0	4171.2	6.3	5442.9
08-Mar-97	23:00	2878.1	3.5	4371.0	4105.4	3.2	5490.9
09-Mar-97	9-Mar 0:00	2659.9	6.8	4339.2	4078.7	5.0	5527.1
09-Mar-97	1:00	2473.0	1.7	4250.1	4060.6	1.6	5548.3
09-Mar-97	2:00	2357.5	2.3	4114.5	3978.6	1.7	5569.5
09-Mar-97	3:00	2282.0	0.9	3887.6	3855.8	0.8	5593.9
09-Mar-97	4:00	2189.4	3.6	3703.2	3738.8	2.5	5627.6
09-Mar-97	5:00	2099.3	1.7	3505.1	3603.9	1.3	5664.6
09-Mar-97	6:00	2002.1	1.3	3363.9	3431.0	0.9	5714.1
09-Mar-97	7:00	1914.6	1.1	3090.4	3236.9	0.8	5760.9
09-Mar-97	8:00	1894.0	2.0	2941.9	3045.0	1.4	5779.7
09-Mar-97	9:00	1916.6	1.7	2784.4	2884.0	1.4	5795.4
09-Mar-97	10:00	1923.4	1.1	2630.4	2766.4	1.0	5801.7
09-Mar-97	11:00	1951.0	1.8	2480.9	2670.6	2.2	5767.2
09-Mar-97	12:00	1998.5	1.3	2378.3	2578.8	1.0	5698.6
09-Mar-97	13:00	2013.5	1.6	2302.9	2486.2	1.2	5615.4
09-Mar-97	14:00	1973.6	2.4	2229.1	2392.3	1.8	5527.1
09-Mar-97	15:00	1898.8	3.7	2156.4	2306.3	2.8	5448.9
09-Mar-97	16:00	1829.9	4.0	2084.3	2244.5	2.8	5377.7
09-Mar-97	17:00	1765.6	1.5	2013.8	2209.8	1.1	5298.5
09-Mar-97	18:00	1693.1	1.4	1944.4	2193.1	1.0	5228.9
09-Mar-97	19:00	1622.7	0.5	1875.6	2192.1	0.4	5185.7
09-Mar-97	20:00	1570.4	0.8	1808.4	2203.2	0.6	5160.0
09-Mar-97	21:00	1541.6	0.8	1742.3	2211.4	0.6	5120.1
09-Mar-97	22:00	1517.1	0.0	1676.9	2201.1	0.0	5049.6
09-Mar-97	23:00	1490.2	0.7	1613.0	2168.2	0.5	4949.4

Fiji Flood Analysis < Rewa River (Gavin) >

		Navolau			Nausori			
		Area (km <sup>2</sup> )	1961	Area (km <sup>2</sup> )	2903			
		Rain total (mm)	488	Rain total (mm)	437			
		Q total (mm)	658	Q total (mm)	385			
		Runoff coeffing	1.3	Runoff coeffing	0.9			
Date	Time	Computed	Rain	Observed	Computed	Rain	Observed	Discharge
		Q(m <sup>3</sup> /s)	(mm)		Q(m <sup>3</sup> /s)	(mm)		
10-Mar-97	10-Mar 0:00	1459.9	0.0	1552.7	2119.3	0.0	4823.9	
10-Mar-97	1:00	1437.4		1485.1	2062.0		4688.0	
10-Mar-97	2:00	1443.0		1431.1	1999.1		4562.8	
10-Mar-97	3:00	1460.6		1384.5	1935.2		4442.9	
10-Mar-97	4:00	1468.9		1338.0	1876.0		4323.2	
10-Mar-97	5:00	1452.2		1292.2	1825.9		4216.0	
10-Mar-97	6:00	1410.7		1274.5	1783.9		4139.3	
10-Mar-97	7:00	1354.7		1247.5	1746.8		4087.3	
10-Mar-97	8:00	1293.2		1230.0	1712.7		4038.1	
10-Mar-97	9:00	1229.7		1212.2	1683.4		3977.8	
10-Mar-97	10:00	1166.0		1168.6	1663.2		3877.6	
10-Mar-97	11:00	1104.3		1168.6	1652.5		3744.5	
10-Mar-97	12:00	1045.8		1151.2	1646.5		3585.5	
10-Mar-97	13:00	991.0		1142.5	1637.1		3405.7	
10-Mar-97	14:00	940.4		1116.9	1618.3		3225.8	
10-Mar-97	15:00	893.9		1099.7	1587.9		3057.3	
10-Mar-97	16:00	851.4		1091.2	1547.8		2894.7	
10-Mar-97	17:00	812.7		1082.6	1500.4		2740.8	
10-Mar-97	18:00	777.3		1074.4	1448.7		2613.4	
10-Mar-97	19:00	745.0		1057.4	1394.8		2522.2	
10-Mar-97	20:00	715.5		1040.5	1340.5		2464.4	
10-Mar-97	21:00	688.4		1024.2	1287.3		2410.7	
10-Mar-97	22:00	663.4		1007.4	1235.8		2319.6	
10-Mar-97	23:00	640.5		1007.4	1186.8		2177.7	
11-Mar-97	11-Mar 0:00	619.3		998.8	1140.5		1999.9	
MAX		4747.7	16.8	4516.8	4962.8	17.0	5801.7	
Rain Total			488.2			436.5		

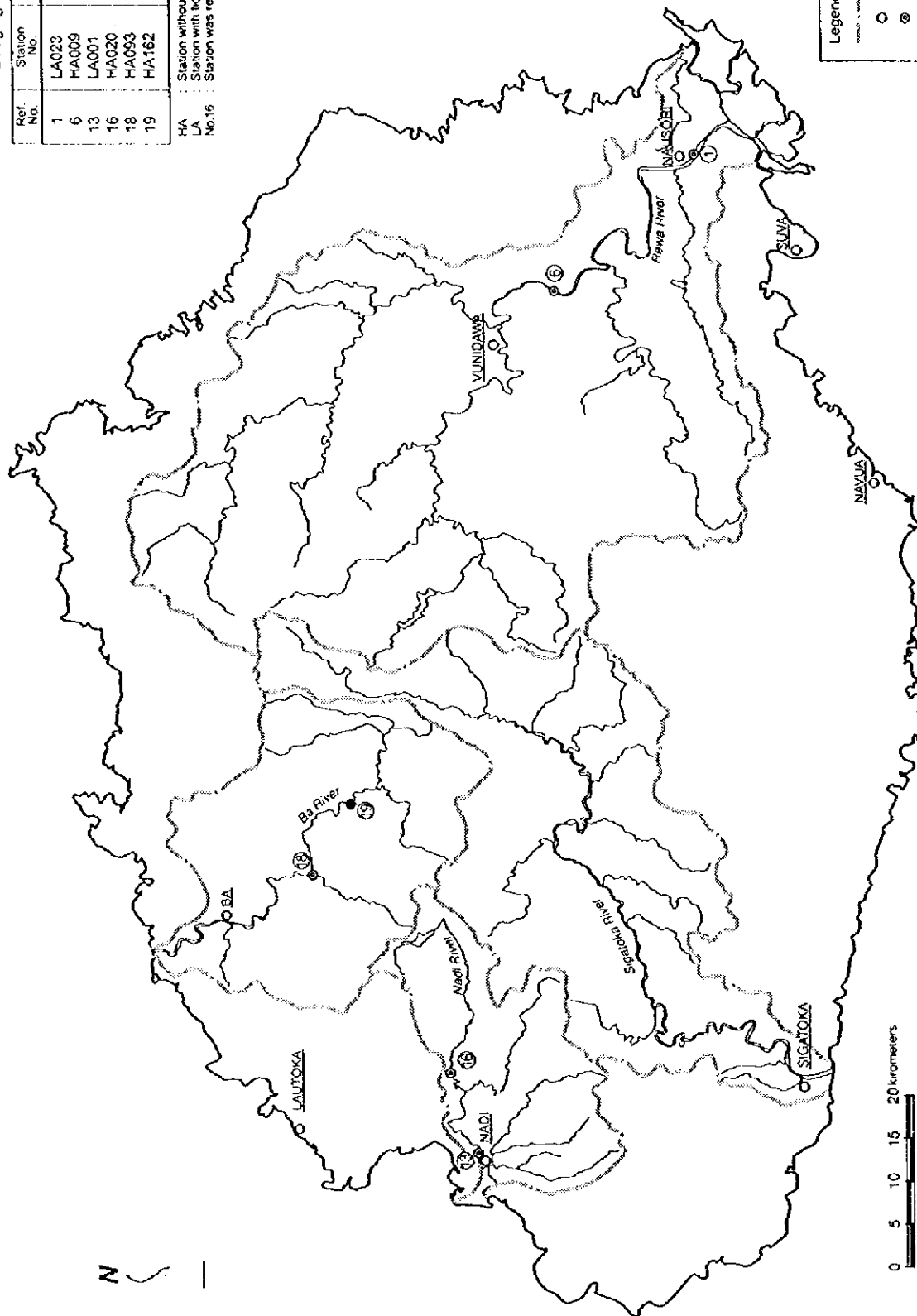


# Gauging Stations Adopted

Ref. No.	Station No.	Station Name
1	LA023	Nausori-crt
6	HA009	Navolau
13	LA001	Nadi-Bridge
16	HA020	Votualevu
18	HA093	Toge
19	HA162	Navala

HA : Station without tidal influence  
 LA : Station with tidal influence  
 No.15 : Station was reopened in January, 1997

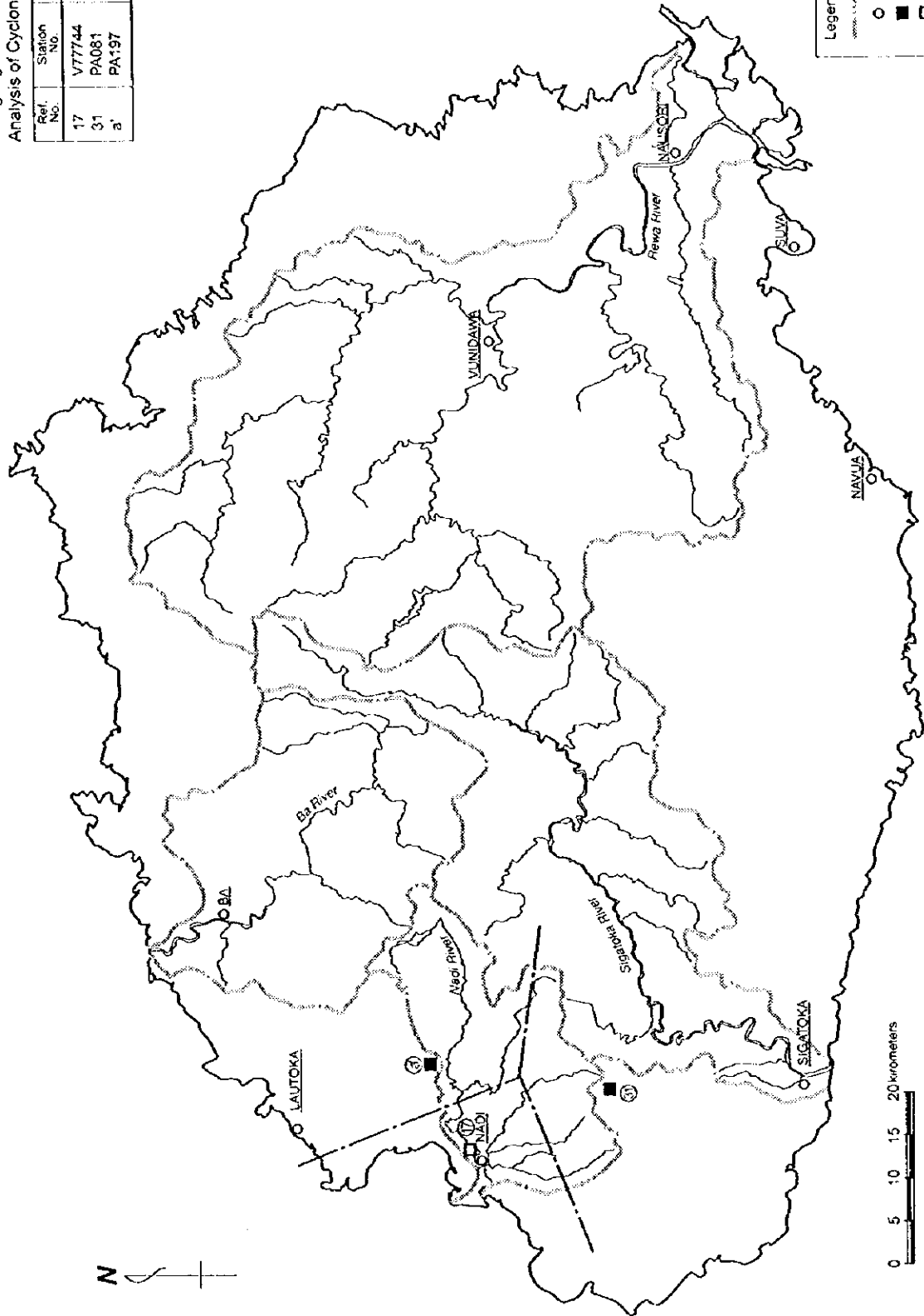
Legend	
	Boundary of Watershed
	City, Town, Village
	Gauging Station Operated
	Gauging Station Closed



Locations of Gauging Stations

Rain gauge Stations available for Runoff  
Analysis of Cyclone Gavin in Nadi Watershed

Ref. No.	Station No.	Station Name	River Basin
17	V77744	Nadi Airport	Nadi
31	PA081	Vunamoli	Others
a'	PA197	Nadrugu	Others



Legend

	Boundary of Watershed
	City, Town, Village
	Rain gauge Station
	Meteorological Station

Locations of Rain gauge Stations



Fiji flood analysis (1) < Nadi River (Gavin) >  
Rain

Original Data					
	Date	Time	PA197	V77744	PA081
1	06-Mar-97	6-Mar 0.00			
2	06-Mar-97	1.00	0.0	0.0	0.0
3	06-Mar-97	2.00	0.0	0.0	0.0
4	06-Mar-97	3.00	0.0	0.0	0.0
5	06-Mar-97	4.00	0.5	0.0	0.0
6	06-Mar-97	5.00	0.5	0.0	0.0
7	06-Mar-97	6.00	0.0	1.0	0.0
8	06-Mar-97	7.00	0.0	1.2	0.0
9	06-Mar-97	8.00	0.0	0.0	0.0
10	06-Mar-97	9.00	0.0	0.0	0.0
11	06-Mar-97	10.00	0.0	0.0	0.0
12	06-Mar-97	11.00	0.0	0.0	0.0
13	06-Mar-97	12.00	0.0	0.0	0.0
14	06-Mar-97	13.00	0.0	0.0	0.0
15	06-Mar-97	14.00	0.0	0.0	0.0
16	06-Mar-97	15.00	0.0	0.0	0.0
17	06-Mar-97	16.00	2.0	0.9	0.0
18	06-Mar-97	17.00	3.5	1.3	0.5
19	06-Mar-97	18.00	1.5	1.2	0.0
20	06-Mar-97	19.00	0.0	0.8	0.0
21	06-Mar-97	20.00	0.0	0.2	0.5
22	06-Mar-97	21.00	1.5	0.0	0.0
23	06-Mar-97	22.00	1.5	0.8	0.5
24	06-Mar-97	23.00	1.0	0.2	0.0
25	07-Mar-97	7-Mar 0.00	3.0	0.2	0.5
26	07-Mar-97	1.00	0.0	1.0	0.5
27	07-Mar-97	2.00	1.0	0.6	0.5
28	07-Mar-97	3.00	0.5	1.4	1.0
29	07-Mar-97	4.00	0.0	0.4	0.5
30	07-Mar-97	5.00	0.0	0.1	0.0
31	07-Mar-97	6.00	0.0	0.6	0.5
32	07-Mar-97	7.00	0.0	0.1	0.5
33	07-Mar-97	8.00	5.5	0.6	2.5
34	07-Mar-97	9.00	3.0	2.6	3.0
35	07-Mar-97	10.00	1.5	0.0	0.5
36	07-Mar-97	11.00	2.0	0.0	2.0
37	07-Mar-97	12.00	2.0	2.2	0.5
38	07-Mar-97	13.00	3.0	0.2	1.0
39	07-Mar-97	14.00	6.0	2.0	3.0
40	07-Mar-97	15.00	13.0	5.3	6.0
41	07-Mar-97	16.00	28.0	14.7	19.0
42	07-Mar-97	17.00	16.5	37.2	20.0
43	07-Mar-97	18.00	24.0	22.4	12.5
44	07-Mar-97	19.00	24.0	9.5	37.5
45	07-Mar-97	20.00	38.5	22.1	13.0
46	07-Mar-97	21.00	18.5	12.5	26.0
47	07-Mar-97	22.00	33.0	18.4	19.5
48	07-Mar-97	23.00	54.0	15.7	14.0
49	08-Mar-97	8-Mar 0.00	14.0	47.3	24.5
50	08-Mar-97	1.00	10.0	13.1	24.0
51	08-Mar-97	2.00	23.5	4.1	14.5
52	08-Mar-97	3.00	12.5	7.0	9.0
53	08-Mar-97	4.00	8.0	11.3	10.5
54	08-Mar-97	5.00	9.0	7.3	5.0
55	08-Mar-97	6.00	1.0	1.1	6.5
56	08-Mar-97	7.00	1.5	4.3	5.5
57	08-Mar-97	8.00	5.0	4.4	5.5
58	08-Mar-97	9.00	9.5	9.7	6.0
59	08-Mar-97	10.00	3.5	10.5	11.0
60	08-Mar-97	11.00	5.0	17.4	13.0
61	08-Mar-97	12.00	12.5	10.7	26.0
62	08-Mar-97	13.00	12.5	8.4	14.5
63	08-Mar-97	14.00	5.0	0.0	1.0
64	08-Mar-97	15.00	0.0	3.7	2.0
65	08-Mar-97	16.00	0.0	1.1	2.0
66	08-Mar-97	17.00	0.5	0.6	2.5

Fiji flood analysis (I) < Nadi River (Gavin) >  
Rain

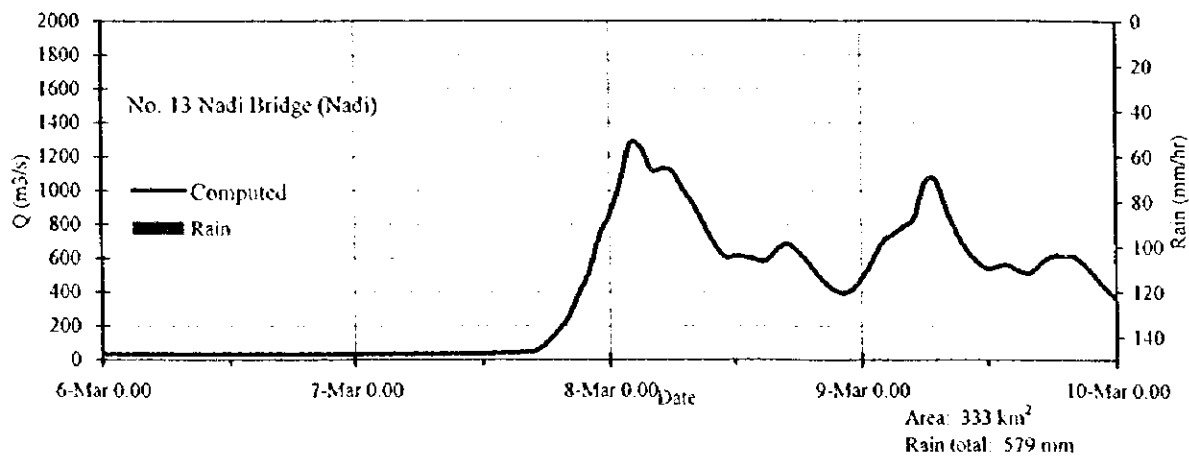
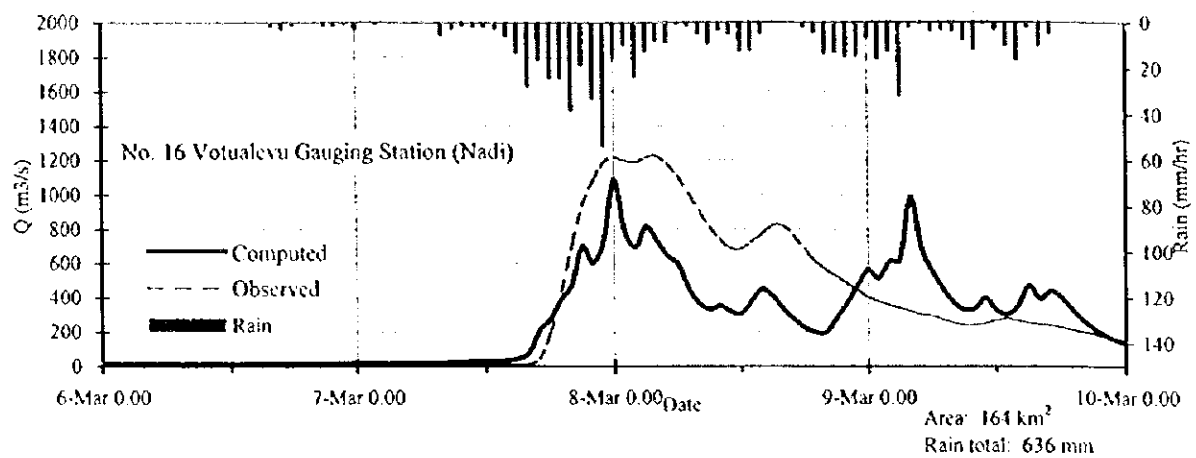
Original Data					
	Date	Time	PA197	V77744	PA081
67	08-Mar-97	18.00	2.0	6.7	3.5
68	08-Mar-97	19.00	4.5	0.3	5.0
69	08-Mar-97	20.00	13.5	1.2	4.0
70	08-Mar-97	21.00	13.0	1.0	1.0
71	08-Mar-97	22.00	14.5	1.1	4.5
72	08-Mar-97	23.00	14.5	0.4	1.5
73	09-Mar-97	9-Mar 0.00	6.5	0.6	5.0
74	09-Mar-97	1.00	16.0	0.6	1.0
75	09-Mar-97	2.00	12.5	0.0	2.0
76	09-Mar-97	3.00	32.0	2.1	2.0
77	09-Mar-97	4.00	2.5	0.0	0.0
78	09-Mar-97	5.00	1.0	0.0	0.5
79	09-Mar-97	6.00	4.0	0.0	0.0
80	09-Mar-97	7.00	3.5	0.0	1.0
81	09-Mar-97	8.00	4.0	0.0	4.5
82	09-Mar-97	9.00	8.0	4.3	2.0
83	09-Mar-97	10.00	12.0	7.2	9.5
84	09-Mar-97	11.00	1.0	0.0	0.0
85	09-Mar-97	12.00	3.5	0.2	9.5
86	09-Mar-97	13.00	10.5	0.7	1.5
87	09-Mar-97	14.00	16.5	0.0	6.0
88	09-Mar-97	15.00	2.5	0.0	0.0
89	09-Mar-97	16.00	10.5	0.0	4.0
90	09-Mar-97	17.00	5.0	0.0	0.5
91	09-Mar-97	18.00	0.5	0.0	0.5
92	09-Mar-97	19.00	0.0	0.0	0.5
93	09-Mar-97	20.00	0.0	0.0	0.0
94	09-Mar-97	21.00	0.0	0.0	0.0
95	09-Mar-97	22.00	0.0	0.0	0.0
96	09-Mar-97	23.00	0.0	0.0	0.0
97	10-Mar-97	10-Mar 0.00	0.0	0.0	0.0
Total			636.0	365.8	438.0

Fiji Flood Analysis < Nadi River (Gavin) >

		Votualevu Gauging			Nadi Bridge		
		Area (km <sup>2</sup> )			Area (km <sup>2</sup> )		
		Rain total (mm)			Rain total (mm)		
		636			579		
Date	Time	Computed	Rain	Observed	Computed	Rain	Observed
		Q(m <sup>3</sup> /s)			Q(m <sup>3</sup> /s)		
06-Mar-97	6-Mar 0.00	18.4		8.3	32.8		
06-Mar-97	1.00	18.4	0.0	8.3	32.8	0.0	
06-Mar-97	2.00	18.4	0.0	8.3	32.8	0.0	
06-Mar-97	3.00	18.4	0.0	8.3	32.8	0.0	
06-Mar-97	4.00	18.4	0.5	8.3	32.8	0.4	
06-Mar-97	5.00	18.4	0.5	8.3	32.8	0.4	
06-Mar-97	6.00	18.4	0.0	8.3	32.8	0.2	
06-Mar-97	7.00	18.4	0.0	8.3	32.8	0.2	
06-Mar-97	8.00	18.4	0.0	8.3	32.8	0.0	
06-Mar-97	9.00	18.4	0.0	8.3	32.8	0.0	
06-Mar-97	10.00	18.4	0.0	8.3	32.8	0.0	
06-Mar-97	11.00	18.4	0.0	8.3	32.8	0.0	
06-Mar-97	12.00	18.4	0.0	8.3	32.8	0.0	
06-Mar-97	13.00	18.4	0.0	8.3	32.8	0.0	
06-Mar-97	14.00	18.4	0.0	8.3	32.8	0.0	
06-Mar-97	15.00	18.4	0.0	8.3	32.8	0.0	
06-Mar-97	16.00	18.4	2.0	8.3	32.8	1.6	
06-Mar-97	17.00	18.4	3.5	8.3	32.8	2.9	
06-Mar-97	18.00	18.6	1.5	8.3	32.8	1.4	
06-Mar-97	19.00	18.7	0.0	8.3	32.8	0.1	
06-Mar-97	20.00	18.8	0.0	8.3	32.8	0.0	
06-Mar-97	21.00	18.8	1.5	8.3	32.9	1.2	
06-Mar-97	22.00	19.0	1.5	8.3	33.0	1.3	
06-Mar-97	23.00	19.3	1.0	8.3	33.0	0.8	
07-Mar-97	7-Mar 0.00	19.5	3.0	8.3	33.1	2.3	
07-Mar-97	1.00	20.5	0.0	8.3	33.3	0.2	
07-Mar-97	2.00	20.6	1.0	8.3	33.4	0.9	
07-Mar-97	3.00	21.1	0.5	8.3	33.7	0.7	
07-Mar-97	4.00	21.4	0.0	8.3	34.1	0.1	
07-Mar-97	5.00	21.5	0.0	8.3	34.4	0.0	
07-Mar-97	6.00	21.5	0.0	8.9	34.9	0.1	
07-Mar-97	7.00	21.4	0.0	8.9	35.2	0.0	
07-Mar-97	8.00	21.4	5.5	8.9	35.5	4.5	
07-Mar-97	9.00	24.6	3.0	8.9	35.7	2.9	
07-Mar-97	10.00	27.4	1.5	8.9	36.0	1.2	
07-Mar-97	11.00	28.9	2.0	9.5	36.5	1.6	
07-Mar-97	12.00	31.1	2.0	9.5	37.6	1.9	
07-Mar-97	13.00	33.4	3.0	10.2	39.2	2.4	
07-Mar-97	14.00	37.2	6.0	11.1	40.9	5.1	
07-Mar-97	15.00	47.3	13.0	12.7	43.1	11.2	
07-Mar-97	16.00	80.9	28.0	17.1	46.4	25.3	
07-Mar-97	17.00	213.4	16.5	47.1	55.8	20.1	
07-Mar-97	18.00	276.9	24.0	200.9	101.5	23.0	
07-Mar-97	19.00	391.8	24.0	433.6	168.5	22.6	
07-Mar-97	20.00	479.7	38.5	709.0	247.9	34.0	
07-Mar-97	21.00	703.0	18.5	942.2	389.1	18.0	
07-Mar-97	22.00	605.7	33.0	1081.8	520.5	29.7	
07-Mar-97	23.00	734.2	54.0	1191.4	734.0	45.1	
08-Mar-97	8-Mar 0.00	1092.1	14.0	1216.8	862.8	20.1	
08-Mar-97	1.00	793.7	10.0	1204.1	1041.8	11.5	
08-Mar-97	2.00	696.0	23.5	1191.4	1275.1	19.8	
08-Mar-97	3.00	816.9	12.5	1216.8	1261.3	11.3	
08-Mar-97	4.00	739.6	8.0	1229.9	1124.9	8.7	
08-Mar-97	5.00	649.1	9.0	1178.6	1128.4	8.5	
08-Mar-97	6.00	597.6	1.0	1106.4	1113.7	1.5	
08-Mar-97	7.00	454.6	1.5	1009.5	1006.2	2.3	
08-Mar-97	8.00	367.1	5.0	907.9	915.3	5.0	
08-Mar-97	9.00	332.3	9.5	811.3	796.8	9.3	
08-Mar-97	10.00	355.3	3.5	742.1	683.2	5.2	
08-Mar-97	11.00	319.2	5.0	691.3	610.3	7.6	
08-Mar-97	12.00	310.1	12.5	682.8	612.0	13.1	
08-Mar-97	13.00	381.1	12.5	726.6	608.6	11.9	
08-Mar-97	14.00	447.9	5.0	771.3	592.0	4.0	
08-Mar-97	15.00	410.9	0.0	821.9	586.1	0.7	
08-Mar-97	16.00	334.1	0.0	821.9	651.1	0.3	
08-Mar-97	17.00	274.2	0.5	761.2	684.4	0.7	
08-Mar-97	18.00	227.8	2.0	682.8	637.1	2.8	
08-Mar-97	19.00	202.3	4.5	618.8	569.4	3.9	
08-Mar-97	20.00	201.6	13.5	566.0	490.0	10.9	
08-Mar-97	21.00	284.1	13.0	528.3	432.4	10.3	

Fiji Flood Analysis < Nadi River (Gavin) >

		Votualevu Gauging			Nadi Bridge		
		Area (km <sup>2</sup> )			Area (km <sup>2</sup> )		
		164			333		
		Rain total (mm)			Rain total (mm)		
		636			579		
Date	Time	Computed	Rain	Observed	Computed	Rain	Observed
		Q(m <sup>3</sup> /s)			Q(m <sup>3</sup> /s)		
08-Mar-97	22.00	371.4	14.5	486.3	397.8	11.7	
08-Mar-97	23.00	474.2	14.5	446.2	409.8	11.4	
09-Mar-97	9-Mar 0.00	561.8	6.5	402.5	477.1	5.5	
09-Mar-97	1.00	513.9	16.0	380.1	579.3	12.5	
09-Mar-97	2.00	613.9	12.5	357.2	695.7	9.7	
09-Mar-97	3.00	626.1	32.0	340.3	740.0	25.0	
09-Mar-97	4.00	988.1	2.5	324.1	785.9	1.9	
09-Mar-97	5.00	693.4	1.0	304.4	837.6	0.8	
09-Mar-97	6.00	553.1	4.0	294.1	1045.9	3.1	
09-Mar-97	7.00	452.4	3.5	274.4	1066.0	2.8	
09-Mar-97	8.00	373.1	4.0	255.4	896.2	3.4	
09-Mar-97	9.00	328.5	8.0	242.8	753.3	7.0	
09-Mar-97	10.00	338.7	12.0	242.8	647.2	11.1	
09-Mar-97	11.00	398.6	1.0	252.0	579.5	0.8	
09-Mar-97	12.00	328.9	3.5	269.5	539.5	3.4	
09-Mar-97	13.00	306.3	10.5	279.4	553.4	8.3	
09-Mar-97	14.00	352.0	16.5	269.5	556.2	13.1	
09-Mar-97	15.00	471.9	2.5	255.4	522.3	1.9	
09-Mar-97	16.00	395.7	10.5	247.4	513.8	8.4	
09-Mar-97	17.00	441.6	5.0	242.8	576.7	3.9	
09-Mar-97	18.00	402.1	0.5	229.4	612.9	0.4	
09-Mar-97	19.00	328.1	0.0	216.6	614.0	0.0	
09-Mar-97	20.00	268.2	0.0	203.9	608.8	0.0	
09-Mar-97	21.00	219.8	0.0	189.0	558.9	0.0	
09-Mar-97	22.00	182.8	0.0	173.6	488.3	0.0	
09-Mar-97	23.00	155.0	0.0	162.7	421.0	0.0	
10-Mar-97	10-Mar 0.00	133.8	0.0	149.4	364.0	0.0	
MAX		1092.1	54.0	1229.9	1275.1	45.1	
Rain Total			636.0			578.9	



## **DATA 5**

### **CROSS SECTIONS OF 4 RIVERS**



### Explanation

Cross sections of 4 rivers surveyed by the Study Team are saved in a floppy disk. The cross section survey was conducted every 500 m and it covered the following area; however, data for Nadi tributaries (Malakua and Nawaka) is not included in the floppy disk.

- Rewa: from river mouth to 50 km upstream
- Sigatoka : from river mouth to 50 km upstream
- Nadi: from river mouth to 25 km upstream
  - Malakua: from confluence with Nadi river to 3 km upstream
  - Nawaka: from confluence with Nadi river to 7 km upstream
- Ba: from river mouth to 35 km upstream.

Data is saved as a text format and an example is shown below. There are four columns, river name, distance from river mouth, X coordinates, Y coordinates and number of data set ("count"). In compliance with the request from the counterpart agency (Drainage and Irrigation Division, MAFF), the results of the cross section survey were drawn, looking upstream of river. Therefore, (-) X coordinates denote the left hand side, looking upstream of river, while (+) X coordinates denote the right hand side. Y coordinates shown elevations above mean sea level.

	DISTANCE	X	Y	count
REWA	16000	-95.93	2.82	31
		-84.17	1.58	
		-51.66	1.61	
		-49.49	-0.37	
		-39.82	-2.35	
		-30.5	-3.2	
		-24.4	-3.3	
		-15.2	-3.3	
		0	-3.8	
		12.2	-3.3	
		19.7	-3.1	
		33.2	-3.4	
		46.7	-3.5	
		54.3	-3.3	
		61	-3.3	
		88	-3.5	
		108.9	-3.6	
		125.4	-3.6	
		141.9	-3.5	
		158.5	-3.2	
		175	-3	
		188.6	-2.9	
		204.1	-2.5	
		225.4	-2.4	
		233.2	-0.5	
		247.27	-0.08	
		263.83	0.23	
		266.03	1.73	
		295.05	1.42	
		303	5.18	
		327.09	5.47	





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