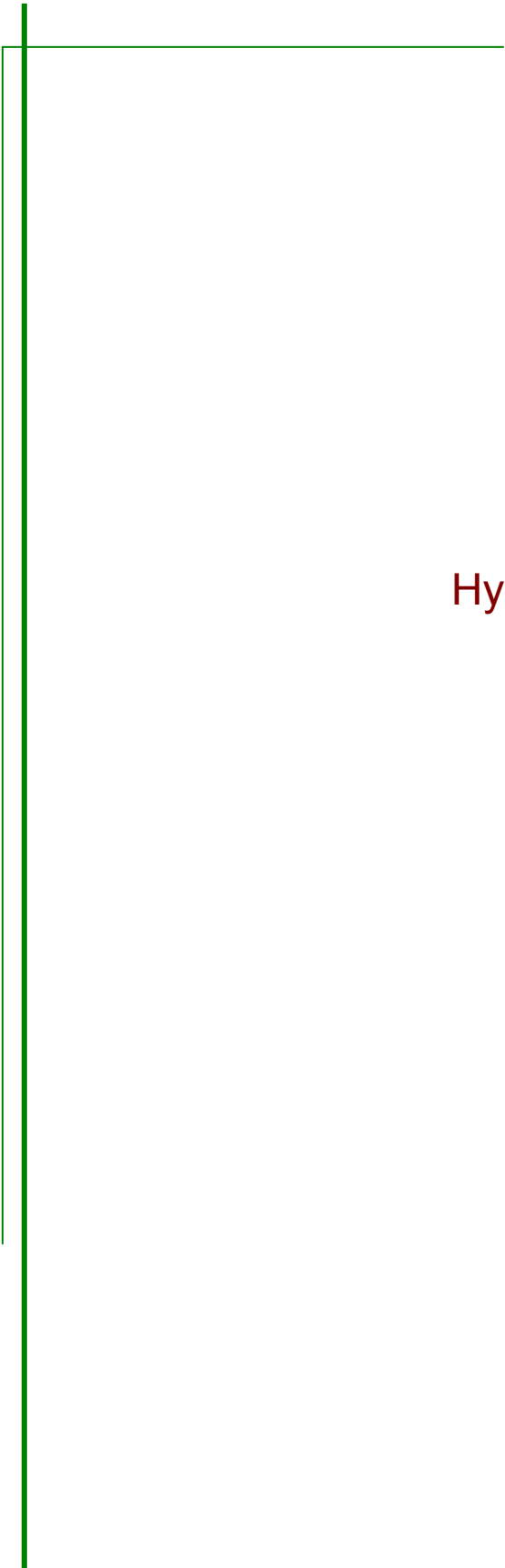




Appendix A

Hydrological Data

Table A1 - Inflow Flood Peaks & Volumes:

	1 in 20 AEP			1 in 100 AEP		
Storm Duration	Time Inc	Peak Inflow	Volume	Time Inc	Peak Inflow	Volume
Hrs		m3/sec	ML		m3/sec	ML
0.50	5 min	759	325	5 min	2,977	1,295
0.75	5 min	841	576	5 min	2,506	1,875
1.00	5 min	1,123	832	5 min	2,847	2,381
1.50	5 min	1,297	1,486	5 min	2,769	3,458
2.00	5 min	1,046	1,933	5 min	2,567	4,162
3.00	0.25 h	854	3,112	0.25 h	1,802	5,856
4.50	0.25 h	1,003	4,152	0.25 h	1,909	7,407
6.00	0.5 h	915	5,182	0.5 h	1,843	8,891
9.00	0.5 h	1,319	6,660	0.5 h	2,084	11,111
12.00	0.5 h	1,436	7,747	0.5 h	2,224	12,826
18.00	1 h	1,008	9,835	1 h	1,632	15,744
24.00	1 h	1,125	11,225	1 h	1,762	17,716
30.00	2 h	846	12,344	2 h	1,310	19,849
36.00	2 h	816	13,462	2 h	1,275	21,243
48.00	2 h	927	14,830	2 h	1,452	23,368
72.00	4 h	738	17,872	4 h	1,096	27,083

Table A2 - Inflow Flood Peaks & Volumes: GSDM Methodology

Method	Storm Duration	1 in 1,000 AEP		1 in 10,000 AEP		1 in 100,000 AEP		1 in 500,000 AEP		PMPDF	
		Peak Inflow	Inflow Volume	Peak Inflow	Inflow Volume	Peak Inflow	Inflow Volume	Peak Inflow	Inflow Volume	Peak Inflow	Inflow Volume
	Hrs	m3/sec	ML	m3/sec	ML	m3/sec	ML	m3/sec	ML	m3/sec	ML
GSDM	1	3,016	4,953	4,361	6,921	6,060	9,312	7,254	10,933	9,512	50,474
	1.5	2,913	6,287	4,241	8,746	5,984	11,841	7,252	14,008	9,596	64,808
	2	3,098	18,920	4,425	26,014	6,051	34,429	7,210	40,250	9,424	74,002
	2.5	3,086	21,303	4,394	29,349	5,976	38,717	7,133	45,354	9,355	83,624
	3	3,056	9,953	4,281	13,390	5,645	17,129	6,792	20,475	8,817	90,885
	4	2,922	11,425	4,061	15,379	5,340	19,724	6,343	23,253	8,114	102,254
	5	2,882	12,688	4,000	17,104	5,210	21,821	6,040	25,215	7,592	110,464
	6	2,770	14,094	3,776	18,667	4,850	23,493	5,558	26,797	6,985	117,558

Table A3 - Inflow Flood Peaks & Volumes: GSAM & GTSMR Methodologies

Method	Storm Duration	1 in 1,000 AEP		1 in 10,000 AEP		1 in 100,000 AEP		1 in 500,000 AEP		PMPDF	
		Peak Inflow	Inflow Volume	Peak Inflow	Inflow Volume	Peak Inflow	Inflow Volume	Peak Inflow	Inflow Volume	Peak Inflow	Inflow Volume
	Hrs	m3/sec	ML	m3/sec	ML	m3/sec	ML	Hrs	ML	m3/sec	ML
GSAM	9	2,416	17,061	3,243	22,659	4,065	28,191	4,675	32,278	5,729	140,418
	12	2,103	19,883	2,810	26,422	3,428	32,063	3,981	37,073	4,753	157,762
	24	1,582	26,856	2,143	35,320	2,672	43,799	3,057	49,966	3,788	221,776
	36	1,307	30,359	1,710	39,431	2,141	49,199	2,432	55,574	2,989	245,277
	48	1,456	34,438	1,868	43,992	2,320	54,135	2,606	60,659	3,116	259,912
	72	1,364	38,496	1,744	48,766	2,118	58,643	2,414	66,426	2,749	271,041
	96									1,940	297,863
GTSMR	9	2,454	16,790	3,288	22,280	4,084	27,486	4,694	31,464	5,647	140,569
	12	2,215	19,648	2,910	25,717	3,533	31,087	3,953	34,685	4,672	145,939
	24	1,758	26,463	2,339	34,528	2,832	41,537	3,143	46,112	3,810	200,309
	36	1,543	30,294	2,052	40,026	2,567	49,594	2,890	55,902	3,507	242,989
	48	1,560	33,722	2,074	44,749	2,613	55,989	3,000	64,203	3,670	281,206
	72	1,429	39,203	1,982	53,646	2,528	67,959	2,940	78,766	3,658	350,306
	96									3,387	391,739

**Table A4 - 1 in 100 Years ARI Design Flood Peak Discharges
Seasonal Peak Discharges Compared with
Annual Peak Discharges**

Storm Duration	Peak Inflow Discharge				
	Annual Series	December to March	April to May	June to September	October to November
hrs	m3/sec	m3/sec	m3/sec	m3/sec	m3/sec
0.50	2,611				
0.75	2,200				
1.00	2,512	2506	1548	995	2221
1.50	2,433				
2.00	2,261				
3.00	1,552	1272	959	684	1120
4.50	1,646				
6.00	1,582	1280	922	757	1073
9.00	1,815				
12.00	1,937	1783	1151	1115	1438
18.00	1,415				
24.00	1,529	1695	901	903	1157
30.00	1,132				
36.00	1,102	1338	715	636	811
48.00	1,258	1605	873	704	906
72.00	944	1266	738	509	657

**Table A5 - 1 in 1,000 Years ARI Design Flood Peak Discharges
Seasonal Peak Discharges Compared with
Annual Peak Discharges**

	Storm Duration	Peak Inflow Discharge				
		Annual Series	December to March	April to May	June to September	October to November
	hrs	m3/sec	m3/sec	m3/sec	m3/sec	m3/sec
GDAM	1	3,016	2615	1846	1180	2541
	1.5	2,913				
	2	3,098				
	2.5	3,086				
	3	3,056	2174	1830	1277	2068
	4	2,922				
	5	2,882				
	6	2,770	2010	1643	1274	1891
GSAM	9	2,416				
	12	2,103	1696	1234	1159	1569
	24	1,582	1535	902	958	1171
	36	1,307	1468	848	740	963
	48	1,456	1627	1042	791	1042
	72	1,364	1601	1089	751	1013

**Table A6 - PMP Design Flood Peak Discharges
Seasonal Peak Discharges Compared with
Annual Peak Discharges**

	Storm Duration	Peak Inflow Discharge				
		Annual Series	December to March	April to May	June to September	October to November
	hrs	m3/sec	m3/sec	m3/sec	m3/sec	m3/sec
GDAM	1	9,512	9590	7577	5598	7577
	1.5	9,596				
	2	9,424				
	2.5	9,355				
	3	8,817	8899	7055	5052	7055
	4	8,114				
	5	7,592				
	6	6,985	6949	5728	4028	5606
GSAM	9	5,729				
	12	4,753	4825	3744	3145	3684
	24	3,788	3707	2783	2783	2783
	36	2,989	2911	2285	2285	2285
	48	3,116	3131	2535	2488	2488
	72	2,749	2687	2587	2406	2406
	96	1,940	1796	1770	1642	1642