

18. Appendix F. Exceedance Flows for No Action and Dam Removal Alternatives Based Upon Index Sequential Hydrology

18. APPENDIX F. EXCEEDANCE FLOWS FOR NO ACTION AND DAM REMOVAL ALTERNATIVES BASED UPON INDEX SEQUENTIAL HYDROLOGY

Table 18-1. Exceedance Flows for Dam Removal Alternative.

Keno – Dam Removal													
Month	0.01	0.05	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.95	0.99
1	8713	5376	3295	2152	1859	1711	1537	1060	650	568	475	362	283
2	8486	5240	4361	2946	2336	1991	1606	1154	694	517	428	377	284
3	8572	6538	5375	3896	2931	2521	2214	2030	1879	1446	939	782	718
4	7174	5719	4919	3659	2996	2546	2181	1891	1660	1418	1005	870	756
5	4605	3541	3017	2507	2233	1956	1745	1510	1298	1005	811	681	497
6	2448	2366	2264	2072	1900	1717	1372	1238	1035	860	731	658	571
7	1825	1660	1549	1338	1095	965	763	673	576	466	412	363	274
8	1187	1042	927	865	805	772	740	707	665	621	566	537	479
9	1214	1161	1094	976	908	873	838	801	747	689	612	571	539
10	1053	998	928	876	823	779	738	697	661	626	533	448	284
11	3299	1195	1040	870	794	740	690	651	613	547	448	410	362
12	6599	3386	1915	1227	927	846	766	691	635	578	448	410	284
Iron Gate – Dam Removal													
Month	0.01	0.05	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.95	0.99
1	11284	6837	4317	2762	2387	2213	1994	1642	1215	1052	981	946	856
2	10465	6739	5594	3720	3061	2635	2242	1847	1197	1036	948	886	823
3	11036	8133	6509	4765	3778	3214	2949	2698	2448	2007	1479	1264	1102
4	8920	7197	6043	4652	3829	3360	2952	2535	2281	2012	1385	1306	1242
5	5813	4569	3962	3362	2915	2534	2315	2120	1832	1487	1209	1138	1082
6	3234	3046	2826	2602	2394	2209	1857	1649	1461	1273	1049	989	940
7	2174	2068	1968	1764	1475	1291	1153	1040	967	895	824	772	716
8	1604	1464	1370	1251	1194	1153	1112	1070	1023	976	928	867	818
9	1606	1536	1448	1364	1303	1243	1196	1153	1111	1068	998	963	935
10	1407	1382	1350	1286	1223	1177	1130	1083	1033	981	930	834	731
11	3799	1408	1371	1297	1225	1177	1129	1081	1017	947	839	773	716
12	9726	5026	2979	1630	1382	1324	1266	1184	1060	1005	951	878	730

18. APPENDIX F. EXCEEDANCE FLOWS FOR NO ACTION AND DAM REMOVAL ALTERNATIVES BASED UPON INDEX SEQUENTIAL HYDROLOGY

Seiad – Dam Removal													
Month	0.01	0.05	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.95	0.99
1	24683	17276	11811	6796	4982	4262	3553	2950	2543	2105	1807	1648	1451
2	18876	13603	9972	8053	6503	5392	4477	3946	3153	2412	1778	1566	1375
3	19398	14669	12042	8977	7094	5968	5284	4675	4084	3523	2462	2162	1743
4	14692	11460	10095	8269	7091	6035	5122	4647	4196	3392	2556	2127	1714
5	12020	9768	8636	7173	5799	5016	4528	4148	3841	3174	2199	1909	1652
6	8956	7176	5992	4830	4108	3586	3161	2843	2422	2042	1598	1353	1134
7	4298	3455	3034	2522	2060	1755	1562	1386	1260	1135	993	898	761
8	2332	1854	1746	1503	1382	1336	1291	1246	1186	1116	1024	951	841
9	2094	1840	1757	1609	1533	1457	1387	1324	1261	1186	1096	1031	949
10	3195	1961	1821	1692	1595	1535	1475	1414	1330	1245	1126	1056	951
11	7641	4494	3130	2436	2158	1874	1752	1635	1473	1349	1249	1167	1082
12	18664	11002	7635	4796	3491	2652	2311	2106	1939	1739	1520	1414	1169
Orleans – Dam Removal													
Month	0.01	0.05	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.95	0.99
1	71076	40971	30339	20425	15335	11909	9566	7579	6342	5316	4358	3035	2217
2	51278	34715	26214	19522	16577	14385	12105	10075	8511	6913	4930	3959	2119
3	46223	32295	26516	20340	16838	14456	12688	11138	9805	8256	6327	5088	3233
4	28716	23982	21681	18349	15291	13606	12215	10798	9328	7891	6305	4715	3577
5	25073	21218	19209	16673	14254	11848	10206	9206	8134	6623	4799	3997	3276
6	20282	15104	12626	9710	8300	7169	6181	5360	4620	3767	2808	2283	1778
7	8296	6077	5156	4111	3509	3039	2701	2440	2206	1938	1601	1384	1216
8	3648	2835	2671	2395	2203	2073	1968	1863	1745	1626	1400	1261	1110
9	3353	2512	2389	2218	2091	1994	1898	1805	1714	1623	1416	1263	1109
10	8215	3554	3050	2618	2367	2182	2058	1949	1833	1697	1493	1291	1105
11	26304	15507	10672	6675	4885	3898	3269	2739	2393	2174	1979	1884	1478
12	53820	33047	23740	14446	10853	8509	7018	5878	4859	3894	2946	2516	2044

18. APPENDIX F. EXCEEDANCE FLOWS FOR NO ACTION AND DAM REMOVAL ALTERNATIVES BASED UPON INDEX SEQUENTIAL HYDROLOGY

Klamath – Dam Removal													
Month	0.01	0.05	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.95	0.99
1	144969	90661	70144	49767	37517	28858	23875	19034	14383	10811	8112	6589	3617
2	107147	78958	62557	43383	35619	31167	27183	23935	20744	16996	12053	9097	3628
3	101402	75480	59282	44009	36213	30950	26764	23933	20754	18088	14993	11582	7654
4	68772	51697	44196	35846	30030	25562	21981	19624	17589	15516	12580	9858	6106
5	44819	36956	33791	29796	26256	20369	17728	15903	13936	11706	9866	8578	5915
6	38074	25636	20425	16238	13943	12127	10467	9083	7762	6492	5296	4532	3437
7	14685	9949	8538	6913	5813	5094	4550	4117	3748	3325	2938	2609	1881
8	6714	4938	4399	3898	3602	3378	3170	2977	2788	2607	2374	2175	1688
9	6036	4830	4120	3663	3415	3181	2965	2780	2638	2497	2290	2178	1941
10	17879	7453	5818	4724	4160	3789	3522	3266	2992	2723	2457	2258	1948
11	72926	41734	24489	14314	10488	7995	6464	5383	4611	3922	3360	3068	2694
12	124313	74833	54421	34345	26321	20895	17079	13818	11052	8828	6240	5063	3260
UKL Elevations - Dam Removal													
Month	0.01	0.05	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.95	0.99
1	4142.3	4142.2	4142.2	4142.0	4141.9	4141.7	4141.4	4141.1	4141.0	4140.7	4140.4	4140.2	4139.5
2	4142.7	4142.7	4142.6	4142.5	4142.4	4142.3	4142.1	4141.8	4141.7	4141.4	4141.1	4140.9	4140.6
3	4143.0	4143.0	4142.9	4142.9	4142.8	4142.8	4142.7	4142.6	4142.4	4142.2	4141.9	4141.6	4141.3
4	4143.2	4143.1	4143.1	4143.1	4143.0	4143.0	4143.0	4142.8	4142.7	4142.6	4142.2	4141.9	4141.7
5	4143.2	4143.2	4143.2	4143.1	4143.1	4143.0	4142.9	4142.7	4142.5	4142.3	4142.0	4141.7	4141.3
6	4143.2	4143.1	4143.0	4142.8	4142.6	4142.4	4142.2	4142.0	4141.9	4141.7	4141.4	4141.1	4140.5
7	4142.7	4142.3	4142.0	4141.7	4141.5	4141.3	4141.1	4141.0	4140.8	4140.6	4140.3	4140.1	4139.4
8	4141.6	4141.1	4140.8	4140.6	4140.4	4140.2	4140.1	4140.0	4139.8	4139.6	4139.4	4139.2	4138.5
9	4140.8	4140.4	4140.1	4139.8	4139.6	4139.5	4139.4	4139.3	4139.1	4139.0	4138.8	4138.5	4137.7
10	4140.9	4140.3	4140.0	4139.6	4139.5	4139.4	4139.2	4139.1	4139.0	4138.9	4138.7	4138.2	4137.5
11	4141.6	4141.2	4140.7	4140.3	4140.1	4139.9	4139.7	4139.5	4139.4	4139.2	4139.0	4138.7	4137.8
12	4141.9	4141.8	4141.7	4141.4	4141.0	4140.8	4140.6	4140.4	4140.1	4139.9	4139.7	4139.4	4138.5

18. APPENDIX F. EXCEEDANCE FLOWS FOR NO ACTION AND DAM REMOVAL ALTERNATIVES BASED UPON INDEX SEQUENTIAL HYDROLOGY

Table 18-2. Exceedance Flows for No Action Alternative.

Keno – No Action													
Month	0.01	0.05	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.95	0.99
1	7304	3746	3167	2222	1980	1727	1273	966	859	757	649	586	430
2	8128	4846	4014	3248	2903	2418	2113	1025	906	826	602	563	532
3	9752	6252	4895	3760	3138	2793	2374	2087	1544	1163	856	765	691
4	7381	5419	4638	3460	2960	2508	1928	1138	1023	950	816	723	549
5	5091	3252	3074	2757	2513	2282	1961	1370	1235	1037	868	784	432
6	2808	2682	2524	2243	1377	1243	1167	1099	1026	947	757	688	626
7	1146	995	902	800	770	740	711	676	641	601	543	497	432
8	913	851	801	771	741	711	687	666	645	624	585	551	376
9	1032	922	891	829	780	739	700	680	659	639	619	592	497
10	1187	1065	1054	1033	1011	990	968	947	922	874	827	783	571
11	2126	2045	1943	1602	1260	1036	988	941	896	852	808	721	571
12	4764	3209	2987	2403	2105	1475	1019	928	878	828	742	672	497
Iron Gate – No Action													
Month	0.01	0.05	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.95	0.99
1	9401	4926	4027	3035	2663	2428	1940	1409	1348	1287	1222	1145	1083
2	10826	6138	5224	4058	3572	3148	2645	1626	1405	1342	1279	1247	1150
3	11185	7494	5866	4807	3971	3500	3125	2702	2098	1663	1449	1342	1250
4	9243	6758	5684	4409	3792	3250	2598	1737	1566	1478	1370	1283	1158
5	6126	4494	4098	3579	3150	2891	2543	1970	1751	1529	1316	1222	1098
6	3603	3209	3071	2769	1864	1720	1596	1514	1431	1310	1183	1124	1076
7	2477	1401	1321	1210	1168	1126	1084	1038	991	943	879	843	814
8	1224	1204	1179	1129	1080	1051	1029	1007	985	963	941	930	837
9	1390	1306	1221	1172	1123	1073	1046	1021	997	972	948	936	871
10	1574	1410	1399	1379	1358	1337	1316	1295	1274	1254	1233	1175	1089
11	2650	2395	2273	1850	1629	1402	1373	1344	1315	1286	1257	1242	1230
12	6876	3711	3498	3068	2537	1947	1589	1392	1351	1310	1269	1248	1232

18. APPENDIX F. EXCEEDANCE FLOWS FOR NO ACTION AND DAM REMOVAL ALTERNATIVES BASED UPON INDEX SEQUENTIAL HYDROLOGY

Seiad – No Action													
Month	0.01	0.05	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.95	0.99
1	23176	16706	10462	6915	5245	4504	3853	3089	2653	2325	1954	1775	1654
2	18690	12460	9866	8150	6901	5659	4870	4135	3444	2849	2202	1885	1581
3	20530	13590	11207	9071	7312	6249	5505	4891	4068	3108	2585	2291	1816
4	15125	11243	9808	8119	6993	5876	4940	4006	3454	2882	2455	2190	1752
5	11801	9784	8561	7196	6038	5200	4637	4168	3698	3036	2377	2003	1705
6	9429	7499	6152	4873	3971	3362	2926	2616	2326	2047	1714	1468	1251
7	4286	2804	2430	1971	1679	1541	1435	1360	1294	1228	1107	1032	949
8	1903	1593	1522	1400	1344	1288	1232	1189	1147	1105	1053	990	941
9	1818	1604	1552	1448	1374	1317	1260	1210	1171	1131	1092	1072	964
10	3195	2015	1855	1801	1747	1692	1638	1588	1540	1492	1444	1420	1263
11	6548	4603	3726	2936	2556	2352	2195	1995	1833	1753	1673	1633	1467
12	14990	9842	7596	5562	4264	3690	3078	2607	2309	2084	1881	1754	1650
Orleans – No Action													
Month	0.01	0.05	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.95	0.99
1	70051	40008	29698	20166	15315	12149	9788	8021	6751	5588	4503	3266	2311
2	51458	33602	26096	19624	16846	14682	12537	10627	8918	7175	5387	4402	2368
3	46589	32076	25607	20575	16948	14685	12847	11246	9902	8219	6320	5149	3322
4	28688	23710	21460	18019	15357	13608	12131	10499	8902	7308	5977	4670	3565
5	24973	21078	19235	16811	14230	11889	10401	9285	8117	6720	4860	4169	3363
6	21235	15718	12662	9610	8229	7075	6024	5230	4525	3737	2917	2405	1819
7	8140	5534	4623	3654	3165	2808	2569	2369	2197	1991	1718	1531	1313
8	3133	2611	2416	2246	2099	1986	1873	1794	1716	1639	1432	1306	1152
9	3111	2415	2166	2041	1930	1836	1764	1693	1620	1512	1396	1273	1118
10	8353	3678	3174	2728	2466	2345	2224	2113	2018	1922	1760	1632	1442
11	26499	15931	10916	7132	5361	4371	3718	3220	2819	2542	2298	2182	1843
12	56365	31178	23391	14856	11435	9289	7771	6487	5458	4487	3356	2925	2549

18. APPENDIX F. EXCEEDANCE FLOWS FOR NO ACTION AND DAM REMOVAL ALTERNATIVES BASED UPON INDEX SEQUENTIAL HYDROLOGY

Klamath – No Action													
Month	0.01	0.05	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.95	0.99
1	140898	89268	69023	49722	37711	28968	23923	19477	14680	11328	8310	6630	3749
2	105374	78331	61893	43738	36032	31361	27432	24307	21028	17412	12336	9360	3906
3	101402	74833	58516	43959	36463	30906	26712	24002	20927	18172	14938	11489	7654
4	69495	51098	43721	35405	29921	25296	21943	19475	17096	15105	12070	9911	6153
5	45026	36564	33656	29845	26240	20315	17623	15937	13960	11818	10132	8744	6022
6	38576	25832	20592	16215	13826	11992	10303	8932	7645	6439	5383	4676	3505
7	14352	9788	8080	6492	5521	4857	4395	4037	3704	3387	3018	2767	1949
8	6338	4802	4263	3755	3511	3268	3098	2929	2766	2611	2425	2175	1691
9	5685	4480	3915	3528	3255	3034	2823	2688	2552	2404	2235	2151	1922
10	17879	7552	6048	4865	4283	3943	3655	3431	3201	2950	2660	2500	2170
11	71733	41734	24951	14768	11064	8383	6872	5765	5000	4348	3755	3414	2937
12	124313	74632	53785	34976	26520	21348	17504	14584	11781	9234	6829	5633	3819
UKL – No Action													
Month	0.01	0.05	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.95	0.99
1	4143.4	4143.1	4142.6	4142.0	4141.6	4141.2	4140.9	4140.7	4140.5	4139.9	4139.3	4138.8	4138.5
2	4143.4	4143.4	4143.3	4142.7	4142.2	4141.8	4141.6	4141.3	4141.1	4140.7	4140.0	4139.4	4139.0
3	4143.4	4143.4	4143.3	4143.3	4142.9	4142.3	4142.1	4141.9	4141.7	4141.4	4140.8	4140.1	4139.3
4	4143.4	4143.4	4143.3	4143.3	4143.2	4142.8	4142.5	4142.4	4142.3	4142.0	4141.5	4140.5	4139.5
5	4143.4	4143.4	4143.3	4143.2	4143.0	4142.7	4142.5	4142.3	4142.2	4142.0	4141.6	4141.0	4139.3
6	4143.3	4143.1	4142.9	4142.6	4142.4	4142.1	4141.9	4141.7	4141.4	4141.1	4140.8	4140.6	4138.8
7	4142.7	4142.3	4142.1	4141.7	4141.4	4141.1	4140.8	4140.5	4140.3	4140.0	4139.7	4139.5	4138.5
8	4141.9	4141.6	4141.2	4140.7	4140.3	4140.0	4139.7	4139.4	4139.2	4139.0	4138.7	4138.5	4138.1
9	4141.5	4141.1	4140.8	4139.9	4139.7	4139.4	4139.0	4138.6	4138.4	4138.3	4138.1	4138.0	4137.7
10	4141.7	4141.3	4141.0	4139.9	4139.7	4139.5	4139.0	4138.6	4138.3	4138.0	4137.9	4137.8	4137.5
11	4142.6	4141.9	4141.3	4140.4	4140.2	4139.9	4139.6	4139.1	4138.8	4138.4	4138.0	4137.9	4137.6
12	4143.3	4142.3	4141.9	4141.1	4140.7	4140.5	4140.3	4140.1	4139.6	4139.1	4138.5	4138.2	4137.9