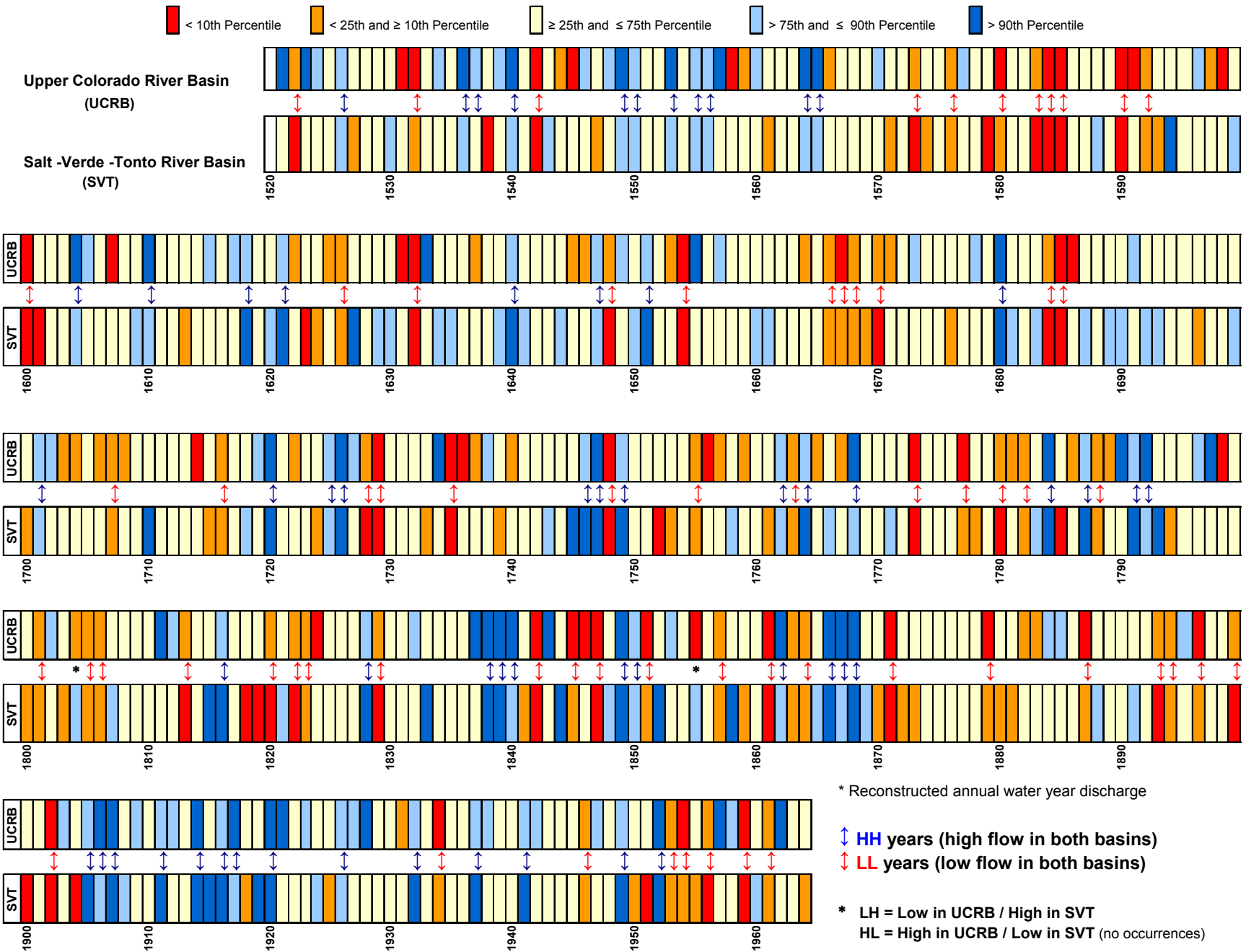


APPENDIX 5 - UCRB & S+V+T TIME SERIES WITH QUANTILE COMPARISON

Extreme High and Low Flow Years in Upper Colorado & Salt-Verde Basins based on Reconstructed Streamflow* 1521-1964



APPENDIX 5 - TIME SERIES WITH QUANTILE COMPARISON

FINAL RECONSTRUCTED FLOW TIME SERIES (in cfs)

(Rank 1 = driest year, 444 = wettest year)

UPPER COLORADO RIVER BASIN at Lees Ferry

SALT-VERDE-TONTO RIVER BASIN

water yr	Qnt	UCRB Q (cfs)	rank ↑	RI	P	1-P		water yr	Qnt	SVT Q (cfs)	rank ↑	RI	P	1-P
1580		7318.60	10	44.500	0.022	0.978	LL	1580		737.96	74	6.014	0.166	0.834
1581		16871.23	129	3.450	0.290	0.710		1581		1255.77	213	2.089	0.479	0.521
1582		20256.23	227	1.960	0.510	0.490		1582		958.54	126	3.532	0.283	0.717
1583		14072.88	68	6.544	0.153	0.847	LL	1583		588.20	36	12.361	0.081	0.919
1584		5478.70	6	74.167	0.013	0.987	LL	1584		552.24	29	15.345	0.065	0.935
1585		10259.44	23	19.348	0.052	0.948	LL	1585		471.47	17	26.176	0.038	0.962
1586		22234.86	292	1.524	0.656	0.344		1586		1717.66	325	1.369	0.730	0.270
1587		19311.51	201	2.214	0.452	0.548		1587		1441.52	262	1.698	0.589	0.411
1588		20396.58	233	1.910	0.524	0.476		1588		1788.16	337	1.320	0.757	0.243
1589		20363.66	230	1.935	0.517	0.483		1589		1141.76	186	2.392	0.418	0.582
1590		9865.99	18	24.722	0.040	0.960	LL	1590		596.75	40	11.125	0.090	0.910
1591		11768.75	36	12.361	0.081	0.919		1591		1005.54	137	3.248	0.308	0.692
1592		12737.33	48	9.271	0.108	0.892	LL	1592		644.08	50	8.900	0.112	0.888
1593		18476.79	181	2.459	0.407	0.593		1593		879.93	111	4.009	0.249	0.751
1594		22943.78	314	1.417	0.706	0.294		1594		3117.79	435	1.023	0.978	0.022
1595		22407.44	299	1.488	0.672	0.328		1595		1377.32	240	1.854	0.539	0.461
1596		23725.64	342	1.301	0.769	0.231		1596		1695.64	322	1.382	0.724	0.276
1597		15776.98	99	4.495	0.222	0.778		1597		1140.98	185	2.405	0.416	0.584
1598		9479.32	16	27.813	0.036	0.964		1598		1006.03	138	3.225	0.310	0.690
1599		22235.39	293	1.519	0.658	0.342		1599		2060.66	375	1.187	0.843	0.157
1600		9918.93	19	23.421	0.043	0.957	LL	1600		477.13	18	24.722	0.040	0.960
1601		20391.78	232	1.918	0.521	0.479		1601		622.13	44	10.114	0.099	0.901
1602		20835.71	251	1.773	0.564	0.436		1602		1481.12	268	1.660	0.602	0.398
1603		23342.99	330	1.348	0.742	0.258		1603		1646.00	312	1.426	0.701	0.299
1604		25994.70	402	1.107	0.903	0.097	HH	1604		1819.19	342	1.301	0.769	0.231
1605		24796.56	370	1.203	0.831	0.169		1605		1607.17	301	1.478	0.676	0.324
1606		23369.52	332	1.340	0.746	0.254		1606		1352.82	232	1.918	0.521	0.479
1607		10062.48	20	22.250	0.045	0.955		1607		1247.41	212	2.099	0.476	0.524
1608		20296.44	229	1.943	0.515	0.485		1608		1733.39	327	1.361	0.735	0.265
1609		22306.69	295	1.508	0.663	0.337		1609		1970.11	362	1.229	0.813	0.187
1610		26050.90	404	1.101	0.908	0.092	HH	1610		2311.01	400	1.113	0.899	0.101
1611		23099.99	319	1.395	0.717	0.283		1611		1583.58	296	1.503	0.665	0.335
1612		17991.47	166	2.681	0.373	0.627		1612		1283.20	217	2.051	0.488	0.512
1613		19849.90	210	2.119	0.472	0.528		1613		751.00	76	5.855	0.171	0.829
1614		23333.23	329	1.353	0.739	0.261		1614		1232.93	206	2.160	0.463	0.537
1615		25518.07	390	1.141	0.876	0.124		1615		1498.53	274	1.624	0.616	0.384
1616		21555.47	269	1.654	0.604	0.396		1616		1300.00	221	2.014	0.497	0.503
1617		25743.87	397	1.121	0.892	0.108		1617		1588.27	298	1.493	0.670	0.330
1618		24181.39	355	1.254	0.798	0.202	HH	1618		2735.07	419	1.062	0.942	0.058
1619		18106.78	169	2.633	0.380	0.620		1619		1205.57	197	2.259	0.443	0.557
1620		21584.99	270	1.648	0.607	0.393		1620		1990.49	366	1.216	0.822	0.178
1621		25486.82	387	1.150	0.870	0.130	HH	1621		2918.24	430	1.035	0.966	0.034
1622		15611.69	96	4.635	0.216	0.784		1622		1223.36	204	2.181	0.458	0.542
1623		16786.84	127	3.504	0.285	0.715		1623		523.51	23	19.348	0.052	0.948
1624		16345.41	114	3.904	0.256	0.744		1624		690.46	60	7.417	0.135	0.865
1625		15544.16	95	4.684	0.213	0.787		1625		1487.63	269	1.654	0.604	0.396
1626		13852.29	66	6.742	0.148	0.852	LL	1626		700.89	63	7.063	0.142	0.858
1627		20072.64	219	2.032	0.492	0.508		1627		2560.23	414	1.075	0.930	0.070
1628		21887.63	283	1.572	0.636	0.364		1628		1072.13	160	2.781	0.360	0.640
1629		19197.26	194	2.294	0.436	0.564		1629		1909.05	352	1.264	0.791	0.209
1630		19235.64	197	2.259	0.443	0.557		1630		1927.62	355	1.254	0.798	0.202
1631		12412.04	44	10.114	0.099	0.901		1631		1120.28	177	2.514	0.398	0.602
1632		11580.02	35	12.714	0.079	0.921	LL	1632		531.10	25	17.800	0.056	0.944
1633		27423.68	422	1.055	0.948	0.052		1633		1592.12	299	1.488	0.672	0.328
1634		20046.60	217	2.051	0.488	0.512		1634		1999.25	368	1.209	0.827	0.173
1635		20180.64	223	1.996	0.501	0.499		1635		2063.98	376	1.184	0.845	0.155
1636		19580.65	206	2.160	0.463	0.537		1636		1412.65	254	1.752	0.571	0.429
1637		14862.11	78	5.705	0.175	0.825		1637		967.48	129	3.450	0.290	0.710
1638		17588.47	153	2.908	0.344	0.656		1638		1070.92	159	2.799	0.357	0.643
1639		22578.74	304	1.464	0.683	0.317		1639		1889.40	349	1.275	0.784	0.216

APPENDIX 5 - TIME SERIES WITH QUANTILE COMPARISON

FINAL RECONSTRUCTED FLOW TIME SERIES (in cfs)

(Rank 1 = driest year, 444 = wettest year)

UPPER COLORADO RIVER BASIN at Lees Ferry

SALT-VERDE-TONTO RIVER BASIN

water yr	Qnt	UCRB Q (cfs)	rank ↑	RI	P	1-P	water yr	Qnt	SVT Q (cfs)	rank ↑	RI	P	1-P
1900		17912.31	162	2.747	0.364	0.636	1900		531.80	26	17.115	0.058	0.942
1901		17489.32	146	3.048	0.328	0.672	1901		1411.25	253	1.759	0.569	0.431
1902		5851.49	7	63.571	0.016	0.984	LL		457.25	14	31.786	0.031	0.969
1903		23835.48	345	1.290	0.775	0.225			1716.81	324	1.373	0.728	0.272
1904		16456.25	117	3.803	0.263	0.737			358.73	3	148.333	0.007	0.993
1905		25034.04	375	1.187	0.843	0.157	HH		2637.25	416	1.070	0.935	0.065
1906		26202.01	405	1.099	0.910	0.090	HH		2029.97	373	1.193	0.838	0.162
1907		27094.25	418	1.065	0.939	0.061	HH		2791.80	424	1.050	0.953	0.047
1908		19333.98	202	2.203	0.454	0.546			2129.64	381	1.168	0.856	0.144
1909		25797.24	399	1.115	0.897	0.103			1638.15	310	1.435	0.697	0.303
1910		22282.80	294	1.514	0.661	0.339			1037.64	151	2.947	0.339	0.661
1911		24776.42	369	1.206	0.829	0.171	HH		2794.02	425	1.047	0.955	0.045
1912		23661.94	340	1.309	0.764	0.236			1767.83	333	1.336	0.748	0.252
1913		20041.38	216	2.060	0.485	0.515			893.09	112	3.973	0.252	0.748
1914		28288.45	431	1.032	0.969	0.031	HH		2510.46	412	1.080	0.926	0.074
1915		21234.03	265	1.679	0.596	0.404			2794.44	426	1.045	0.957	0.043
1916		24591.54	366	1.216	0.822	0.178	HH		2322.69	402	1.107	0.903	0.097
1917		27836.17	430	1.035	0.966	0.034	HH		1984.57	365	1.219	0.820	0.180
1918		20443.23	236	1.886	0.530	0.470			833.83	98	4.541	0.220	0.780
1919		17490.90	147	3.027	0.330	0.670			3057.43	434	1.025	0.975	0.025
1920		26940.99	415	1.072	0.933	0.067	HH		2751.21	421	1.057	0.946	0.054
1921		28851.80	436	1.021	0.980	0.020			1023.36	146	3.048	0.328	0.672
1922		20869.88	252	1.766	0.566	0.434			1355.90	233	1.910	0.524	0.476
1923		23718.81	341	1.305	0.766	0.234			1171.16	193	2.306	0.434	0.566
1924		22050.11	289	1.540	0.649	0.351			2130.29	382	1.165	0.858	0.142
1925		18485.53	182	2.445	0.409	0.591			797.03	90	4.944	0.202	0.798
1926		24765.71	368	1.209	0.827	0.173	HH		1964.65	361	1.233	0.811	0.189
1927		24237.69	356	1.250	0.800	0.200			1498.39	273	1.630	0.613	0.387
1928		26986.34	417	1.067	0.937	0.063			1064.12	157	2.834	0.353	0.647
1929		23193.03	322	1.382	0.724	0.276			1112.65	175	2.543	0.393	0.607
1930		21118.83	260	1.712	0.584	0.416			1650.22	313	1.422	0.703	0.297
1931		13247.75	55	8.091	0.124	0.876			1291.61	219	2.032	0.492	0.508
1932		24002.47	348	1.279	0.782	0.218	HH		2333.52	404	1.101	0.908	0.092
1933		18396.36	178	2.500	0.400	0.600			1685.24	319	1.395	0.717	0.283
1934		7103.86	9	49.444	0.020	0.980	LL		787.63	87	5.115	0.196	0.804
1935		20560.29	240	1.854	0.539	0.461			1626.48	308	1.445	0.692	0.308
1936		17012.80	132	3.371	0.297	0.703			893.37	113	3.938	0.254	0.746
1937		24013.25	349	1.275	0.784	0.216	HH		2527.76	413	1.077	0.928	0.072
1938		24430.98	359	1.240	0.807	0.193			1161.82	192	2.318	0.431	0.569
1939		17784.09	159	2.799	0.357	0.643			931.46	117	3.803	0.263	0.737
1940		18680.70	186	2.392	0.418	0.582			1100.18	171	2.602	0.384	0.616
1941		25291.65	385	1.156	0.865	0.135	HH		3732.36	441	1.009	0.991	0.009
1942		25580.99	392	1.135	0.881	0.119			1621.05	305	1.459	0.685	0.315
1943		19681.49	207	2.150	0.465	0.535			1084.83	165	2.697	0.371	0.629
1944		16827.39	128	3.477	0.288	0.712			1515.01	279	1.595	0.627	0.373
1945		16517.96	119	3.739	0.267	0.733			1451.57	263	1.692	0.591	0.409
1946		13324.73	57	7.807	0.128	0.872	LL		634.59	48	9.271	0.108	0.892
1947		23959.97	347	1.282	0.780	0.220			1082.50	164	2.713	0.369	0.631
1948		21085.60	259	1.718	0.582	0.418			1516.37	280	1.589	0.629	0.371
1949		25276.66	384	1.159	0.863	0.137	HH		2336.62	405	1.099	0.910	0.090
1950		17622.50	154	2.890	0.346	0.654			673.28	57	7.807	0.128	0.872
1951		17976.72	165	2.697	0.371	0.629			451.47	12	37.083	0.027	0.973
1952		26633.88	410	1.085	0.921	0.079	HH		2735.49	420	1.060	0.944	0.056
1953		14898.11	80	5.563	0.180	0.820	LL		877.23	110	4.045	0.247	0.753
1954		9636.30	17	26.176	0.038	0.962	LL		753.53	79	5.633	0.178	0.822
1955		18155.17	170	2.618	0.382	0.618			752.45	77	5.779	0.173	0.827
1956		15985.07	103	4.320	0.231	0.769	LL		606.64	42	10.595	0.094	0.906
1957		27724.11	429	1.037	0.964	0.036			1454.63	265	1.679	0.596	0.404
1958		25165.09	380	1.171	0.854	0.146			1219.10	202	2.203	0.454	0.546
1959		11303.87	32	13.906	0.072	0.928	LL		545.33	28	15.893	0.063	0.937
1960		20250.10	226	1.969	0.508	0.492			1782.37	336	1.324	0.755	0.245
1961		13634.97	64	6.953	0.144	0.856	LL		779.87	85	5.235	0.191	0.809
1962		28984.72	437	1.018	0.982	0.018			1605.74	300	1.483	0.674	0.326
1963		17560.82	150	2.967	0.337	0.663			939.30	121	3.678	0.272	0.728
1964		17186.86	136	3.272	0.306	0.694			731.30	72	6.181	0.162	0.838

APPENDIX 5 - TIME SERIES WITH QUANTILE COMPARISON

FINAL RECONSTRUCTED FLOW SORTED BY MAGNITUDE (lowest => highest)

(Rank 1 = driest year, 444 = wettest year)

UPPER COLORADO RIVER BASIN at Lees Ferry

SALT-VERDE-TONTO RIVER BASIN

water yr	Qnt	UCRB Q (cfs)	rank ↑	RI	P	1-P	water yr	Qnt	SVT Q (cfs)	rank ↑	RI	P	1-P
1685		4344.24	1	445.000	0.002	0.998	1748		252.20	1	445.000	0.002	0.998
1654		5110.52	2	222.500	0.004	0.996	1847		349.04	2	222.500	0.004	0.996
1542		5252.23	3	148.333	0.007	0.993	1904		358.73	3	148.333	0.007	0.993
1845		5331.27	4	111.250	0.009	0.991	1542		369.57	4	111.250	0.009	0.991
1532		5439.72	5	89.000	0.011	0.989	1818		390.85	5	89.000	0.011	0.989
1584		5478.70	6	74.167	0.013	0.987	1773		398.95	6	74.167	0.013	0.987
1902		5851.49	7	63.571	0.016	0.984	1861		402.71	7	63.571	0.016	0.984
1851		6278.93	8	55.625	0.018	0.982	1822		403.09	8	55.625	0.018	0.982
1934		7103.86	9	49.444	0.020	0.980	1735		409.12	9	49.444	0.020	0.980
1580		7318.60	10	44.500	0.022	0.978	1685		416.99	10	44.500	0.022	0.978
1871		8147.17	11	40.455	0.025	0.975	1899		450.73	11	40.455	0.025	0.975
1735		8362.28	12	37.083	0.027	0.973	1951		451.47	12	37.083	0.027	0.973
1879		8465.68	13	34.231	0.029	0.971	1729		456.66	13	34.231	0.029	0.971
1798		8809.75	14	31.786	0.031	0.969	1902		457.25	14	31.786	0.031	0.969
1847		9346.58	15	29.667	0.034	0.966	1752		461.00	15	29.667	0.034	0.966
1598		9479.32	16	27.813	0.036	0.964	1573		465.80	16	27.813	0.036	0.964
1954		9636.30	17	26.176	0.038	0.962	1585		471.47	17	26.176	0.038	0.962
1590		9865.99	18	24.722	0.040	0.960	1600		477.13	18	24.722	0.040	0.960
1600		9918.93	19	23.421	0.043	0.957	1670		477.50	19	23.421	0.043	0.957
1607		10062.48	20	22.250	0.045	0.955	1728		481.65	20	22.250	0.045	0.955
1773		10093.45	21	21.190	0.047	0.953	1522		501.99	21	21.190	0.047	0.953
1824		10187.69	22	20.227	0.049	0.951	1654		503.33	22	20.227	0.049	0.951
1585		10259.44	23	19.348	0.052	0.948	1623		523.51	23	19.348	0.052	0.948
1748		10371.31	24	18.542	0.054	0.946	1819		529.26	24	18.542	0.054	0.946
1729		10441.82	25	17.800	0.056	0.944	1632		531.10	25	17.800	0.056	0.944
1861		10490.94	26	17.115	0.058	0.942	1900		531.80	26	17.115	0.058	0.942
1896		10545.53	27	16.481	0.061	0.939	1871		541.53	27	16.481	0.061	0.939
1686		10743.12	28	15.893	0.063	0.937	1959		545.33	28	15.893	0.063	0.937
1855		10768.92	29	15.345	0.065	0.935	1584		552.24	29	15.345	0.065	0.935
1667		10840.19	30	14.833	0.067	0.933	1648		553.03	30	14.833	0.067	0.933
1756		11152.62	31	14.355	0.070	0.930	1820		556.37	31	14.355	0.070	0.930
1959		11303.87	32	13.906	0.072	0.928	1684		564.67	32	13.906	0.072	0.928
1887		11368.20	33	13.485	0.074	0.926	1785		568.53	33	13.485	0.074	0.926
1545		11558.23	34	13.088	0.076	0.924	1842		573.82	34	13.088	0.076	0.924
1632		11580.02	35	12.714	0.079	0.921	1780		574.92	35	12.714	0.079	0.921
1591		11768.75	36	12.361	0.081	0.919	1583		588.20	36	12.361	0.081	0.919
1531		11770.96	37	12.027	0.083	0.917	1579		591.08	37	12.027	0.083	0.917
1736		11866.41	38	11.711	0.085	0.915	1829		593.00	38	11.711	0.085	0.915
1777		11974.17	39	11.410	0.088	0.912	1893		594.83	39	11.410	0.088	0.912
1846		12219.78	40	11.125	0.090	0.910	1590		596.75	40	11.125	0.090	0.910
1558		12244.33	41	10.854	0.092	0.908	1538		605.37	41	10.854	0.092	0.908
1714		12377.62	42	10.595	0.094	0.906	1956		606.64	42	10.595	0.094	0.906
1842		12388.06	43	10.349	0.097	0.903	1813		612.18	43	10.349	0.097	0.903
1631		12412.04	44	10.114	0.099	0.901	1601		622.13	44	10.114	0.099	0.901
1722		12480.26	45	9.889	0.101	0.899	1880		626.03	45	9.889	0.101	0.899
1653		12641.67	46	9.674	0.103	0.897	1864		628.28	46	9.674	0.103	0.897
1684		12655.89	47	9.468	0.106	0.894	1851		629.65	47	9.468	0.106	0.894
1592		12737.33	48	9.271	0.108	0.892	1946		634.59	48	9.271	0.108	0.892
1670		12753.19	49	9.082	0.110	0.890	1532		641.51	49	9.082	0.110	0.890
1704		12778.52	50	8.900	0.112	0.888	1592		644.08	50	8.900	0.112	0.888
1707		12828.09	51	8.725	0.115	0.885	1668		644.71	51	8.725	0.115	0.885
1664		13046.53	52	8.558	0.117	0.883	1716		653.98	52	8.558	0.117	0.883
1789		13065.65	53	8.396	0.119	0.881	1894		661.91	53	8.396	0.119	0.881
1763		13242.92	54	8.241	0.121	0.879	1733		665.75	54	8.241	0.121	0.879
1931		13247.75	55	8.091	0.124	0.876	1778		667.84	55	8.091	0.124	0.876
1668		13261.72	56	7.946	0.126	0.874	1857		672.49	56	7.946	0.126	0.874
1946		13324.73	57	7.807	0.128	0.872	1950		673.28	57	7.807	0.128	0.872
1780		13358.18	58	7.672	0.130	0.870	1574		673.87	58	7.672	0.130	0.870
1820		13376.25	59	7.542	0.133	0.867	1782		676.75	59	7.542	0.133	0.867

APPENDIX 5 - TIME SERIES WITH QUANTILE COMPARISON

FINAL RECONSTRUCTED FLOW SORTED BY MAGNITUDE (lowest => highest)

(Rank 1 = driest year, 444 = wettest year)

UPPER COLORADO RIVER BASIN at Lees Ferry

SALT-VERDE-TONTO RIVER BASIN

water yr	Qnt	UCRB Q (cfs)	rank ↑	RI	P	1-P	water yr	Qnt	SVT Q (cfs)	rank ↑	RI	P	1-P
1822		13385.83	60	7.417	0.135	0.865	1624		690.46	60	7.417	0.135	0.865
1813		13415.13	61	7.295	0.137	0.863	1788		691.06	61	7.295	0.137	0.863
1708		13474.33	62	7.177	0.139	0.861	1763		692.10	62	7.177	0.139	0.861
1782		13598.32	63	7.063	0.142	0.858	1626		700.89	63	7.063	0.142	0.858
1961		13634.97	64	6.953	0.144	0.856	1803		702.08	64	6.953	0.144	0.856
1882		13679.79	65	6.846	0.146	0.854	1724		706.11	65	6.846	0.146	0.854
1626		13852.29	66	6.742	0.148	0.852	1676		707.25	66	6.742	0.148	0.852
1857		13898.24	67	6.642	0.151	0.849	1777		712.73	67	6.642	0.151	0.849
1583		14072.88	68	6.544	0.153	0.847	1696		713.41	68	6.544	0.153	0.847
1740		14106.47	69	6.449	0.155	0.845	1873		720.13	69	6.449	0.155	0.845
1829		14191.01	70	6.357	0.157	0.843	1707		727.08	70	6.357	0.157	0.843
1786		14216.54	71	6.268	0.160	0.840	1547		727.77	71	6.268	0.160	0.840
1899		14234.85	72	6.181	0.162	0.838	1964		731.30	72	6.181	0.162	0.838
1706		14337.26	73	6.096	0.164	0.836	1667		732.93	73	6.096	0.164	0.836
1666		14469.66	74	6.014	0.166	0.834	1580		737.96	74	6.014	0.166	0.834
1671		14552.04	75	5.933	0.169	0.831	1805		738.70	75	5.933	0.169	0.831
1646		14710.00	76	5.855	0.171	0.829	1613		751.00	76	5.855	0.171	0.829
1544		14726.08	77	5.779	0.173	0.827	1955		752.45	77	5.779	0.173	0.827
1637		14862.11	78	5.705	0.175	0.825	1881		752.97	78	5.705	0.175	0.825
1805		14876.08	79	5.633	0.178	0.822	1954		753.53	79	5.633	0.178	0.822
1953		14898.11	80	5.563	0.180	0.820	1576		754.33	80	5.563	0.180	0.820
1806		14911.95	81	5.494	0.182	0.818	1806		768.17	81	5.494	0.182	0.818
1864		14927.99	82	5.427	0.184	0.816	1887		769.96	82	5.427	0.184	0.816
1767		14946.54	83	5.361	0.187	0.813	1870		771.06	83	5.361	0.187	0.813
1893		14959.96	84	5.298	0.189	0.811	1753		776.31	84	5.298	0.189	0.811
1576		15029.40	85	5.235	0.191	0.809	1961		779.87	85	5.235	0.191	0.809
1728		15045.80	86	5.174	0.193	0.807	1794		780.68	86	5.174	0.193	0.807
1788		15114.83	87	5.115	0.196	0.804	1934		787.63	87	5.115	0.196	0.804
1645		15115.95	88	5.057	0.198	0.802	1561		788.64	88	5.057	0.198	0.802
1765		15166.07	89	5.000	0.200	0.800	1845		796.04	89	5.000	0.200	0.800
1648		15188.17	90	4.944	0.202	0.798	1925		797.03	90	4.944	0.202	0.798
1522		15239.04	91	4.890	0.204	0.796	1872		798.06	91	4.890	0.204	0.796
1759		15240.30	92	4.837	0.207	0.793	1739		803.10	92	4.837	0.207	0.793
1823		15266.16	93	4.785	0.209	0.791	1863		804.33	93	4.785	0.209	0.791
1894		15312.68	94	4.734	0.211	0.789	1859		810.45	94	4.734	0.211	0.789
1625		15544.16	95	4.684	0.213	0.787	1801		811.73	95	4.684	0.213	0.787
1622		15611.69	96	4.635	0.216	0.784	1823		823.98	96	4.635	0.216	0.784
1755		15613.74	97	4.588	0.218	0.782	1700		830.55	97	4.588	0.218	0.782
1559		15688.60	98	4.541	0.220	0.780	1918		833.83	98	4.541	0.220	0.780
1597		15776.98	99	4.495	0.222	0.778	1896		839.87	99	4.495	0.222	0.778
1703		15809.91	100	4.450	0.225	0.775	1669		840.23	100	4.450	0.225	0.775
1573		15897.90	101	4.406	0.227	0.773	1666		845.74	101	4.406	0.227	0.773
1804		15977.65	102	4.363	0.229	0.771	1879		848.50	102	4.363	0.229	0.771
1956		15985.07	103	4.320	0.231	0.769	1527		850.70	103	4.320	0.231	0.769
1566		15991.14	104	4.279	0.234	0.766	1755		853.63	104	4.279	0.234	0.766
1801		16006.21	105	4.238	0.236	0.764	1841		859.36	105	4.238	0.236	0.764
1883		16090.01	106	4.198	0.238	0.762	1761		861.04	106	4.198	0.238	0.762
1781		16149.81	107	4.159	0.240	0.760	1715		867.81	107	4.159	0.240	0.760
1757		16171.31	108	4.120	0.243	0.757	1800		871.30	108	4.120	0.243	0.757
1716		16174.22	109	4.083	0.245	0.755	1571		873.47	109	4.083	0.245	0.755
1737		16317.66	110	4.045	0.247	0.753	1953		877.23	110	4.045	0.247	0.753
1863		16324.91	111	4.009	0.249	0.751	1593		879.93	111	4.009	0.249	0.751
1574		16327.30	112	3.973	0.252	0.748	1913		893.09	112	3.973	0.252	0.748
1814		16333.97	113	3.938	0.254	0.746	1936		893.37	113	3.938	0.254	0.746
1624		16345.41	114	3.904	0.256	0.744	1657		903.16	114	3.904	0.256	0.744
1794		16367.61	115	3.870	0.258	0.742	1765		914.37	115	3.870	0.258	0.742
1778		16431.87	116	3.836	0.261	0.739	1653		914.95	116	3.836	0.261	0.739
1904		16456.25	117	3.803	0.263	0.737	1939		931.46	117	3.803	0.263	0.737
1721		16496.69	118	3.771	0.265	0.735	1560		936.06	118	3.771	0.265	0.735
1945		16517.96	119	3.739	0.267	0.733	1708		937.31	119	3.739	0.267	0.733

APPENDIX 5 - TIME SERIES WITH QUANTILE COMPARISON

FINAL RECONSTRUCTED FLOW SORTED BY MAGNITUDE (lowest => highest)

(Rank 1 = driest year, 444 = wettest year)

UPPER COLORADO RIVER BASIN at Lees Ferry

SALT-VERDE-TONTO RIVER BASIN

water yr	Qnt	UCRB Q (cfs)	rank ↑	RI	P	1-P	water yr	Qnt	SVT Q (cfs)	rank ↑	RI	P	1-P
1562		16524.55	120	3.708	0.270	0.730	1750		937.72	120	3.708	0.270	0.730
1809		16600.60	121	3.678	0.272	0.728	1963		939.30	121	3.678	0.272	0.728
1830		16612.38	122	3.648	0.274	0.726	1876		942.22	122	3.648	0.274	0.726
1776		16643.84	123	3.618	0.276	0.724	1664		944.79	123	3.618	0.276	0.724
1774		16655.12	124	3.589	0.279	0.721	1798		951.68	124	3.589	0.279	0.721
1538		16697.17	125	3.560	0.281	0.719	1790		956.14	125	3.560	0.281	0.719
1551		16735.18	126	3.532	0.283	0.717	1582		958.54	126	3.532	0.283	0.717
1623		16786.84	127	3.504	0.285	0.715	1737		959.94	127	3.504	0.285	0.715
1944		16827.39	128	3.477	0.288	0.712	1854		962.07	128	3.477	0.288	0.712
1581		16871.23	129	3.450	0.290	0.710	1637		967.48	129	3.450	0.290	0.710
1834		16905.79	130	3.423	0.292	0.708	1843		968.80	130	3.423	0.292	0.708
1881		16941.44	131	3.397	0.294	0.706	1559		974.95	131	3.397	0.294	0.706
1936		17012.80	132	3.371	0.297	0.703	1558		976.59	132	3.371	0.297	0.703
1663		17130.55	133	3.346	0.299	0.701	1797		993.77	133	3.346	0.299	0.701
1889		17146.46	134	3.321	0.301	0.699	1810		996.67	134	3.321	0.301	0.699
1744		17154.70	135	3.296	0.303	0.697	1703		997.43	135	3.296	0.303	0.697
1964		17186.86	136	3.272	0.306	0.694	1742		1001.15	136	3.272	0.306	0.694
1713		17198.29	137	3.248	0.308	0.692	1591		1005.54	137	3.248	0.308	0.692
1825		17208.15	138	3.225	0.310	0.690	1598		1006.03	138	3.225	0.310	0.690
1709		17220.15	139	3.201	0.312	0.688	1521		1006.37	139	3.201	0.312	0.688
1750		17226.55	140	3.179	0.315	0.685	1789		1007.07	140	3.179	0.315	0.685
1658		17257.24	141	3.156	0.317	0.683	1523		1007.23	141	3.156	0.317	0.683
1870		17304.93	142	3.134	0.319	0.681	1713		1014.71	142	3.134	0.319	0.681
1567		17351.58	143	3.112	0.321	0.679	1786		1019.87	143	3.112	0.321	0.679
1675		17394.45	144	3.090	0.324	0.676	1704		1022.98	144	3.090	0.324	0.676
1730		17469.26	145	3.069	0.326	0.674	1722		1023.27	145	3.069	0.326	0.674
1901		17489.32	146	3.048	0.328	0.672	1921		1023.36	146	3.048	0.328	0.672
1919		17490.90	147	3.027	0.330	0.670	1548		1024.96	147	3.027	0.330	0.670
1878		17513.05	148	3.007	0.333	0.667	1827		1033.39	148	3.007	0.333	0.667
1875		17531.66	149	2.987	0.335	0.665	1832		1034.64	149	2.987	0.335	0.665
1963		17560.82	150	2.967	0.337	0.663	1740		1037.33	150	2.967	0.337	0.663
1880		17562.40	151	2.947	0.339	0.661	1910		1037.64	151	2.947	0.339	0.661
1742		17576.35	152	2.928	0.342	0.658	1658		1037.80	152	2.928	0.342	0.658
1638		17588.47	153	2.908	0.344	0.656	1524		1040.71	153	2.908	0.344	0.656
1950		17622.50	154	2.890	0.346	0.654	1727		1052.87	154	2.890	0.346	0.654
1652		17646.93	155	2.871	0.348	0.652	1709		1060.34	155	2.871	0.348	0.652
1682		17719.41	156	2.853	0.351	0.649	1883		1063.45	156	2.853	0.351	0.649
1877		17745.93	157	2.834	0.353	0.647	1928		1064.12	157	2.834	0.353	0.647
1886		17768.89	158	2.816	0.355	0.645	1528		1068.14	158	2.816	0.355	0.645
1939		17784.09	159	2.799	0.357	0.643	1638		1070.92	159	2.799	0.357	0.643
1770		17826.60	160	2.781	0.360	0.640	1628		1072.13	160	2.781	0.360	0.640
1800		17885.69	161	2.764	0.362	0.638	1545		1075.65	161	2.764	0.362	0.638
1900		17912.31	162	2.747	0.364	0.636	1567		1076.84	162	2.747	0.364	0.636
1724		17955.65	163	2.730	0.366	0.634	1886		1077.43	163	2.730	0.366	0.634
1662		17965.35	164	2.713	0.369	0.631	1947		1082.50	164	2.713	0.369	0.631
1951		17976.72	165	2.697	0.371	0.629	1943		1084.83	165	2.697	0.371	0.629
1612		17991.47	166	2.681	0.373	0.627	1554		1085.89	166	2.681	0.373	0.627
1874		18004.17	167	2.665	0.375	0.625	1757		1092.17	167	2.665	0.375	0.625
1779		18037.13	168	2.649	0.378	0.622	1836		1095.99	168	2.649	0.378	0.622
1619		18106.78	169	2.633	0.380	0.620	1533		1098.66	169	2.633	0.380	0.620
1955		18155.17	170	2.618	0.382	0.618	1566		1099.61	170	2.618	0.382	0.618
1717		18194.69	171	2.602	0.384	0.616	1940		1100.18	171	2.602	0.384	0.616
1752		18241.50	172	2.587	0.387	0.613	1562		1101.33	172	2.587	0.387	0.613
1723		18255.31	173	2.572	0.389	0.611	1544		1110.26	173	2.572	0.389	0.611
1795		18262.14	174	2.557	0.391	0.609	1675		1112.52	174	2.557	0.391	0.609
1793		18263.57	175	2.543	0.393	0.607	1929		1112.65	175	2.543	0.393	0.607
1772		18353.87	176	2.528	0.396	0.604	1731		1115.14	176	2.528	0.396	0.604
1695		18387.54	177	2.514	0.398	0.602	1631		1120.28	177	2.514	0.398	0.602
1933		18396.36	178	2.500	0.400	0.600	1817		1122.11	178	2.500	0.400	0.600
1579		18461.32	179	2.486	0.402	0.598	1730		1127.97	179	2.486	0.402	0.598
1808		18471.83	180	2.472	0.404	0.596	1796		1129.89	180	2.472	0.404	0.596
1593		18476.79	181	2.459	0.407	0.593	1751		1131.00	181	2.459	0.407	0.593
1925		18485.53	182	2.445	0.409	0.591	1531		1135.23	182	2.445	0.409	0.591
1731		18500.62	183	2.432	0.411	0.589	1769		1136.18	183	2.432	0.411	0.589
1898		18502.33	184	2.418	0.413	0.587	1679		1138.43	184	2.418	0.413	0.587
1873		18566.47	185	2.405	0.416	0.584	1597		1140.98	185	2.405	0.416	0.584

APPENDIX 5 - TIME SERIES WITH QUANTILE COMPARISON

FINAL RECONSTRUCTED FLOW SORTED BY MAGNITUDE (lowest => highest)

(Rank 1 = driest year, 444 = wettest year)

UPPER COLORADO RIVER BASIN at Lees Ferry

SALT-VERDE-TONTO RIVER BASIN

water yr	Qnt	UCRB Q (cfs)	rank ↑	RI	P	1-P	water yr	Qnt	SVT Q (cfs)	rank ↑	RI	P	1-P
1940		18680.70	186	2.392	0.418	0.582	1589		1141.76	186	2.392	0.418	0.582
1819		18762.54	187	2.380	0.420	0.580	1892		1146.21	187	2.380	0.420	0.580
1700		18770.64	188	2.367	0.422	0.578	1551		1148.79	188	2.367	0.422	0.578
1665		18783.42	189	2.354	0.425	0.575	1756		1150.86	189	2.354	0.425	0.575
1571		18799.14	190	2.342	0.427	0.573	1645		1150.97	190	2.342	0.427	0.573
1892		18853.69	191	2.330	0.429	0.571	1702		1158.89	191	2.330	0.429	0.571
1810		18861.71	192	2.318	0.431	0.569	1938		1161.82	192	2.318	0.431	0.569
1696		18968.80	193	2.306	0.434	0.566	1923		1171.16	193	2.306	0.434	0.566
1629		19197.26	194	2.294	0.436	0.564	1736		1180.64	194	2.294	0.436	0.564
1856		19217.46	195	2.282	0.438	0.562	1694		1186.94	195	2.282	0.438	0.562
1715		19234.70	196	2.270	0.440	0.560	1697		1188.04	196	2.270	0.440	0.560
1630		19235.64	197	2.259	0.443	0.557	1619		1205.57	197	2.259	0.443	0.557
1568		19238.98	198	2.247	0.445	0.555	1575		1207.06	198	2.247	0.445	0.555
1888		19242.30	199	2.236	0.447	0.553	1691		1211.08	199	2.236	0.447	0.553
1563		19291.67	200	2.225	0.449	0.551	1662		1216.38	200	2.225	0.449	0.551
1587		19311.51	201	2.214	0.452	0.548	1875		1219.05	201	2.214	0.452	0.548
1908		19333.98	202	2.203	0.454	0.546	1958		1219.10	202	2.203	0.454	0.546
1835		19342.81	203	2.192	0.456	0.544	1744		1220.46	203	2.192	0.456	0.544
1751		19439.08	204	2.181	0.458	0.542	1622		1223.36	204	2.181	0.458	0.542
1854		19506.24	205	2.171	0.461	0.539	1578		1225.85	205	2.171	0.461	0.539
1636		19580.65	206	2.160	0.463	0.537	1614		1232.93	206	2.160	0.463	0.537
1943		19681.49	207	2.150	0.465	0.535	1678		1233.59	207	2.150	0.465	0.535
1818		19693.14	208	2.139	0.467	0.533	1572		1240.26	208	2.139	0.467	0.533
1561		19806.89	209	2.129	0.470	0.530	1767		1240.91	209	2.129	0.470	0.530
1613		19849.90	210	2.119	0.472	0.528	1698		1241.78	210	2.119	0.472	0.528
1529		19907.24	211	2.109	0.474	0.526	1831		1242.41	211	2.109	0.474	0.526
1528		19908.20	212	2.099	0.476	0.524	1607		1247.41	212	2.099	0.476	0.524
1783		19996.71	213	2.089	0.479	0.521	1581		1255.77	213	2.089	0.479	0.521
1732		19997.02	214	2.079	0.481	0.519	1711		1258.24	214	2.079	0.481	0.519
1575		20037.62	215	2.070	0.483	0.517	1781		1262.49	215	2.070	0.483	0.517
1913		20041.38	216	2.060	0.485	0.515	1779		1264.62	216	2.060	0.485	0.515
1634		20046.60	217	2.051	0.488	0.512	1612		1283.20	217	2.051	0.488	0.512
1694		20058.55	218	2.041	0.490	0.510	1541		1283.21	218	2.041	0.490	0.510
1627		20072.64	219	2.032	0.492	0.508	1931		1291.61	219	2.032	0.492	0.508
1641		20093.47	220	2.023	0.494	0.506	1721		1298.84	220	2.023	0.494	0.506
1836		20099.93	221	2.014	0.497	0.503	1616		1300.00	221	2.014	0.497	0.503
1698		20109.41	222	2.005	0.499	0.501	1760		1305.54	222	2.005	0.499	0.501
1635		20180.64	223	1.996	0.501	0.499	1811		1306.88	223	1.996	0.501	0.499
1644		20223.18	224	1.987	0.503	0.497	1717		1311.41	224	1.987	0.503	0.497
1872		20237.18	225	1.978	0.506	0.494	1738		1317.34	225	1.978	0.506	0.494
1960		20250.10	226	1.969	0.508	0.492	1808		1332.76	226	1.969	0.508	0.492
1582		20256.23	227	1.960	0.510	0.490	1734		1334.58	227	1.960	0.510	0.490
1859		20258.28	228	1.952	0.512	0.488	1643		1339.20	228	1.952	0.512	0.488
1608		20296.44	229	1.943	0.515	0.485	1834		1342.40	229	1.943	0.515	0.485
1589		20363.66	230	1.935	0.517	0.483	1860		1347.39	230	1.935	0.517	0.483
1527		20367.50	231	1.926	0.519	0.481	1772		1348.54	231	1.926	0.519	0.481
1601		20391.78	232	1.918	0.521	0.479	1606		1352.82	232	1.918	0.521	0.479
1588		20396.58	233	1.910	0.524	0.476	1922		1355.90	233	1.910	0.524	0.476
1533		20422.46	234	1.902	0.526	0.474	1659		1356.00	234	1.902	0.526	0.474
1733		20430.62	235	1.894	0.528	0.472	1846		1363.06	235	1.894	0.528	0.472
1918		20443.23	236	1.886	0.530	0.470	1535		1363.31	236	1.886	0.530	0.470
1659		20493.09	237	1.878	0.533	0.467	1824		1369.27	237	1.878	0.533	0.467
1869		20541.22	238	1.870	0.535	0.465	1557		1371.48	238	1.870	0.535	0.465
1530		20544.23	239	1.862	0.537	0.463	1812		1371.90	239	1.862	0.537	0.463
1935		20560.29	240	1.854	0.539	0.461	1595		1377.32	240	1.854	0.539	0.461
1827		20603.91	241	1.846	0.542	0.458	1671		1377.62	241	1.846	0.542	0.458
1572		20630.96	242	1.839	0.544	0.456	1776		1378.20	242	1.839	0.544	0.456
1754		20660.20	243	1.831	0.546	0.454	1774		1385.27	243	1.831	0.546	0.454
1860		20722.35	244	1.824	0.548	0.452	1770		1388.05	244	1.824	0.548	0.452
1692		20724.88	245	1.816	0.551	0.449	1663		1390.97	245	1.816	0.551	0.449
1661		20728.99	246	1.809	0.553	0.447	1712		1396.64	246	1.809	0.553	0.447
1775		20748.66	247	1.802	0.555	0.445	1754		1397.74	247	1.802	0.555	0.445
1712		20765.54	248	1.794	0.557	0.443	1674		1398.53	248	1.794	0.557	0.443
1739		20776.92	249	1.787	0.560	0.440	1719		1401.03	249	1.787	0.560	0.440

APPENDIX 5 - TIME SERIES WITH QUANTILE COMPARISON

FINAL RECONSTRUCTED FLOW SORTED BY MAGNITUDE (lowest => highest)

(Rank 1 = driest year, 444 = wettest year)

UPPER COLORADO RIVER BASIN at Lees Ferry

SALT-VERDE-TONTO RIVER BASIN

water yr	Qnt	UCRB Q (cfs)	rank ↑	RI	P	1-P	water yr	Qnt	SVT Q (cfs)	rank ↑	RI	P	1-P
1690		20792.04	250	1.780	0.562	0.438	1878		1408.30	250	1.780	0.562	0.438
1602		20835.71	251	1.773	0.564	0.436	1652		1409.52	251	1.773	0.564	0.436
1922		20869.88	252	1.766	0.566	0.434	1570		1410.87	252	1.766	0.566	0.434
1803		20874.47	253	1.759	0.569	0.431	1901		1411.25	253	1.759	0.569	0.431
1891		20908.27	254	1.752	0.571	0.429	1636		1412.65	254	1.752	0.571	0.429
1687		20999.60	255	1.745	0.573	0.427	1646		1414.62	255	1.745	0.573	0.427
1758		21028.67	256	1.738	0.575	0.425	1889		1415.15	256	1.738	0.575	0.425
1543		21061.61	257	1.732	0.578	0.422	1534		1420.52	257	1.732	0.578	0.422
1669		21069.88	258	1.725	0.580	0.420	1723		1426.02	258	1.725	0.580	0.420
1948		21085.60	259	1.718	0.582	0.418	1577		1430.37	259	1.718	0.582	0.418
1930		21118.83	260	1.712	0.584	0.416	1552		1437.73	260	1.712	0.584	0.416
1711		21131.84	261	1.705	0.587	0.413	1826		1438.12	261	1.705	0.587	0.413
1656		21186.05	262	1.698	0.589	0.411	1587		1441.52	262	1.698	0.589	0.411
1807		21197.46	263	1.692	0.591	0.409	1945		1451.57	263	1.692	0.591	0.409
1831		21219.97	264	1.686	0.593	0.407	1898		1452.28	264	1.686	0.593	0.407
1915		21234.03	265	1.679	0.596	0.404	1957		1454.63	265	1.679	0.596	0.404
1876		21238.73	266	1.673	0.598	0.402	1882		1455.04	266	1.673	0.598	0.402
1710		21262.89	267	1.667	0.600	0.400	1714		1467.90	267	1.667	0.600	0.400
1705		21527.86	268	1.660	0.602	0.398	1602		1481.12	268	1.660	0.602	0.398
1616		21555.47	269	1.654	0.604	0.396	1625		1487.63	269	1.654	0.604	0.396
1620		21584.99	270	1.648	0.607	0.393	1673		1495.31	270	1.648	0.607	0.393
1569		21609.42	271	1.642	0.609	0.391	1809		1497.25	271	1.642	0.609	0.391
1890		21613.08	272	1.636	0.611	0.389	1525		1497.54	272	1.636	0.611	0.389
1799		21639.26	273	1.630	0.613	0.387	1927		1498.39	273	1.630	0.613	0.387
1848		21658.01	274	1.624	0.616	0.384	1615		1498.53	274	1.624	0.616	0.384
1677		21695.46	275	1.618	0.618	0.382	1741		1502.85	275	1.618	0.618	0.382
1865		21737.46	276	1.612	0.620	0.380	1529		1504.70	276	1.612	0.620	0.380
1841		21740.09	277	1.606	0.622	0.378	1642		1509.09	277	1.606	0.622	0.378
1689		21760.95	278	1.601	0.625	0.375	1705		1513.70	278	1.601	0.625	0.375
1817		21780.60	279	1.595	0.627	0.373	1944		1515.01	279	1.595	0.627	0.373
1718		21816.90	280	1.589	0.629	0.371	1948		1516.37	280	1.589	0.629	0.371
1745		21847.63	281	1.584	0.631	0.369	1895		1516.46	281	1.584	0.631	0.369
1761		21886.92	282	1.578	0.634	0.366	1563		1516.53	282	1.578	0.634	0.366
1628		21887.63	283	1.572	0.636	0.364	1877		1516.82	283	1.572	0.636	0.364
1785		21889.34	284	1.567	0.638	0.362	1672		1518.59	284	1.567	0.638	0.362
1642		21896.08	285	1.561	0.640	0.360	1825		1518.78	285	1.561	0.640	0.360
1769		21956.89	286	1.556	0.643	0.357	1853		1518.87	286	1.556	0.643	0.357
1858		22012.34	287	1.551	0.645	0.355	1775		1521.03	287	1.551	0.645	0.355
1679		22020.52	288	1.545	0.647	0.353	1665		1524.60	288	1.545	0.647	0.353
1924		22050.11	289	1.540	0.649	0.351	1688		1534.94	289	1.540	0.649	0.351
1699		22081.86	290	1.534	0.652	0.348	1686		1535.43	290	1.534	0.652	0.348
1815		22134.80	291	1.529	0.654	0.346	1732		1548.20	291	1.529	0.654	0.346
1586		22234.86	292	1.524	0.656	0.344	1569		1553.82	292	1.524	0.656	0.344
1599		22235.39	293	1.519	0.658	0.342	1706		1563.52	293	1.519	0.658	0.342
1910		22282.80	294	1.514	0.661	0.339	1568		1568.96	294	1.514	0.661	0.339
1609		22306.69	295	1.508	0.663	0.337	1802		1574.67	295	1.508	0.663	0.337
1833		22330.97	296	1.503	0.665	0.335	1611		1583.58	296	1.503	0.665	0.335
1844		22345.53	297	1.498	0.667	0.333	1546		1586.84	297	1.498	0.667	0.333
1683		22391.06	298	1.493	0.670	0.330	1617		1588.27	298	1.493	0.670	0.330
1595		22407.44	299	1.488	0.672	0.328	1633		1592.12	299	1.488	0.672	0.328
1541		22416.34	300	1.483	0.674	0.326	1962		1605.74	300	1.483	0.674	0.326
1826		22452.99	301	1.478	0.676	0.324	1605		1607.17	301	1.478	0.676	0.324
1552		22512.59	302	1.474	0.679	0.321	1677		1607.24	302	1.474	0.679	0.321
1525		22522.33	303	1.469	0.681	0.319	1814		1618.95	303	1.469	0.681	0.319
1639		22578.74	304	1.464	0.683	0.317	1656		1620.74	304	1.464	0.683	0.317
1697		22632.85	305	1.459	0.685	0.315	1942		1621.05	305	1.459	0.685	0.315
1643		22686.10	306	1.454	0.688	0.312	1795		1621.14	306	1.454	0.688	0.312
1821		22692.46	307	1.450	0.690	0.310	1897		1623.80	307	1.450	0.690	0.310
1897		22695.15	308	1.445	0.692	0.308	1935		1626.48	308	1.445	0.692	0.308
1688		22837.75	309	1.440	0.694	0.306	1856		1626.98	309	1.440	0.694	0.306
1741		22856.28	310	1.435	0.697	0.303	1909		1638.15	310	1.435	0.697	0.303
1547		22872.19	311	1.431	0.699	0.301	1890		1641.61	311	1.431	0.699	0.301
1660		22874.49	312	1.426	0.701	0.299	1603		1646.00	312	1.426	0.701	0.299
1676		22915.91	313	1.422	0.703	0.297	1930		1650.22	313	1.422	0.703	0.297
1594		22943.78	314	1.417	0.706	0.294	1799		1673.09	314	1.417	0.706	0.294
1760		22975.06	315	1.413	0.708	0.292	1874		1673.57	315	1.413	0.708	0.292

APPENDIX 5 - TIME SERIES WITH QUANTILE COMPARISON

FINAL RECONSTRUCTED FLOW SORTED BY MAGNITUDE (lowest => highest)

(Rank 1 = driest year, 444 = wettest year)

UPPER COLORADO RIVER BASIN at Lees Ferry

SALT-VERDE-TONTO RIVER BASIN

water yr	Qnt	UCRB Q (cfs)	rank ↑	RI	P	1-P	water yr	Qnt	SVT Q (cfs)	rank ↑	RI	P	1-P
1674		23019.89	316	1.408	0.710	0.290	1682		1674.09	316	1.408	0.710	0.290
1766		23022.72	317	1.404	0.712	0.288	1835		1683.50	317	1.404	0.712	0.288
1743		23085.49	318	1.399	0.715	0.285	1830		1683.92	318	1.399	0.715	0.285
1611		23099.99	319	1.395	0.717	0.283	1933		1685.24	319	1.395	0.717	0.283
1771		23135.02	320	1.391	0.719	0.281	1537		1685.31	320	1.391	0.719	0.281
1535		23184.67	321	1.386	0.721	0.279	1655		1692.76	321	1.386	0.721	0.279
1929		23193.03	322	1.382	0.724	0.276	1596		1695.64	322	1.382	0.724	0.276
1693		23217.19	323	1.378	0.726	0.274	1884		1705.61	323	1.378	0.726	0.274
1852		23270.23	324	1.373	0.728	0.272	1903		1716.81	324	1.373	0.728	0.272
1753		23276.29	325	1.369	0.730	0.270	1586		1717.66	325	1.369	0.730	0.270
1650		23284.62	326	1.365	0.733	0.267	1649		1717.89	326	1.365	0.733	0.267
1578		23285.49	327	1.361	0.735	0.265	1608		1733.39	327	1.361	0.735	0.265
1681		23310.67	328	1.357	0.737	0.263	1695		1735.22	328	1.357	0.737	0.263
1614		23333.23	329	1.353	0.739	0.261	1759		1735.75	329	1.353	0.739	0.261
1603		23342.99	330	1.348	0.742	0.258	1885		1751.70	330	1.348	0.742	0.258
1672		23366.90	331	1.344	0.744	0.256	1837		1760.06	331	1.344	0.744	0.256
1606		23369.52	332	1.340	0.746	0.254	1539		1763.49	332	1.340	0.746	0.254
1554		23394.17	333	1.336	0.748	0.252	1912		1767.83	333	1.336	0.748	0.252
1812		23449.33	334	1.332	0.751	0.249	1840		1775.36	334	1.332	0.751	0.249
1749		23519.30	335	1.328	0.753	0.247	1549		1780.55	335	1.328	0.753	0.247
1546		23526.37	336	1.324	0.755	0.245	1960		1782.37	336	1.324	0.755	0.245
1651		23541.10	337	1.320	0.757	0.243	1588		1788.16	337	1.320	0.757	0.243
1702		23596.94	338	1.317	0.760	0.240	1693		1794.78	338	1.317	0.760	0.240
1787		23633.93	339	1.313	0.762	0.238	1530		1797.93	339	1.313	0.762	0.238
1912		23661.94	340	1.309	0.764	0.236	1821		1802.53	340	1.309	0.764	0.236
1923		23718.81	341	1.305	0.766	0.234	1807		1814.13	341	1.305	0.766	0.234
1596		23725.64	342	1.301	0.769	0.231	1604		1819.19	342	1.301	0.769	0.231
1539		23761.46	343	1.297	0.771	0.229	1783		1827.60	343	1.297	0.771	0.229
1537		23823.96	344	1.294	0.773	0.227	1768		1859.77	344	1.294	0.773	0.227
1903		23835.48	345	1.290	0.775	0.225	1762		1864.62	345	1.290	0.775	0.225
1802		23853.97	346	1.286	0.778	0.222	1855		1864.89	346	1.286	0.778	0.222
1947		23959.97	347	1.282	0.780	0.220	1891		1874.67	347	1.282	0.780	0.220
1932		24002.47	348	1.279	0.782	0.218	1725		1883.65	348	1.279	0.782	0.218
1937		24013.25	349	1.275	0.784	0.216	1639		1889.40	349	1.275	0.784	0.216
1647		24041.50	350	1.271	0.787	0.213	1661		1895.67	350	1.271	0.787	0.213
1738		24078.59	351	1.268	0.789	0.211	1804		1901.51	351	1.268	0.789	0.211
1657		24088.94	352	1.264	0.791	0.209	1629		1909.05	352	1.264	0.791	0.209
1762		24093.04	353	1.261	0.793	0.207	1888		1910.06	353	1.261	0.793	0.207
1727		24107.70	354	1.257	0.796	0.204	1862		1924.28	354	1.257	0.796	0.204
1618		24181.39	355	1.254	0.798	0.202	1630		1927.62	355	1.254	0.798	0.202
1927		24237.69	356	1.250	0.800	0.200	1543		1928.85	356	1.250	0.800	0.200
1526		24288.57	357	1.246	0.802	0.198	1647		1928.99	357	1.246	0.802	0.198
1570		24332.20	358	1.243	0.804	0.196	1555		1934.76	358	1.243	0.804	0.196
1938		24430.98	359	1.240	0.807	0.193	1848		1944.49	359	1.240	0.807	0.193
1548		24436.41	360	1.236	0.809	0.191	1641		1956.70	360	1.236	0.809	0.191
1725		24440.54	361	1.233	0.811	0.189	1926		1964.65	361	1.233	0.811	0.189
1895		24462.02	362	1.229	0.813	0.187	1609		1970.11	362	1.229	0.813	0.187
1560		24470.43	363	1.226	0.816	0.184	1650		1976.37	363	1.226	0.816	0.184
1764		24494.35	364	1.223	0.818	0.182	1526		1976.38	364	1.223	0.818	0.182
1534		24543.33	365	1.219	0.820	0.180	1917		1984.57	365	1.219	0.820	0.180
1916		24591.54	366	1.216	0.822	0.178	1620		1990.49	366	1.216	0.822	0.178
1678		24638.13	367	1.213	0.825	0.175	1690		1997.00	367	1.213	0.825	0.175
1926		24765.71	368	1.209	0.827	0.173	1634		1999.25	368	1.209	0.827	0.173
1911		24776.42	369	1.206	0.829	0.171	1553		2006.52	369	1.206	0.829	0.171
1605		24796.56	370	1.203	0.831	0.169	1550		2019.07	370	1.203	0.831	0.169
1885		24884.34	371	1.199	0.834	0.166	1536		2022.13	371	1.199	0.834	0.166
1791		24931.83	372	1.196	0.836	0.164	1660		2029.66	372	1.196	0.836	0.164
1850		24965.50	373	1.193	0.838	0.162	1906		2029.97	373	1.193	0.838	0.162
1649		24971.73	374	1.190	0.840	0.160	1556		2041.44	374	1.190	0.840	0.160
1905		25034.04	375	1.187	0.843	0.157	1599		2060.66	375	1.187	0.843	0.157
1719		25099.68	376	1.184	0.845	0.155	1635		2063.98	376	1.184	0.845	0.155
1640		25113.56	377	1.180	0.847	0.153	1644		2087.03	377	1.180	0.847	0.153
1816		25120.16	378	1.177	0.849	0.151	1718		2097.24	378	1.177	0.849	0.151
1691		25135.15	379	1.174	0.852	0.148	1867		2121.11	379	1.174	0.852	0.148

APPENDIX 5 - TIME SERIES WITH QUANTILE COMPARISON

FINAL RECONSTRUCTED FLOW SORTED BY MAGNITUDE (lowest => highest)

(Rank 1 = driest year, 444 = wettest year)

UPPER COLORADO RIVER BASIN at Lees Ferry

SALT-VERDE-TONTO RIVER BASIN

water yr	Qnt	UCRB Q (cfs)	rank ↑	RI	P	1-P	water yr	Qnt	SVT Q (cfs)	rank ↑	RI	P	1-P
1958		25165.09	380	1.171	0.854	0.146	1540		2124.13	380	1.171	0.854	0.146
1673		25197.15	381	1.168	0.856	0.144	1908		2129.64	381	1.168	0.856	0.144
1550		25231.79	382	1.165	0.858	0.142	1924		2130.29	382	1.165	0.858	0.142
1796		25238.27	383	1.162	0.861	0.139	1699		2134.64	383	1.162	0.861	0.139
1949		25276.66	384	1.159	0.863	0.137	1758		2138.97	384	1.159	0.863	0.137
1941		25291.65	385	1.156	0.865	0.135	1865		2140.08	385	1.156	0.865	0.135
1577		25409.31	386	1.153	0.867	0.133	1850		2150.95	386	1.153	0.867	0.133
1621		25486.82	387	1.150	0.870	0.130	1869		2153.65	387	1.150	0.870	0.130
1556		25505.85	388	1.147	0.872	0.128	1701		2161.16	388	1.147	0.872	0.128
1832		25512.44	389	1.144	0.874	0.126	1771		2162.73	389	1.144	0.874	0.126
1615		25518.07	390	1.141	0.876	0.124	1683		2169.69	390	1.141	0.876	0.124
1828		25579.54	391	1.138	0.879	0.121	1689		2178.91	391	1.138	0.879	0.121
1942		25580.99	392	1.135	0.881	0.119	1565		2179.24	392	1.135	0.881	0.119
1884		25618.52	393	1.132	0.883	0.117	1743		2182.88	393	1.132	0.883	0.117
1701		25634.18	394	1.129	0.885	0.115	1687		2216.94	394	1.129	0.885	0.115
1524		25673.59	395	1.127	0.888	0.112	1792		2221.78	395	1.127	0.888	0.112
1746		25699.56	396	1.124	0.890	0.110	1681		2237.87	396	1.124	0.890	0.110
1617		25743.87	397	1.121	0.892	0.108	1766		2285.58	397	1.121	0.892	0.108
1555		25763.98	398	1.118	0.894	0.106	1564		2295.01	398	1.118	0.894	0.106
1909		25797.24	399	1.115	0.897	0.103	1692		2298.36	399	1.115	0.897	0.103
1853		25905.86	400	1.113	0.899	0.101	1610		2311.01	400	1.113	0.899	0.101
1557		25987.72	401	1.110	0.901	0.099	1858		2320.55	401	1.110	0.901	0.099
1604		25994.70	402	1.107	0.903	0.097	1916		2322.69	402	1.107	0.903	0.097
1790		26031.95	403	1.104	0.906	0.094	1815		2327.61	403	1.104	0.906	0.094
1610		26050.90	404	1.101	0.908	0.092	1932		2333.52	404	1.101	0.908	0.092
1906		26202.01	405	1.099	0.910	0.090	1949		2336.62	405	1.099	0.910	0.090
1565		26280.02	406	1.096	0.912	0.088	1833		2349.09	406	1.096	0.912	0.088
1868		26389.30	407	1.093	0.915	0.085	1640		2366.54	407	1.093	0.915	0.085
1784		26597.39	408	1.091	0.917	0.083	1791		2367.45	408	1.091	0.917	0.083
1536		26612.95	409	1.088	0.919	0.081	1852		2401.69	409	1.088	0.919	0.081
1952		26633.88	410	1.085	0.921	0.079	1844		2427.42	410	1.085	0.921	0.079
1843		26718.88	411	1.083	0.924	0.076	1710		2490.26	411	1.083	0.924	0.076
1811		26831.33	412	1.080	0.926	0.074	1914		2510.46	412	1.080	0.926	0.074
1523		26842.29	413	1.077	0.928	0.072	1937		2527.76	413	1.077	0.928	0.072
1747		26896.52	414	1.075	0.930	0.070	1627		2560.23	414	1.075	0.930	0.070
1920		26940.99	415	1.072	0.933	0.067	1720		2596.21	415	1.072	0.933	0.067
1540		26958.63	416	1.070	0.935	0.065	1905		2637.25	416	1.070	0.935	0.065
1928		26986.34	417	1.067	0.937	0.063	1838		2685.14	417	1.067	0.937	0.063
1907		27094.25	418	1.065	0.939	0.061	1866		2698.52	418	1.065	0.939	0.061
1840		27295.43	419	1.062	0.942	0.058	1618		2735.07	419	1.062	0.942	0.058
1734		27341.37	420	1.060	0.944	0.056	1952		2735.49	420	1.060	0.944	0.056
1521		27363.07	421	1.057	0.946	0.054	1920		2751.21	421	1.057	0.946	0.054
1633		27423.68	422	1.055	0.948	0.052	1747		2765.70	422	1.055	0.948	0.052
1768		27459.77	423	1.052	0.951	0.049	1764		2785.83	423	1.052	0.951	0.049
1838		27601.88	424	1.050	0.953	0.047	1907		2791.80	424	1.050	0.953	0.047
1862		27631.11	425	1.047	0.955	0.045	1911		2794.02	425	1.047	0.955	0.045
1792		27640.23	426	1.045	0.957	0.043	1915		2794.44	426	1.045	0.957	0.043
1797		27704.65	427	1.042	0.960	0.040	1787		2829.27	427	1.042	0.960	0.040
1655		27720.94	428	1.040	0.962	0.038	1651		2834.84	428	1.040	0.962	0.038
1957		27724.11	429	1.037	0.964	0.036	1680		2877.31	429	1.037	0.964	0.036
1917		27836.17	430	1.035	0.966	0.034	1621		2918.24	430	1.035	0.966	0.034
1914		28288.45	431	1.032	0.969	0.031	1726		2935.68	431	1.032	0.969	0.031
1680		28327.11	432	1.030	0.971	0.029	1849		2978.71	432	1.030	0.971	0.029
1839		28427.83	433	1.028	0.973	0.027	1745		2995.25	433	1.028	0.973	0.027
1549		28698.63	434	1.025	0.975	0.025	1919		3057.43	434	1.025	0.975	0.025
1866		28848.61	435	1.023	0.978	0.022	1594		3117.79	435	1.023	0.978	0.022
1921		28851.80	436	1.021	0.980	0.020	1828		3142.48	436	1.021	0.980	0.020
1962		28984.72	437	1.018	0.982	0.018	1784		3271.92	437	1.018	0.982	0.018
1564		29197.41	438	1.016	0.984	0.016	1749		3306.59	438	1.016	0.984	0.016
1553		29425.66	439	1.014	0.987	0.013	1816		3332.41	439	1.014	0.987	0.013
1837		29444.42	440	1.011	0.989	0.011	1839		3515.86	440	1.011	0.989	0.011
1726		30102.73	441	1.009	0.991	0.009	1941		3732.36	441	1.009	0.991	0.009
1849		30141.68	442	1.007	0.993	0.007	1746		4028.15	442	1.007	0.993	0.007
1720		30495.00	443	1.005	0.996	0.004	1793		4612.05	443	1.005	0.996	0.004
1867		31208.75	444	1.002	0.998	0.002	1868		4621.62	444	1.002	0.998	0.002