

## Supplemental Materials

Table S1 Selected pairs for high flows ( $Q_{5\%}$  and  $Q_{10\%}$ ) in the Pingjiang and Xiangshui watersheds

High flows	Selected years	Pingjiang watershed				Xiangshui watershed		
		Paired years	$R_{5\%}$ Precipitation (mm)		Selected years	Paired years	$R_{5\%}$ Precipitation (mm)	
$Q_{5\%}$	1964	2004	691.4	701.4	1968	1999	648.0	644.9
	1976	1991	725.4	729.7	1971	2004	597.2	592.5
	1987	1996	713	717.8	1972	1998	659	660.1
	1968	2006	878.9	878.8	1974	1994	736.1	731.6
	1973	2006	869.2	878.8	1975	1995	755.1	752.8
	1974	2001	756.4	770.5	1976	1999	645.8	644.9
	1985	2000	691.7	678.1	1978	2000	808.3	804.7
					1982	2002	693.6	699.4
$Q_{10\%}$					1983	1996	894.2	891.7
			$R_{10\%}$ Precipitation (mm)				$R_{10\%}$ Precipitation (mm)	
	1965	1996	277.6	280.2	1970	2000	390.3	389.8
	1966	1993	266.3	270.7	1970	2002	390.3	389.6
	1976	1993	337.4	270.7	1971	2004	238.7	240
	1980	1999	315.4	315.2	1972	2000	263.1	360.8
	1980	2000	315.4	317.7	1973	1992	421.1	419.2
	1985	1996	276.7	280.2	1980	2001	335.3	336.1
	1984	2001	332.5	333.4	1981	2001	335.0	336.1
					1987	2005	323.9	318.6

Table S2 Selected pairs for median and low flows in the Pingjiang and Xiangshui watersheds

Watersheds	Selected years	Paired years	Precipitation (mm)		Tave (°C)	Tmax (°C)		
Pingjiang	1965	1995	1574.95	1542.54	19.06	18.66	24.53	24.95
	1968	1999	1550.26	1554.50	19.29	19.45	25.63	25.06
	1969	2000	1455.62	1484.41	18.64	18.93	24.55	24.47
	1969	1996	1455.62	1430.87	18.64	18.47	24.58	24.47
	1970	1994	1891.53	1850.62	18.38	18.94	24.61	23.85
	1972	1996	1450.16	1430.87	18.76	18.47	24.58	24.61
	1972	2000	1450.16	1484.41	18.76	18.93	24.58	24.47
	1974	1995	1530.18	1542.54	18.81	18.66	24.53	24.79
	1977	1993	1382.30	1354.62	18.97	18.61	24.59	24.95
	1978	1991	1222.65	1196.88	19.24	19.08	24.70	25.06
Xiangshui	1979	2004	1376.78	1348.38	19.23	19.33	25.73	25.20
	1981	2001	1693.93	1643.60	18.76	19.24	25.13	24.39
	1968	1999	1384.54	1372.82	25.72	25.71	1968	1999
	1970	1997	1916.12	1915.69	24.68	24.96	1970	1997
	1970	1992	1916.12	1954.50	24.68	24.97	1970	1992
	1972	1989	1346.64	1305.32	25.34	25.03	1972	1989
	1974	1996	1623.52	1609.27	25.11	25.07	1974	1996
	1976	1998	1571.99	1579.53	24.65	25.77	1976	1998
	1980	1993	1715.93	1677.41	25.08	24.87	1980	1993
	1981	1996	1611.93	1609.27	25.09	25.07	1981	1996
	1982	1993	1659.28	1677.41	24.76	24.87	1982	1993
	1988	1998	1573.69	1579.53	24.67	25.77	1988	1998
	1985	2000	1766.01	1756.84	24.3	25.21	1985	2000

Table S3 Selected pairs for recession constants in the Pingjiang and Xiangshui watersheds

Watersheds	Selected rainfall events	Paired rainfall events	Antecedent rainfall (3-day average) (mm)		Antecedent streamflow (3-day) (m <sup>3</sup> /s)		Peak rainfall	
Pingjiang	1966 8.15-8.23	1995 5.21-5.30	0.20	0.00	36.07	66.77	42.30	40.10
	1989 6.17-6.25	1995 5.22-5.30	0.70	0.00	37.93	66.77	42.40	40.10
	1976 5.23-5.30	1993 11.27- 12.03	0.00	0.10	71.10	25.53	36.10	36.20
	1976 10.3-10.10	1993 11.27- 12.03	0.00	0.10	34.47	25.53	37.60	36.20
	1981 10.14-10.21	1993 11.4- 11.11	0.00	0.23	28.70	26.07	35.30	35.90
	1976 5.23-5.30	1993 11.4- 11.11	0.00	0.23	71.10	26.07	36.10	35.90
	1973 8.2-8.10	1997 11.11-11.19	0.00	0.00	23.00	34.40	28.80	29.90
	1983 7.22-7.29	1997 11.11-11.19	0.00	0.00	26.57	34.40	31.10	29.90
	1966 8.15-8.23	2002 3.20-3.27	0.20	0.00	36.07	34.40	42.30	40.20
	1989 3.30-4.5	2002 3.20-3.2	0.64	0.00	27.03	34.40	40.30	40.20
Xiangshui	1974 4.28-5.5	2000 10.1-10.8	3.50	0.03	109.20	79.50	47.50	45.10
	1972 9.14-9.21	1995 5.18-5.25	0.60	0.33	51.50	134.70	26.10	26.60
	1973 11.23-11.30	1997 1.30- 2.5	0.27	0.00	62.60	45.00	22.60	22.90
	1972 7.9-7.16	1992 3.14-3.20	0.70	0.57	49.00	120.20	28.10	28.40
	1971 10.26- 11.1	1995 9.7- 9.14	0.53	0.70	40.20	129.30	32.20	32.60
	1969 10.14-10.21	1991 6.17-6.24	0.66	0.90	50.80	47.80	64.60	61.20
	1968 2.23-3.3	1993 11.27-12. 2	0.00	0.16	30.86	52.30	20.50	20.80
	1974 10.28-11.3	1998 1.11-1.16	3.13	0.20	65.90	86.20	36.80	36.90
	1976 4.30-5.6	1994 4.30-5.6	0.00	1.23	192.10	217.80	41.40	42.60