

Illinois River near Tahlequah

Illinois River Near Tahlequah				Loadings	
Year	Flow (cfs)	Total P (mg/L)	Ortho P (mg/L)	Total P kg/year	Ortho P kg/year
1980	249				
1981	384				
1982	812				
1983	537				
1984	1,157				
1985	1,651				
1986	1,452				
1987	1,218				
1988	820				
1989	808				
1990	1,695	0.098	0.078	147,579	117,307
1991	1,094	0.079	0.044	76,796	43,285
1992	1,207	0.080	0.058	86,205	62,858
1993	1,751	0.099	0.086	154,647	133,796
1994	1,071	0.084	0.068	80,223	64,768
1995	1,123	0.080	0.071	80,229	71,454
1996	938	0.085	0.092	71,207	76,792
1997	812	0.069	0.066	49,797	47,621
1998	1,044	0.081	0.075	75,524	69,930
1999	1,143	0.121	0.093	123,518	94,936
2000	1,083	0.136	0.111	131,543	107,362
2001	1,033	0.158	0.123	145,766	113,476
2002	851	0.211	0.151	160,366	114,764
2003	478	0.100	0.109	42,690	46,532
2004	1,157	0.075		77,499	
2005	712	0.060		38,148	
2006	426	0.074		28,154	
2007	736	0.066		43,383	
2008	1,839	0.062		101,829	
2009	1,407	0.072		90,475	
2010	819.8	0.050		36,608	
2011	1,540.8	0.058		79,813	
2012	491.8	0.038		16,689	
2013	946.1	0.043		36,331	
2014	659.4	0.038		22,378	
2015	2,174.6	0.041		79,628	
2016	700.6	0.050		31,286	
2017	1,219.7	0.050		54,465	
2018	987.2	0.054		47,610	
2019	2,308.0	0.100		206,129	
2020	1,670.3	0.047		70,112	
2021	1,362.4	0.030		36,502	
2022	1,577.6	0.040		56,359	
2023	1,189.1	0.034		36,106	
Average	1,099	0.075	0.087	73,914	85,774

Illinois River near Tahlequah				
Year	Pt (mg/l)	Flow (cfs)	Pt (kg/yr)	% Decrease
1980-1993	0.090	1060	85,235	0.0%
1990-1994	0.088	1364	107,341	-25.9%
1991-1995	0.085	1249	94,704	-11.1%
1992-1996	0.086	1218	93,495	-9.7%
1993-1997	0.082	1139	83,799	1.7%
1994-1998	0.079	998	70,546	17.2%
1995-1999	0.093	1012	83,632	1.9%
1996-2000	0.104	1004	92,876	-9.0%
1997-2001	0.117	1023	106,797	-25.3%
1998-2008	0.143	1031	131,491	-54.3%
1999-2003	0.143	918	117,524	-37.9%
2000-2004	0.137	920	112,341	-31.8%
2001-2005	0.121	846	91,325	-7.1%
2002-2006	0.104	725	67,345	21.0%
2003-2007	0.075	702	47,216	44.6%
2004-2008	0.067	974	58,605	31.2%
2005-2009	0.067	1024	60,830	28.6%
2006-2010	0.065	1046	61,131	28.3%
2007-2011	0.062	1269	70,259	17.6%
2008-2012	0.056	1220	61,180	28.2%
2009-2013	0.052	1041	48,513	43.1%
2010-2014	0.046	1105	36,735	56.9%
2011-2015	0.045	1163	46,721	45.2%
2012-2016	0.042	994	37,303	56.2%
2013-2017	0.044	1140	45,051	47.1%
2014-2018	0.047	1148	47,787	43.9%
2015-2019	0.059	1478	77,881	8.6%
2016-2020	0.060	1377	73,518	13.7%
2017-2021	0.058	1510	78,165	8.3%
2018-2022	0.058	1581	81,291	4.6%
2019-2023	0.051	1621	74,547	12.5%

NOTES : Flow & Water quality data provided by USGS Oklahoma District

* WQ data from 1999 to the present also includes data routinely collected by the OWRB
 Values represent data that is routinely collected and excludes targeted high flow events.