

Air Quality Pollutant Estimates

Northern Great Plains Network

Park	Ozone							Wet Deposition			Visibility		
	2nd Hi	1hr	#1hr > 100	4th Hi	8hr#8hr > 85	Sum06	3 Mo Total	S kg/Ha	Total N kg/Ha	Dext	Clear	Dext	Hazy
Agate Fossil Beds NM	99		2	73	2	16	1.59	2.77	7		32		
Badlands NP	90		1	69	1	9	1.30	2.70	10		46		
Devils Tower NM	88		1	68	1	7	1.02	1.89	7		33		
Fort Laramie NHS	98		2	73	2	16	1.59	2.68	6		28		
Fort Union Trading Post NHS	77		0	63	0	3	0.74	1.46	7		35		
Jewel Cave NM	93		2	70	1	14	1.28	2.37	8		38		
Knife River Indian Village NHS	73		0	61	0	2	1.05	2.36	8		38		
Missouri NRR	111		12	86	6	26	4.91	3.78	34		190		
Mount Rushmore NMem	92		2	70	1	10	1.25	2.42	9		41		
Niobrara NSR	111		12	86	6	26	4.91	3.78	34		190		
Scotts Bluff NM	99		2	73	2	15	1.62	2.83	7		29		
Theodore Roosevelt NP	76		0	63	0	3	0.91	1.85	7		36		
Wind Cave NP	94		2	71	1	15	1.34	2.53	9		40		

Class: refers to an area's designation under the Clean Air Act

Ozone information represents 5-yr average of annual values from 1995-1999

2nd High 1 hr concentration (ppb): indicates peak values for ozone; old standard of 0.12 ppm (120 ppb) was based on 2nd hi, 1-hr average

4th high 8 hr concentration (ppb): new ozone standard of 0.08 ppm (80 ppb) is based on 4th hi, 8-hr average

#8 hours>85 ppb: indicates how often the area would be in violation of the new 8-hr standard of 0.08 ppm

hours> 100 ppb: high peaks in ozone concentration, as well as cumulative dose, contribute to vegetation injury

SUM06_3mon (ppm-hrs) - sum of hourly ozone conc \geq 0.06 ppm (60 ppb) over 3 months (~ growing season), i.e., cumulative ozone dose

NADP information represents 6-yr average of annual values from 1995-2000

NADP deposition (kg/ha/yr): estimate of pollutants deposited to ecosystem by precipitation (NADP-National Atmospheric Deposition Program)

NADP Total S - sulfur from sulfate deposited by precipitation

NADP Total N - inorganic nitrogen (ammonium plus nitrate) deposited by precipitation

Visibility IMPROVE information represents 5-yr average of annual values from 1995-1999

bextClear - measure of light scattering and absorption, i.e., extinction, by particles in the air on an average clear day

bextHazy - measure of light scattering and absorption, i.e., extinction, by particles in the air on an average hazy day