

Table 1. 2012 Site specifications.

National Park Unit	Site Name	State	NPS Abbr.	CASTNet Abbr.	AQS ID Number	Latitude (degrees north)	Longitude (degrees west)	Elev. (m)	O ₃ Years ^a	SO ₂	CO	NO _x	PM	WS/WD	TMP	RH	RNF	SOL	Filter Pack ^b
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)																			
Big Bend	K-Bar Ranch Road	TX	BIBE-KB	BBE401	48-043-0101	29.3022	103.1772	1052	23	---	---	---	---	X	X	X	X	X	X
Canyonlands	Island in the Sky	UT	CANY-IS	CAN407	49-037-0101	38.4586	109.8211	1809	21	---	---	---	---	X	X	X	X	X	X
<u>Carl Sandburg</u>	Pasture	NC	CASA-PA	---	---	35.2736	82.4514	678	1	---	---	---	---	X	X	X	X	X	---
<u>Carlsbad Caverns</u>	Maintenance Area	NM	CAVE-MA	---	35-015-3001	32.1792	104.4417	1310	7	---	---	---	---	X	X	X	X	X	---
Chiricahua	Entrance Station	AZ	CHIR-ES	CHA467	04-003-8001	32.0092	109.3892	1570	22	---	---	---	---	X	X	X	X	X	X
<u>Colorado</u>	Maintenance Yard	CO	COLM-MY	---	08-077-1001	39.1067	108.7411	1740	7	---	---	---	---	X	X	X	X	X	---
Craters of the Moon	Visitor Center	ID	CRMO-VC	---	16-023-0101	43.4606	113.5622	1815	21	---	---	---	---	X	X	X	---	X	---
<u>Cumberland Gap</u>	Hensley Settlement	TN	CUGA-HS	---	21-013-1002	36.6719	83.5264	1013	7	---	---	---	---	X	X	X	X	X	---
Death Valley	Park Village	CA	DEVA-PV	---	06-027-0101	36.5092	116.8481	125	20	---	---	---	---	X	X	X	X	---	---
Denali	Headquarters	AK	DENA-HQ	DEN417	02-068-0003	63.7258	148.9633	661	26	---	---	---	---	X	X	X	X	X	X
<u>Devil's Tower</u>	Joyner Ridge Trail	WY	DETO-JR	---	56-011-1013	44.5969	104.7047	1200	4	---	---	---	---	X	X	X	X	X	---
<u>Dinosaur</u>	West Entrance Housing	UT	DINO-WE	---	49-047-1002	40.2917	108.9417	2072	10	---	---	---	---	X	X	X	X	X	---
Everglades	Beard Center	FL	EVER-BC	EVE419	12-086-0030	25.3911	80.6806	2	---	---	---	---	---	X	X	X	X	X	X
Glacier	West Glacier Horse Stables	MT	GLAC-WG	GLR468	30-029-8001	48.5103	113.9956	976	21	---	---	---	---	X	X	X	X	X	X
Grand Canyon	The Abyss	AZ	GRCA-AS	GRC474	04-005-8001	36.0597	112.1822	2073	20	---	---	---	---	X	X	X	X	X	X
Grand Teton	Science School	WY	GRTE-SS	---	56-039-0008	43.6708	110.5994	2105	2	---	---	---	---	X	X	X	X	X	---
Great Basin	Maintenance Yard	NV	GRBA-MY	GRB411	32-033-0101	39.0053	114.2158	2060	20	---	---	---	---	X	X	X	X	X	---
Great Smoky Mountains	Clingmans Dome	TN	GRSM-CD	---	47-155-0102	35.5619	83.4981	2021	20	---	---	---	---	X	X	X	X	X	---
Great Smoky Mountains	Cove Mountain	TN	GRSM-CM	---	47-155-0101	35.6967	83.6086	1243	25	X	---	---	---	X	X	X	X	---	---
Great Smoky Mountains	Look Rock	TN	GRSM-LR	GRS420	47-009-0101	35.6331	83.9422	793	25	---	X	X	X	X	X	X	X	X	X
<u>Guilford Courthouse</u>	Library	NC	GUCO-LI	---	---	36.1325	79.8478	261	1	---	---	---	---	X	X	X	---	---	---
Hawaii Volcanoes	Observatory / Jaggar Museum	HI	HAVO-OB	---	15-001-0007	19.4203	155.2881	1123	---	X	---	---	X	X	X	X	X	---	---
Hawaii Volcanoes	Visitor Center	HI	HAVO-VC	---	15-001-0005	19.4308	155.2578	1215	---	X	---	---	---	X	X	X	X	X	---
Joshua Tree	Black Rock	CA	JOTR-BR	JOT403	06-071-9002	34.0714	116.3906	1244	20	---	---	---	---	X	X	X	X	X	X
Joshua Tree	Cottonwood Canyon	CA	JOTR-CC	---	06-065-0008	33.7411	115.8206	984	8	---	---	---	---	X	X	X	X	X	---
<u>Joshua Tree</u>	Pinto Wells	CA	JOTR-PW	---	06-065-1004	33.9397	115.4108	326	7	---	---	---	---	X	X	X	X	X	---
<u>Kings Mountain</u>	Brown's Mountain	SC	KIMO-BM	---	45-021-0003	35.1314	81.405	340	2	---	---	---	---	X	X	X	X	X	---
Lassen Volcanic	Manzanita Lake Fire Station	CA	LAVO-ML	LAV410	06-089-3003	40.5403	121.5764	1756	26	---	---	---	---	X	X	X	X	X	X
<u>Little River Canyon</u>	Canyon High	AL	LIRI-CH	---	---	34.3669	85.6642	372	2	---	---	---	---	X	X	X	---	---	---
<u>Lyndon B. Johnson</u>	Hay Barn	TX	LYJO-HB	---	48-171-0001	30.2625	98.6292	470	1	---	---	---	---	X	X	X	X	X	---
Mammoth Cave	Houchin Meadow	KY	MACA-HM	MAC426	21-061-0501	37.1864	86.0411	258	17	X	X	X	---	X	X	X	X	X	X

Table 1. 2012 Site specifications (continued).

National Park Unit	Site Name	State	NPS Abbr.	CASTNet Abbr.	AQS ID Number	Latitude (degrees north)	Longitude (degrees west)	Elev. (m)	O ₃ Years ^a	SO ₂	CO	NO _x	PM	WS/WD	TMP	RH	RNF	SOL	Filter Pack ^b
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)																			
Mesa Verde	Resource Mngmt Area	CO	MEVE-RM	MEV405	08-083-0101	37.1983	108.4903	2165	20	---	---	---	---	X	X	X	X	X	X
<u>Mojave</u>	Kelso Mountains	CA	MOJA-KM	---	06-071-1001	35.1019	115.7767	1212	9	---	---	---	---	X	X	X	X	X	---
Mount Rainier	Tahoma Woods	WA	MORA-TW	MOR409	53-053-1010	46.7583	122.1244	415	22	---	---	---	---	X	X	X	X	X	X
Petrified Forest	South Entrance	AZ	PEFO-SE	PET427	04-017-0119	34.8225	109.8919	1723	11	---	---	---	---	X	X	X	X	X	X
Pinnacles	SW of East Entrance Station	CA	PINN-ES	PIN414	06-069-0003	36.485	121.1556	335	26	---	---	---	---	X	X	X	X	X	X
Rocky Mountain	Long's Peak	CO	ROMO-LP	ROM406	08-069-0007	40.2778	105.5453	2743	28	---	---	---	---	X	X	X	X	X	X
<u>Scotts Bluff</u>	Visitor Center	NE	SCBL-VC	---	31-157-0005	41.8294	103.708	1255	3	---	---	---	---	X	X	X	X	X	---
Sequoia and Kings Canyon	Ash Mountain	CA	SEKI-AS	SEK430	06-107-0009	36.4894	118.8292	457	14	---	---	---	X	X	X	X	X	X	X
Sequoia and Kings Canyon	Lower Kaweah	CA	SEKI-LK	---	06-107-0006	36.5658	118.7772	1890	30	---	---	---	---	X	X	X	X	X	---
Shenandoah	Big Meadows	VA	SHEN-BM	SHN418	51-113-0003	38.5231	78.4347	1073	29	---	---	---	---	X	X	X	X	X	X
Voyageurs	Sullivan Bay	MN	VOYA-SB	VOY413	27-137-0034	48.4128	92.8292	429	17	---	---	---	---	X	X	X	X	X	X
Yellowstone	Old Faithful	WY	YELL-OF	---	56-039-1012	44.4569	110.8314	2246	---	---	X	---	X	X	X	X	---	---	---
Yellowstone	Old Faithful Snow Lodge	WY	YELL-OS	---	---	44.3731	110.8308	2230	---	---	X	---	X	X	X	X	---	---	---
Yellowstone	Water Tank	WY	YELL-WT	YEL408	56-039-1011	44.5597	110.4006	2400	17	---	---	---	---	X	X	X	X	X	X
<u>Yosemite</u>	School Yard	CA	YOSE-SY	---	06-043-1004	37.7478	119.5917	1234	7	---	---	---	---	X	X	X	X	X	---
Yosemite	Turtleback Dome	CA	YOSE-TD	YOS404	06-043-0003	37.7133	119.7061	1605	20	---	---	---	---	X	X	X	X	X	X
Zion	Dalton's Wash	UT	ZION-DW	---	49-053-0130	37.1983	113.1506	1213	9	---	---	---	X	X	X	X	X	X	---
# active park units: 39		# active park sites: 48																	
Sites operated by the NPS for the Bureau of Land Management																			
Meeker	Plant Science Center	CO	MEEK-PS	---	08-103-0005	40.0039	107.8475	1994	3	---	---	X	X	X	X	X	X	X	---
Rangely	Golf Course	CO	RANG-GC	---	08-103-0006	40.0869	108.7614	1655	3	---	---	X	X	X	X	X	X	X	---
# active units: 2		# active sites: 2																	
Sites operated by the NPS for the U.S. Forest Service																			
Escalante	Visitor Center	UT	ESCA-VC	---	49-017-0044	37.7756	111.6147	1789	2	---	---	---	---	X	X	X	X	X	---
Walden	Chandler Ranch	CO	WALD-CR	---	08-057-0003	40.8822	106.3061	2417	2	---	X	X	---	X	X	X	---	X	---
# active units: 2		# active sites: 2																	
Sites operated by cooperating state agencies																			
<i>Acadia</i>	Cadillac Mountain	ME	ACAD-CM	---	23-009-0102	44.4083	68.2461	37	18	---	---	---	---	X	X	X	---	---	---
<i>Acadia</i>	McFarland Hill	ME	ACAD-MH	ACA416	23-009-0103	44.3769	68.2608	158	15	---	---	---	X	X	X	X	X	X	X
<i>Badlands</i>	Visitor Center	SD	BADL-VC	---	46-071-0001	43.7436	101.9414	739	12	---	---	---	X	---	---	---	---	---	---
<i>Cape Cod</i>	Cape Cod	MA	CACO-XX	---	25-001-0002	41.9758	70.0247	41	26	---	---	---	---	X	X	X	---	X	---

Table 1. 2012 Site specifications (continued).

National Park Unit	Site Name	State	NPS Abbr.	CASTNet Abbr.	AQS ID Number	Latitude (degrees north)	Longitude (degrees west)	Elev. (m)	O ₃ Years ^a	SO ₂	CO	NO _x	PM	WS/WD	TMP	RH	RNF	SOL	Filter Pack ^b
Sites operated by cooperating state agencies																			
<i>Chamizal</i>	Chamizal	TX	CHAM-XX	---	48-141-0044	31.7656	106.455	1128	21	---	---	---	---	X	X	X	---	X	---
<i>Congaree</i>	Congaree Bluff	SC	COSW-BL	---	45-079-0021	33.8147	80.7811	34	13	X	---	---	---	---	---	---	---	---	---
<i>Cowpens</i>	State Monitor	SC	COWP-SM	---	45-021-0002	35.1304	81.8166	297	25	---	---	---	---	---	---	---	---	---	---
<i>Everglades</i>	Cutler Road	FL	EVER-CR	---	12-086-0029	25.5861	80.3269	4	28	---	---	---	---	---	---	---	---	---	---
<i>Great Smoky Mountains</i>	Cades Cove	TN	GRSM-CC	---	47-009-0102	35.6042	83.7831	564	20	---	---	---	---	X	X	X	X	X	---
<i>Great Smoky Mountains</i>	Purchase Knob	NC	GRSM-PK	---	37-087-0036	35.59	83.0775	1500	15	---	---	---	---	---	---	---	---	---	---
<i>Indiana Dunes</i>	Ammunition Bunker	IN	INDU-AB	---	18-089-0022	41.7169	86.9075	187	20	---	---	---	X	X	X	X	---	X	---
<i>Mount Rainier</i>	Jackson Visitor's Center	WA	MORA-JV	---	53-053-0012	46.7853	121.7378	1615	15	---	---	---	---	---	---	---	---	---	---
<i>Saguaro</i>	East	AZ	SAGU-EA	---	04-019-0021	32.1744	110.7364	938	21	---	---	---	---	---	---	---	---	---	---
<i>Theodore Roosevelt</i>	Painted Canyon Visitor Cntr	ND	THRO-VC	THR422	38-007-0002	46.8947	103.3778	850	15	X	---	---	X	X	X	X	X	X	X
<i>Wind Cave</i>	Visitor Center	SD	WICA-VC	WNC429	46-033-0132	43.5578	103.4839	1292	9	---	---	---	X	X	X	X	X	X	X
<i>Yellowstone</i>	West Yellowstone	MT	YELL-WS	---	30-031-0017	44.6569	111.0894	2030	---	---	X	X	X	X	X	---	---	---	---
<i>Yosemite</i>	Village	CA	YOSE-VI	---	06-043-1001	37.7458	119.6028	1216	---	---	---	---	X	---	---	---	---	---	---

active park units: 15

active park sites: 17

Table 2. 2012 Summary of 8-hour average ozone concentrations (ppb).

National Park Unit	Site Name	Valid Number of Days	1 st Highest	2 nd Highest	3 rd Highest	4 th Highest ^a	5 th Highest	# Days with 8-Hour Average O ₃ Values ≥76 ppb ^a
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)								
Big Bend	K-Bar Ranch Road	349	69	68	68	67	67	0
Canyonlands	Island in the Sky	364	79	77	74	72	72	2
Chiricahua	Entrance Station	352	76	74	74	74	73	1
Craters of the Moon	Visitor Center	354	70	66	66	66	65	0
Death Valley	Park Village	358	77	75	74	73	71	1
Denali	Headquarters	364	57	56	53	52	52	0
Glacier	West Glacier Horse Stables	349	65	64	56	55	54	0
Grand Canyon	The Abyss	364	80	79	75	73	73	2
Grand Teton	Science School	362	72	70	69	67	66	0
Great Basin	Maintenance Yard	339	80	78	77	76	75	4
Great Smoky Mountains	Clingmans Dome	186	87	87	76	71	70	3
Great Smoky Mountains	Cove Mountain	360	81	77	73	72	69	2
Great Smoky Mountains	Look Rock	358	78	77	77	75	73	3
Joshua Tree	Black Rock	362	97	96	96	95	93	48
Joshua Tree	Cottonwood Canyon	233	82	77	76	75	74	3
Lassen Volcanic	Manzanita Lake Fire Station	356	81	79	77	71	69	3
Mammoth Cave	Houchin Meadow	362	90	81	81	81	79	9
Mesa Verde	Resource Management Area	354	72	71	70	69	68	0
Mount Rainier	Tahoma Woods	363	59	58	58	58	53	0
Petrified Forest	South Entrance	351	78	75	74	73	73	1
Pinnacles	SW of East Entrance Station	362	80	74	72	72	72	1
Rocky Mountain	Long's Peak	361	90	87	81	79	79	15
Sequoia and Kings Canyon	Ash Mountain	362	103	98	97	95	95	82
Sequoia and Kings Canyon	Lower Kaweah	359	90	89	88	87	87	41
Shenandoah	Big Meadows	349	82	82	73	72	71	2
Voyageurs	Sullivan Bay	354	74	68	64	63	63	0
Yellowstone	Water Tank	345	72	72	70	67	64	0
Yosemite	Turtleback Dome	361	91	84	81	81	78	8
Zion	Dalton's Wash	363	80	76	76	75	75	3
Sites operated by the NPS for the Bureau of Land Management								
Meeker	Plant Science Center	351	68	67	65	64	64	0
Rangely	Golf Course	342	71	71	70	69	69	0
Sites operated by the NPS for the U.S. Forest Service								
Escalante	Visitor Center	365	74	73	70	68	65	0
Walden	Chandler Ranch	322	60	60	60	59	59	0
Sites operated by cooperating state agencies								
Acadia	Cadillac Mountain	210	71	70	69	66	66	0
Acadia	McFarland Hill	356	67	65	65	60	60	0
Badlands	Visitor Center	365	68	68	67	64	64	0
Cape Cod	Cape Cod	207	88	85	80	79	77	6
Chamizal	Chamizal	360	75	71	70	69	68	0
Congaree	Congaree Bluff	232	63	57	56	56	56	0
Cowpens	State Monitor	210	77	74	74	71	70	1

Table 2. 2012 Summary of 8-hour average ozone concentrations (ppb) (continued).

National Park Unit	Site Name	Valid Number of Days	1 st Highest	2 nd Highest	3 rd Highest	4 th Highest ^a	5 th Highest	# Days with 8-Hour Average O ₃ Values ≥76 ppb ^a
Sites operated by cooperating state agencies								
<i>Everglades</i>	Cutler Road	347	68	66	65	62	59	0
<i>Great Smoky Mountains</i>	Cades Cove	241	69	67	64	64	62	0
<i>Great Smoky Mountains</i>	Purchase Knob	211	78	78	71	70	67	2
<i>Indiana Dunes</i>	Ammunition Bunker	179	97	95	88	78	73	4
<i>Mount Rainier</i>	Jackson Visitor's Center	240	66	62	62	61	59	0
<i>Saguaro</i>	East	361	74	73	72	71	71	0
<i>Theodore Roosevelt</i>	Painted Canyon Visitor Cntr	271	60	60	59	57	57	0
<i>Wind Cave</i>	Visitor Center	360	74	73	72	69	67	0
Portable ozone monitoring systems (POMS)^b								
<u>Carl Sandburg</u>	Pasture	209	74	66	60	60	59	0
<u>Carlsbad Caverns</u>	Maintenance Area	146	75	74	73	72	71	0
<u>Colorado</u>	Maintenance Yard	181	73	72	72	71	71	0
<u>Cumberland Gap</u>	Hensley Settlement	144	80	79	74	74	70	2
<u>Devil's Tower</u>	Joyner Ridge Trail	131	79	78	77	77	74	4
<u>Dinosaur</u>	West Entrance Housing	343	83	80	75	75	74	2
<u>Joshua Tree</u>	Pinto Wells	275	79	79	78	78	77	8
<u>Kings Mountain</u>	Brown's Mountain	142	77	76	71	71	71	2
<u>Mojave</u>	Kelso Mountains	210	82	81	81	80	80	15
<u>Scotts Bluff</u>	Visitor Center	182	85	84	72	68	67	2
<u>Yosemite</u>	School Yard	163	71	69	69	63	63	0

^a The primary and secondary National Ambient Air Quality Standard for ozone is 0.075 ppm over an 8-hour period. (An exceedance of the standard occurs when an 8-hour average ozone concentration is greater than or equal to 76 ppb. A violation of the standard occurs when the 3-year average of the fourth highest daily maximum 8-hour average ozone concentration equals or exceeds 76 ppb.) Exceedances of the standard are highlighted here in orange or red.

^b The Gaseous Pollutant Monitoring Program Portable Ozone Monitoring Systems (POMS) do not meet EPA standards for regulatory monitoring. However, ozone summary statistics from portable systems can be compared to EPA standards for reference purposes.

Note: The color coding break points follow the color categories used on the EPA's AIRNow Web Site (<http://www.airnow.gov>).

Operating agency key: plain text = site operated by the National Park Service, Bureau of Land Management, or U.S. Forest Service
italics = site operated by a state agency
underline = site operated by the National Park Service, but consisting of non-EPA certified portable instrumentation

Bold = Ozone summary statistics for POMS are highlighted bold where exceedances occurred. These sites should be compared to EPA standards for reference purposes only.





Color shading key: 4th highest 8-hour average  = 76 - 104 ppb ozone concentration # days with 8-hour average ≥76 ppb  = 4 - 10 days
 ≥ 105 ppb ozone concentration  > 10 days

Table 3. 2012 Ozone violation summary - primary standard^{a,b}.

National Park Unit	Site Name	2010-2012	2009-2011	2008-2010	2007-2009	2006-2008	2005-2007	2004-2006	2003-2005
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)									
Big Bend	K-Bar Ranch Road	70	69	64	66	66	66	63	63
Canyonlands	Island in the Sky	69	68	69	70	71	70	70	71
Chiricahua	Entrance Station	73	70	68	66	69	71	72	71
Craters of the Moon	Visitor Center	63	61	62	(64)	(67)	(67)	---	---
Death Valley	Park Village	72	71	72	77	81	84	82	81
Denali	Headquarters	52	53	58	58	58	52	52	52
Glacier	West Glacier Horse Stables	55	55	55	55	56	56	56	57
Grand Canyon	The Abyss	72	69	68	68	70	72	73	74
Grand Teton	Science School	(60)	(54)	---	---	---	---	---	---
Great Basin	Maintenance Yard	72	70	69	71	72	73	72	72
Great Smoky Mountains	Clingmans Dome	(75)	(75)	(76)	(79)	(84)	(83)	(80)	(79)
Great Smoky Mountains	Cove Mountain	76	75	76	79	82	82	77	78
Great Smoky Mountains	Look Rock	79	77	77	79	85	86	84	86
Joshua Tree	Black Rock	94	93	98	100	104	103	103	105
Joshua Tree	Cottonwood Canyon	(76)	(78)	(81)	(80)	(79)	(66)	(62)	(45)
Lassen Volcanic	Manzanita Lake Fire Station	67	64	70	74	77	72	69	68
Mammoth Cave	Houchin Meadow	75	70	70	72	74	76	72	73
Mesa Verde	Resource Management Area	68	68	68	69	71	73	73	70
Mount Rainier	Tahoma Woods	54	54	55	56	58	(56)	(58)	(61)
Petrified Forest	South Entrance	70	66	67	(67)	(70)	(70)	(70)	(71)
Pinnacles	SW of East Entrance Station	70	70	76	77	79	74	75	76
Rocky Mountain	Long's Peak	77	74	73	74	76	76	74	78
Sequoia and Kings Canyon	Ash Mountain	95	96	(101)	(103)	(105)	(103)	(103)	(105)
Sequoia and Kings Canyon	Lower Kaweah	81	79	86	90	96	95	96	97
Shenandoah	Big Meadows	72	71	73	73	75	76	77	(80)
Voyageurs	Sullivan Bay	63	62	(62)	(61)	(61)	(65)	64	66
Yellowstone	Water Tank	66	65	64	64	66	64	63	61
Yosemite	Turtleback Dome	78	77	83	86	(88)	85	86	88
Zion	Dalton's Wash	73	70	70	70	71	78	79	(82)
# park units with violations (0.08 ppm standard):					3	4	4	3	4
# sites with violations:					4	5	5	4	5
# park units with violations (0.075 ppm standard):		5	4	5					
# sites with violations:		8	6	9					
Sites operated by the NPS for the Bureau of Land Management									
Meeker	Plant Science Center	64	(64)	(66)	---	---	---	---	---
Rangely	Golf Course	66	(65)	(58)	---	---	---	---	---
# units with violations (0.08 ppm standard):					---	---	---	---	---
# sites with violations:					---	---	---	---	---
# units with violations (0.075 ppm standard):		0	0	0					
# sites with violations:		0	0	0					
Sites operated by the NPS for the U.S. Forest Service									
Escalante	Visitor Center	(68)	---	---	---	---	---	---	---
Walden	Chandler Ranch	(59)	---	---	---	---	---	---	---
# units with violations (0.08 ppm standard):					---	---	---	---	---
# sites with violations:					---	---	---	---	---
# units with violations (0.075 ppm standard):		0	0	---					
# sites with violations:		0	0	---					

Table 3. 2012 Ozone violation summary - primary standard^{a,b} (continued).




National Park Unit	Site Name	2010-2012	2009-2011	2008-2010	2007-2009	2006-2008	2005-2007	2004-2006	2003-2005
Sites operated by cooperating state agencies									
<i>Acadia</i>	Cadillac Mountain	72	74	74	78	80	83	81	82
<i>Acadia</i>	McFarland Hill	65	69	69	73	72	74	71	74
<i>Badlands</i>	Visitor Center	58	54	55	57	62	68	67	(66)
<i>Cape Cod</i>	Cape Cod	75	72	74	76	79	84	84	86
<i>Chamizal</i>	Chamizal	70	69	70	71	75	74	73	72
<i>Congaree</i>	Congaree Bluff	61	62	65	67	71	73	72	73
<i>Cowpens</i>	State Monitor	71	66	69	67	74	73	74	75
<i>Everglades</i>	Cutler Road	63	63	67	69	72	69	68	66
<i>Great Smoky Mountains</i>	Cades Cove	68	68	69	69	72	70	67	(67)
<i>Great Smoky Mountains</i>	Purchase Knob	69	67	72	74	77	77	75	78
<i>Indiana Dunes</i>	Ammunition Bunker	69	62	(61)	(68)	73	82	75	76
<i>Mount Rainier</i>	Jackson Visitor's Center	56	54	(52)	(56)	(59)	61	(61)	(67)
<i>Saguaro</i>	East	71	70	69	71	74	76	76	(76)
<i>Theodore Roosevelt</i>	Painted Canyon Visitor Cntr	58	58	59	60	63	63	60	59
<i>Wind Cave</i>	Visitor Center	62	60	(59)	63	67	70	(71)	(70)
# park units with violations (0.08 ppm standard):					0	0	0	0	1
# sites with violations:					0	0	0	0	1
# park units with violations (0.075 ppm standard):					0	0	0	0	0
# sites with violations:					0	0	0	0	0

^a The new primary and secondary National Ambient Air Quality Standard for ozone is 0.075 ppm over an 8-hour period. (An exceedance of the standard occurs when an 8-hour average ozone concentration is greater than or equal to 76 ppb. A violation of the standard occurs when the 3-year average of the fourth highest daily maximum 8-hour average ozone concentration equals or exceeds 76 ppb.) For reference, values that would violate the new standard are outlined with a black box. The first 3-year period that the new standard will apply to is 2008-2010.

^b The old primary and secondary National Ambient Air Quality Standard for ozone is 0.08 ppm over an 8-hour period. (An exceedance of the standard occurs when an 8-hour average ozone concentration is greater than or equal to 85 ppb. A violation of the standard occurs when the 3-year average of the fourth highest daily maximum 8-hour average ozone concentration equals or exceeds 85 ppb.) Violations of the old standard are highlighted here in orange and red. The old standard applies to all 3-year periods prior to 2008-2010.

Note: The color coding break points follow the color categories used on the EPA's AIRNow Web Site (<http://www.airnow.gov>).

Operating agency key: plain text = site operated by the National Park Service, Bureau of Land Management, or U.S. Forest Service
italics = site operated by a state agency
underline = site operated by the National Park Service, but consisting of non-EPA certified portable instrumentation

Color shading key: 4th highest 8-hour average
 = 85 - 104 ppb ozone concentration
 ≥ 105 ppb ozone concentration
 ≥ 76 ppb ozone concentration

Note: A number in parenthesis () indicates that data completeness was not met. The primary standard requires 90 percent data completeness, on average, during the 3-year period, with no single year within the period having less than 75 percent data completeness. This data completeness requirement would have to be satisfied in order to determine that the standard has been met at a monitoring site. However, calendar years with less than 75 percent data completeness are included in the computation if the annual fourth-highest daily maximum 8-hour concentration is greater than the level of the standard. A site could be found not to have met the standard with less than complete data.

Dashed lines represent no data available at that site.

Table 4. 2012 Summary of indices for resource injury (SUM06 and W126).

National Park Unit	Site Name	O ₃ % Valid	SUM06 ^a (ppm-hr)	W126 ^b (ppm-hr)	Period
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)					
Big Bend	K-Bar Ranch Road	97.2	18	12	April-June
Canyonlands	Island in the Sky	99.7	22	16	May-July
Chiricahua	Entrance Station	96.7	36	22	April-June
Craters of the Moon	Visitor Center	97.4	8	9	June-August
Death Valley	Park Village	99.3	37	21	May-July
Denali	Headquarters	99.8	0	2	March-May
Glacier	West Glacier Horse Stables	96.2	1	3	May-July
Grand Canyon	The Abyss	99.4	28	20	April-June
Grand Teton	Science School	99.6	10	10	April-June
Great Basin	Maintenance Yard	95.0	28	20	May-July
Great Smoky Mountains	Clingmans Dome	96.7	10	9	May-July
Great Smoky Mountains	Cove Mountain	99.5	12	10	May-July
Great Smoky Mountains	Look Rock	99.0	17	12	June-August
Joshua Tree	Black Rock	99.2	61	43	May-July
Joshua Tree	Cottonwood Canyon	83.7	21	15	June-August
Lassen Volcanic	Manzanita Lake Fire Station	97.8	24	16	July-September
Mammoth Cave	Houchin Meadow	99.8	26	19	June-August
Mesa Verde	Resource Management Area	97.9	19	14	May-July
Mount Rainier	Tahoma Woods	99.5	1	1	July-September
Petrified Forest	South Entrance	98.3	26	18	April-June
Pinnacles	SW of East Entrance Station	99.5	14	11	July-September
Rocky Mountain	Long's Peak	99.6	44	27	May-July
Sequoia and Kings Canyon	Ash Mountain	99.2	74	57	July-September
Sequoia and Kings Canyon	Lower Kaweah	98.2	59	41	July-September
Shenandoah	Big Meadows	97.2	14	11	May-July
Voyageurs	Sullivan Bay	97.5	5	5	April-June
Yellowstone	Water Tank	96.0	12	10	April-June
Yosemite	Turtleback Dome	99.3	46	29	July-September
Zion	Dalton's Wash	99.8	33	21	May-July
Sites operated by the NPS for the Bureau of Land Management					
Meeker	Plant Science Center	98.1	10	10	April-June
Rangely	Golf Course	96.0	16	13	May-July
Sites operated by the NPS for the U.S. Forest Service					
Escalante	Visitor Center	99.8	13	12	April-June
Walden	Chandler Ranch	89.1	3	6	June-August
Sites operated by cooperating state agencies					
<i>Acadia</i>	Cadillac Mountain	99.5	3	3	March-May
<i>Acadia</i>	McFarland Hill	98.0	1	3	March-May
<i>Badlands</i>	Visitor Center	96.3	8	8	June-August
<i>Cape Cod</i>	Cape Cod	96.8	9	7	June-August
<i>Chamizal</i>	Chamizal	99.6	14	11	May-July
<i>Congaree</i>	Congaree Bluff	97.8	2	3	March-May
<i>Cowpens</i>	State Monitor	98.7	8	7	June-August
<i>Everglades</i>	Cutler Road	98.5	3	3	February-April

Table 4. 2012 Summary of indices for resource injury (SUM06 and W126) (continued).

National Park Unit	Site Name	O ₃ % Valid	SUM06 ^a (ppm-hr)	W126 ^b (ppm-hr)	Period
Sites operated by cooperating state agencies					
<i>Great Smoky Mountains</i>	Cades Cove	99.3	5	5	April-June
<i>Great Smoky Mountains</i>	Purchase Knob	99.4	5	6	April-June
<i>Indiana Dunes</i>	Ammunition Bunker	97.2	16	12	June-August
<i>Mount Rainier</i>	Jackson Visitor's Center	87.1	1	2	May-July
<i>Saguaro</i>	East	99.3	27	17	April-June
<i>Theodore Roosevelt</i>	Painted Canyon Visitor Center	99.6	1	5	May-July
<i>Wind Cave</i>	Visitor Center	98.7	20	15	June-August
Portable ozone monitoring systems (POMS)					
<u>Carl Sandburg</u>	Pasture	99.9	4	4	April-June
<u>Carlsbad Caverns</u>	Maintenance Area	89.2	15	11	July-September
<u>Colorado</u>	Maintenance Yard	99.8	13	11	April-June
<u>Cumberland Gap</u>	Hensley Settlement	96.5	10	10	May-July
<u>Devil's Tower</u>	Joyner Ridge Trail	74.7	11	7	June-August
<u>Dinosaur</u>	West Entrance Housing	97.1	26	18	June-August
<u>Guilford</u>	Courthouse Library	87.1	5	5	May-July
<u>Joshua Tree</u>	Pinto Wells	100.0	39	24	April-June
<u>Kings Mountain</u>	Brown's Mountain	96.6	15	10	June-August
<u>Mojave</u>	Kelso Mountains	99.0	44	27	May-July
<u>Scotts Bluff</u>	Visitor Center	100.0	19	14	June-August
<u>Yosemite</u>	School Yard	99.4	11	8	July-September

^a SUM06 exposure index represents the 0800-2000 hourly ozone concentrations equaling or exceeding 0.06 ppm. The value reported here represents a three-month maximum value during the ozone season. Units are ppm-hr.

^b W126 exposure index represents 0800-2000 hourly ozone concentrations where each concentration is weighted by a function that gives greater emphasis to the higher hourly concentrations while still including the lower ones. The value reported here represents a three-month maximum value during the ozone season. Units are ppm-hr. For more information on the W126 exposure index go to <http://www.nature.nps.gov/air/aqbasics/glossary.cfm>.

Note: The SUM06 and W126 are described in further detail on pages 3-4 of this report. For more information see the section titled "Resource Injury Indices."

Operating agency key: plain text = site operated by the National Park Service, Bureau of Land Management, or U.S. Forest Service
 italics = site operated by a state agency
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Table 5. 2012 Summary of sulfur dioxide data.

National Park Unit	Site Name	Highest Daily Maximum 1-Hour Average Concentration ^a (ppb)					99 th Percentile Value	No. of Days with 1-Hr Average ≥ 76 ppb	Highest Daily Maximum 3-Hour Average Concentration ^b (ppb)				
		1 st Highest	2 nd Highest	3 rd Highest	4 th Highest	No. of Days with 3-Hr Maximum ≥ 550 ppb							
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)													
Great Smoky Mountains	Cove Mountain	7	7	6	5	5	0	5	4	4	4	0	
Great Smoky Mountains	Look Rock	7	5	4	3	3	0	4	3	3	2	0	
Hawaii Volcanoes *	Observatory / Jaggar Museum	2632	2176	2073	1969	1969	80	1341	1250	1247	1139	14	
Hawaii Volcanoes *	Visitor Center	1712	1550	1439	1233	1233	70	1039	841	778	680	6	
Mammoth Cave	Houchin Meadow	14	11	10	9	9	0	9	7	7	6	0	
Sites operated by cooperating state agencies													
<i>Badlands</i>	Visitor Center	3	3	2	2	2	0	2	2	2	2	0	
<i>Congaree</i>	Congaree Bluff	82	32	13	11	11	1	36	24	16	9	0	
<i>Indiana Dunes</i>	Ammunition Bunker	61	60	51	47	47	0	52	43	39	37	0	
<i>Theodore Roosevelt</i>	Painted Canyon Visitor Ctr	8	8	8	6	6	0	6	6	5	5	0	

^a The primary hourly National Ambient Air Quality Standard for sulfur dioxide is a daily maximum 1-hour average of 75 ppb. (An exceedance of the Standard occurs when a daily maximum 1-hour average exceeds 75 ppb. A violation of the Standard occurs when the 3-year average of the 99th percentile of the daily maximum 1-hour average exceeds 75 ppb.)

^b The secondary National Ambient Air Quality Standard for sulfur dioxide is 0.5 ppm over a 3-hour period not to be exceeded more than once per year. (A value greater than 0.5 ppm, 549 ppb, or 1300 µg/m³ exceeds the standard.) (40 CFR 50.5.)

* This site collected sulfur dioxide data using an instrument or a range that is not an EPA reference method.

Operating agency key: plain text = site operated by the National Park Service, Bureau of Land Management, or U.S. Forest Service
italics = site operated by a state agency

Color shading key: >34 ppb annual arithmetic mean, > 75 ppb 99th percentile value, or >549 ppb 3-hour average

Table 6. 2012 Summary of carbon monoxide data.

National Park Unit	Site Name	Highest Daily Maximum 1-Hour Average Concentration ^a (ppm)					Highest Daily Maximum 8-Hour Average Concentration ^b (ppm)				
		1 st Highest	2 nd Highest	3 rd Highest	4 th Highest	No. of Days with 1-Hr Average ≥ 35 ppm	1 st Highest	2 nd Highest	3 rd Highest	4 th Highest	No. of Days with 8-Hr Average ≥ 9 ppm
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)											
Great Smoky Mountains	Look Rock	0.3	0.3	0.3	0.3	0	0.2	0.2	0.2	0.2	0
Mammoth Cave	Houchin Meadow	0.3	0.3	0.3	0.3	0	0.2	0.2	0.2	0.2	0
Walden	Chandler Ranch	0.3	0.3	0.3	0.2	0	0.2	0.1	0.1	0.1	0
Yellowstone	Old Faithful Snow Lodge	2.0	1.4	1.2	1.1	0	0.7	0.7	0.5	0.5	0
Sites operated by cooperating state agencies											
<i>Yellowstone</i>	West Yellowstone	4.8	3.9	3.6	3.2	0	1.0	0.9	0.9	0.8	0

^a The primary hourly National Ambient Air Quality Standard for carbon monoxide is a daily maximum 1-hour average of 35 ppm. (An exceedance of the Standard occurs when a daily maximum 1-hour average exceeds 35 ppm. A violation of the Standard occurs when a daily maximum 1-hour average exceeds 35 ppm more than once in a calendar year.)

^b The primary National Ambient Air Quality Standard for carbon monoxide is 9 ppm over an 8-hour period. (An exceedance of the Standard occurs when an 8-hour average exceeds 9 ppm. A violation of the Standard occurs when a daily maximum 8-hour average exceeds 9 ppm more than once in a calendar year.) (40 CFR 50.8.)

Operating agency key: plain text = site operated by the National Park Service, Bureau of Land Management, or U.S. Forest Service
italics = site operated by a state agency

Color shading key: ■ >35 ppm 1-hour average or >9 ppm 8-hour average

Table 7. 2012 Summary of nitrogen dioxide data.

National Park Unit	Site Name	Highest Daily Maximum 1-Hour Average Concentrations ^{ab} (ppb)						No. of Days with 1-Hour Average \geq 100 ppb	Annual Arithmetic Mean
		1 st Highest	2 nd Highest	3 rd Highest	4 th Highest	98 th Percentile Value			
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)									
Great Smoky Mountains	Look Rock	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mammoth Cave	Houchin Meadow	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sites operated by the NPS for the Bureau of Land Management									
Meeker	Plant Science Center	8.7	7.5	6.0	5.7	5.3	0	0.8	
Rangely	Golf Course	24.7	23.3	22.3	20.6	18.6	0	2.4	
Sites operated by the NPS for the U.S. Forest Service									
Walden	Chandlers Ranch	5.2	4.9	4.5	4.0	4.9	0	0.5	
Sites operated by cooperating state agencies									
Yellowstone	West Yellowstone	28.0	28.0	28.0	27.0	26.0	0	2.7	

Table 8. 2012 Summary of oxides of nitrogen data.

National Park Unit	Site Name	Highest Daily Maximum 1-Hour Average Concentrations (ppb)				No. of Days with 1-Hour Average \geq 100 ppb
		1 st Highest	2 nd Highest	3 rd Highest	4 th Highest	
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)						
Great Smoky Mountains	Look Rock	21.6	16.0	14.9	12.4	0
Mammoth Cave	Houchin Meadow	29.8	26.3	25.0	23.4	0
Sites operated by the NPS for the Bureau of Land Management						
Meeker	Plant Science Center	16.1	15.6	10.5	9.0	0
Rangely	Golf Course	26.8	25.8	23.7	23.6	0
Sites operated by the NPS for the U.S. Forest Service						
Walden	Chandlers Ranch	8.8	6.6	6.4	6.1	0
Sites operated by cooperating state agencies						
Yellowstone	West Yellowstone	88.0	83.0	83.0	79.0	0

Table 9. 2012 Summary of PM_{2.5} data from reference and equivalency methods.

National Park Unit	Site Name	Sampler Type*	% Valid ^a	Annual Arithmetic Mean ^b (µg/m ³)	Highest Daily 24-Hour Average Concentrations ^c (µg/m ³)					
					1 st Highest	2 nd Highest	3 rd Highest	4 th Highest	98 th Percentile Value	No. of Days with 24-Hour Average >35 µg/m ³
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)										
Great Smoky Mountains	Look Rock	TEOM	99.4	10.5	27	25	24	22	21	0
Hawaii Volcanoes	Observatory / Jaggar Museum	SHARP	100.0	6.0	49	45	42	39	25	5
Sequoia and Kings Canyon	Ash Mountain	BAM	90.7	8.3	33	24	24	22	19	0
Yellowstone	Old Faithful	BAM	99.9	2.5	9	8	6	6	6	0
Yellowstone	Old Faithful Snow Lodge	BAM	98.8	1.0	5	4	4	4	4	0
Zion	Dalton's Wash	FRM or FEM	89.1	6.0	20	16	14	13	12	0
Sites operated by the NPS for the Bureau of Land Management										
Meeker	Plant Science Center	TEOM	94.4	6.0	31	24	24	23	20	0
Rangely	Golf Course	FRM or FEM	93.9	5.5	36	33	33	30	25	1
Sites operated by cooperating state agencies										
<i>Acadia</i>	McFarland Hill	TEOM	98.0	1.8	12	10	9	9	8	0
<i>Badlands</i>	Visitor Center	FRM or FEM	98.9	3.5	17	15	13	13	13	0
<i>Indiana Dunes</i>	Ammunition Bunker	FRM or FEM	94.5	12.3	37	35	32	32	30	1
<i>Theodore Roosevelt</i>	Painted Canyon Visitor Ctr	TEOM	94.4	5.5	22	22	20	16	14	0
<i>Wind Cave</i>	Visitor Center	FRM or FEM	96.4	4.3	22	20	19	16	15	0
<i>Yellowstone</i>	W. Yellowstone State Site	BAM	83.8	6.0	41	35	33	31	22	1
<i>Yosemite</i>	Village	BAM	96.7	9.8	35	33	26	25	24	0

^a At sites operated by an agency other than the National Park Service, the primary responsibility for the operation and data reporting of particulate matter belongs to the operating agency.

^b The primary annual National Ambient Air Quality Standard for PM_{2.5} is an annual arithmetic mean of 15.0 µg/m³. (An exceedance of the standard occurs when an annual arithmetic mean of PM_{2.5} concentrations is greater than 15.0 µg/m³. A violation of the standard occurs when the 3-year average of the weighted annual mean PM_{2.5} concentrations is greater than 15.0 µg/m³ (40 CFR 50.7.)

^c The primary daily National Ambient Air Quality Standard for PM_{2.5} is a 24-hour average concentration of 35 µg/m³. (An exceedance of the standard occurs when a 24-hour average PM_{2.5} concentration is greater than 35 µg/m³. A violation of the standard occurs when the 3-year average of the annual 98th percentile of 24-hour PM_{2.5} concentrations is greater than 35 µg/m³.) (40 CFR 50.7.)

* TEOM = tapered element oscillating microbalance
 BAM = beta attenuation monitor
 SHARP = synchronized hybrid ambient real-time particulate monitor
 FRM = federal reference method monitor
 FEM = federal equivalent method monitor

Operating agency key: plain text = site operated by the National Park Service, Bureau of Land Management, or U.S. Forest Service
 italics = site operated by a state agency

Color shading key: Annual arithmetic mean > 15 µg/m³
 98th percentile value > 35 µg/m³

Table 10. 2012 Summary of PM₁₀ data from reference and equivalency methods.

National Park Unit	Site Name	Sampler Type*	% Valid ^a	Annual Arithmetic Mean ^b (µg/m ³)	Highest Daily 24-Hour Average Concentrations ^c (µg/m ³)				No. of Days with 24-Hour Average >150 µg/m ³
					1 st Highest	2 nd Highest	3 rd Highest	4 th Highest	
Sites operated by cooperating state agencies									
<i>Badlands</i>	Visitor Center	BAM	90.5	11	60	40	40	40	0
<i>Wind Cave</i>	Visitor Center	BAM	90.9	10	50	40	40	30	0

^a At sites operated by an agency other than the National Park Service, the primary responsibility for the operation and data reporting of particulate matter belongs to the operating agency.

^b The primary annual National Ambient Air Quality Standard for PM₁₀ is an annual arithmetic mean of 50 µg/m³. (An exceedance of the standard occurs when an annual arithmetic mean of PM₁₀ concentrations is greater than 50 µg/m³. A violation of the standard occurs when the 3-year average of the weighted annual mean PM₁₀ concentrations is greater than 50 µg/m³ (40 CFR 50.6.)

^c The primary daily National Ambient Air Quality Standard for PM₁₀ is a 24-hour average concentration of 150 µg/m³. (An exceedance of the standard occurs when a 24-hour average PM₁₀ concentration is greater than 150 µg/m³. A violation of the standard occurs when a 24-hour average concentration greater than 150 µg/m³ occurs more than once in a calendar year.) (40 CFR 50.6.)

* TEOM = tapered element oscillating microbalance
BAM = beta attenuation monitor

Color shading key: >50 µg/m³ annual arithmetic mean, >150 µg/m³ 24-hour average

italics = site operated by a state agency

Table 11. PM₁₀ summary - maximum daily 24-hour average concentration in 2010-2012 (µg/m³)^a.

National Park Unit	Site Name	Sampler Type*	2012	2011	2010
Sites operated by cooperating state agencies					
<i>Badlands</i>	Visitor Center	BAM	60	50	30
<i>Wind Cave</i>	Visitor Center	BAM	50	40	140

^a The primary daily National Ambient Air Quality Standard for PM₁₀ is a 24-hour average concentration of 150 µg/m³. (An exceedance of the standard occurs when a 24-hour average PM₁₀ concentration is greater than 150 µg/m³. A violation of the standard occurs when a 24-hour average concentration greater than 150 µg/m³ occurs more than once in a calendar year.) (40 CFR 50.6.)

* TEOM = tapered element oscillating microbalance
BAM = beta attenuation monitor

Color shading key: > 1 24-hour average concentration >150 µg/m³

italics = site operated by a state agency

Table 12. 2012 Annual summary of selected meteorological data.

National Park Unit	Site Name	Wind Speed (m/s)	Ambient Temperature (degrees C)			Relative Humidity (%)			Precipitation (mm)
		Average	Average	Maximum	Minimum	Average	Maximum	Minimum	Annual Accumulation
Sites operated by the National Park Service (Gaseous Pollutant Monitoring Program)									
Big Bend	K-Bar Ranch Road	3.6	21.4	38.3	-0.8	37	95	3	225.1
Canyonlands	Island in the Sky	2.9	13.3	33.7	-11.8	35	98	4	165
Chiricahua	Entrance Station	3.0	16.7	35.8	-6.3	38	100	6	308.6
Craters of the Moon	Visitor Center	3.5	7.6	33.3	-18.0	50	99	3	---
Death Valley	Park Village	3.7	27.0	49.5	5.1	17	87	3	34.2
Denali	Headquarters	1.3	-3.4	25.4	-38.9	65	99	10	229.2
Everglades	Beard Center	2.2	23.4	32.8	2.5	81	100	24	1135.6
Glacier	West Glacier Horse Stables	0.9	6.2	32.2	-16.1	74	100	13	682.4
Grand Canyon	The Abyss	2.7	12.4	31.7	-7.8	44	100	11	361.1
Grand Teton	Science School	2.7	3.5	30.0	-24.7	64	100	9	224.3
Great Basin	Maintenance Yard	2.9	10.5	34.4	-16.6	39	98	2	264.9
Great Smoky Mountains	Cades Cove	1.2	13.9	33.5	-11.0	73	100	13	1381.3
Great Smoky Mountains	Clingmans Dome	3.5	11.9	25.0	-3.6	86	100	4	1078
Great Smoky Mountains	Cove Mountain	4.4	11.6	30.8	-15.2	71	100	3	1331.1
Great Smoky Mountains	Look Rock	2.3	14.3	35.5	-14.3	70	100	13	1323.0
Hawaii Volcanoes	Observatory / Jaggar Museum	5.2	15.2	24.1	9.2	87	100	12	775.7
Hawaii Volcanoes	Visitor Center	3.9	14.6	23.9	8.3	92	100	14	1499.5
Joshua Tree	Black Rock	3.7	17.2	37.0	-3.8	33	96	4	126.4
Joshua Tree	Cottonwood Canyon	3.0	21.8	39.7	-0.6	30	100	4	64
Lassen Volcanic	Manzanita Lake Fire Station	1.9	6.9	29.5	-16.1	59	95	8	1054.7
Mammoth Cave	Houchin Meadow	1.8	15.7	40.1	-8.8	68	96	17	1058.5
Mesa Verde	Resource Management Area	3.1	11.6	31.9	-11.8	38	100	6	225.7
Mount Rainier	Tahoma Woods	0.9	8.6	32.6	-6.0	82	95	14	1753.2
Petrified Forest	South Entrance	4.1	13.7	35.6	-11.1	37	100	3	209.9
Pinnacles	SW of East Entrance Station	2.3	14.5	42.7	-7.8	59	100	3	402
Rocky Mountain	Long's Peak	2.7	1.8	23.2	-21.0	44	99	0	346.3
Sequoia and Kings Canyon	Ash Mountain	2.5	17.5	39.1	-2.1	50	98	2	661.8
Sequoia and Kings Canyon	Lower Kaweah	1.8	9.9	29.0	-10.4	56	100	6	893.2
Shenandoah	Big Meadows	1.9	9.3	29.5	-16.4	72	99	9	1079.1
Voyageurs	Sullivan Bay	2.6	5.8	32.9	-31.1	79	99	16	734.1
Yellowstone	Old Faithful	1.9	-3.3	19.9	-25.7	73	100	11	---
Yellowstone	Old Faithful Snow Lodge	1.7	-4.3	13.1	-31.8	78	97	18	---
Yellowstone	Water Tank	1.8	2.6	26.2	-24.4	65	100	10	532
Yosemite	Turtleback Dome	4.0	11.8	31.7	-8.4	49	96	5	---
Zion	Dalton's Wash	4.1	17.0	39.6	-4.9	35	95	4	210.5
Sites operated by the NPS for the Bureau of Land Management									
Meeker	Plant Science Center	3.8	8.7	34.0	-21.9	48	100	6	260.1
Rangely	Golf Course	3.2	10.9	36.0	-26.0	44	100	4	192.2
Sites operated by the NPS for the U.S. Forest Service									
Escalante	Visitor Center	3.0	12.6	33.4	-11.9	36	100	5	238.1
Walden	Chandler Ranch	3.8	4.3	30.0	-32.3	56	100	7	---
Sites operated by cooperating state agencies									
Acadia	Cadillac Mountain	5.0	13.5	28.3	-3.0	79	100	23	---
Acadia	McFarland Hill	2.6	8.4	30.3	-20.0	77	100	15	1045.5

Table 12. 2012 Annual summary of selected meteorological data (continued).

National Park Unit	Site Name	Wind Speed (m/s)	Ambient Temperature (degrees C)			Relative Humidity (%)			Precipitation (mm)
		Average	Average	Maximum	Minimum	Average	Maximum	Minimum	Annual Accumulation
Sites operated by cooperating state agencies									
<i>Cape Cod</i>	Cape Cod	2.4	11.8	34.9	-11.2	71	91	15	---
<i>Chamizal</i>	Chamizal	3.4	20.5	39.5	-1.2	28	90	3	---
<i>Indiana Dunes</i>	Ammunition Bunker	3.5	12.2	41.3	-14.5	70	100	17	174.2
<i>Saguaro</i>	East	---	22.1	41.1	0.9	30	96	3	---
<i>Theodore Roosevelt</i>	Painted Canyon Visitor Cntr	5.1	8.1	37.9	-26.5	58	95	4	274.2
<i>Wind Cave</i>	Visitor Center	3.5	11.1	38.1	-21.3	46	99	6	258.2
Portable ozone monitoring systems (POMS) (seasonal)									
<u>Carl Sandburg</u>	Pasture	0.6	18.4	35.7	-1.2	80	99	12	665.4
<u>Carlsbad Caverns</u>	Maintenance Area	4.4	25.0	38.5	9.2	38	100	5	229.8
<u>Colorado</u>	Maintenance Yard	1.7	21.8	36.4	0.1	28	100	6	56.0
<u>Cumberland Gap</u>	Hensley Settlement	1.9	18.2	33.2	4.0	79	100	27	658.4
<u>Devil's Tower</u>	Joyner Ridge Trail	1.5	17.3	38.9	-6.7	50	99	7	224.0
<u>Dinosaur</u>	West Entrance Housing	1.4	11.5	37.6	-22.2	47	98	6	56.3
<u>Joshua Tree</u>	Pinto Wells	3.1	26.4	46.8	-0.9	26	97	2	71.7
<u>Kings Mountain</u>	Brown's Mountain	1.3	22.9	38.8	11.5	74	100	25	499.0
<u>Mojave</u>	Kelso Mountains	3.4	23.9	38.7	-1.1	26	100	4	83.1
<u>Scotts Bluff</u>	Visitor Center	2.6	20.3	39.5	-0.4	42	100	6	144.4
<u>Yosemite</u>	School Yard	0.8	19.4	37.2	2.2	49	97	7	53.9

Note: Dashed lines represent no data available for that particular parameter at that site.

Operating agency key: plain text = site operated by the National Park Service, Bureau of Land Management, or U.S. Forest Service
italics = site operated by a state agency
underline = site operated by the National Park Service, but consisting of non-EPA certified portable instrumentation