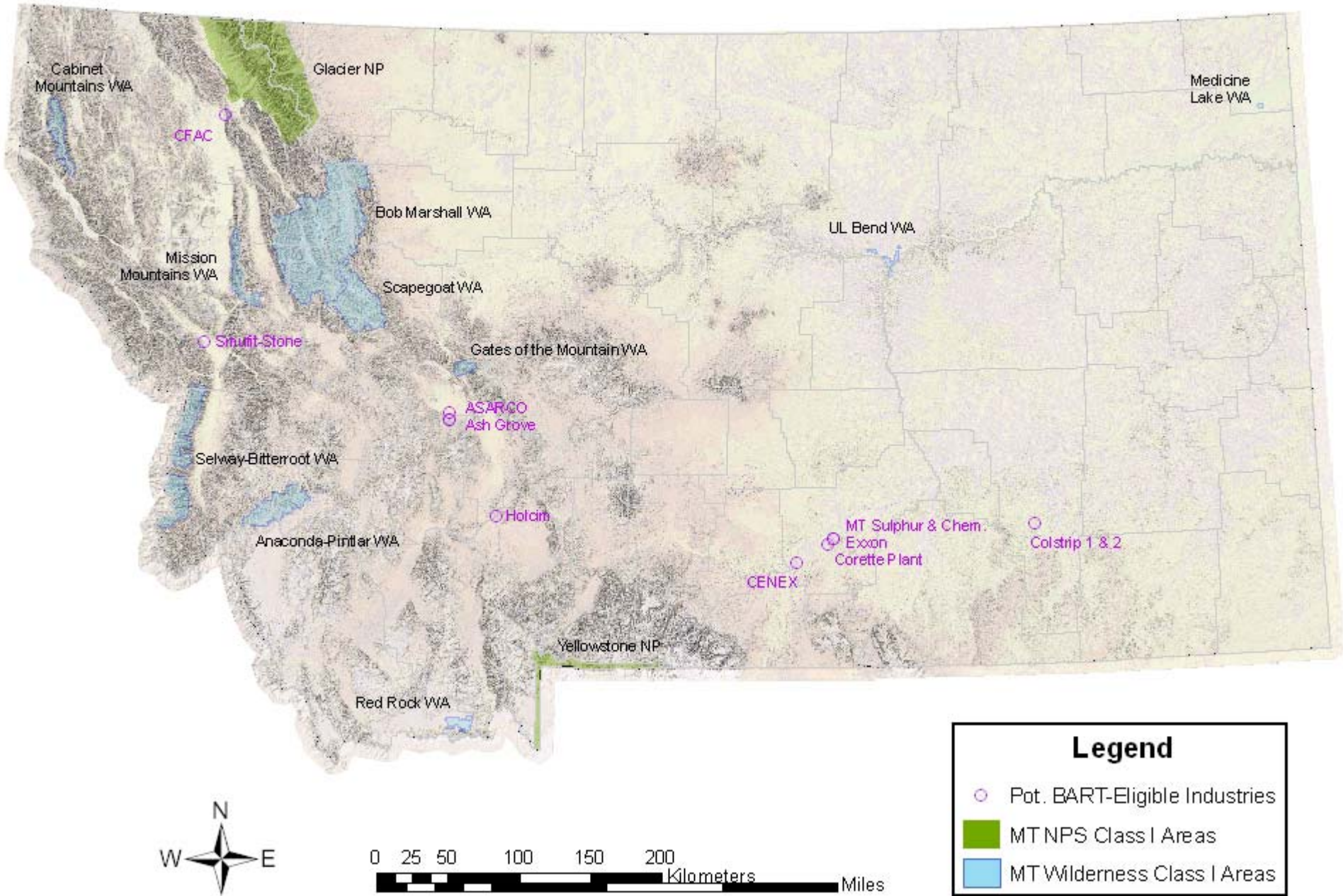
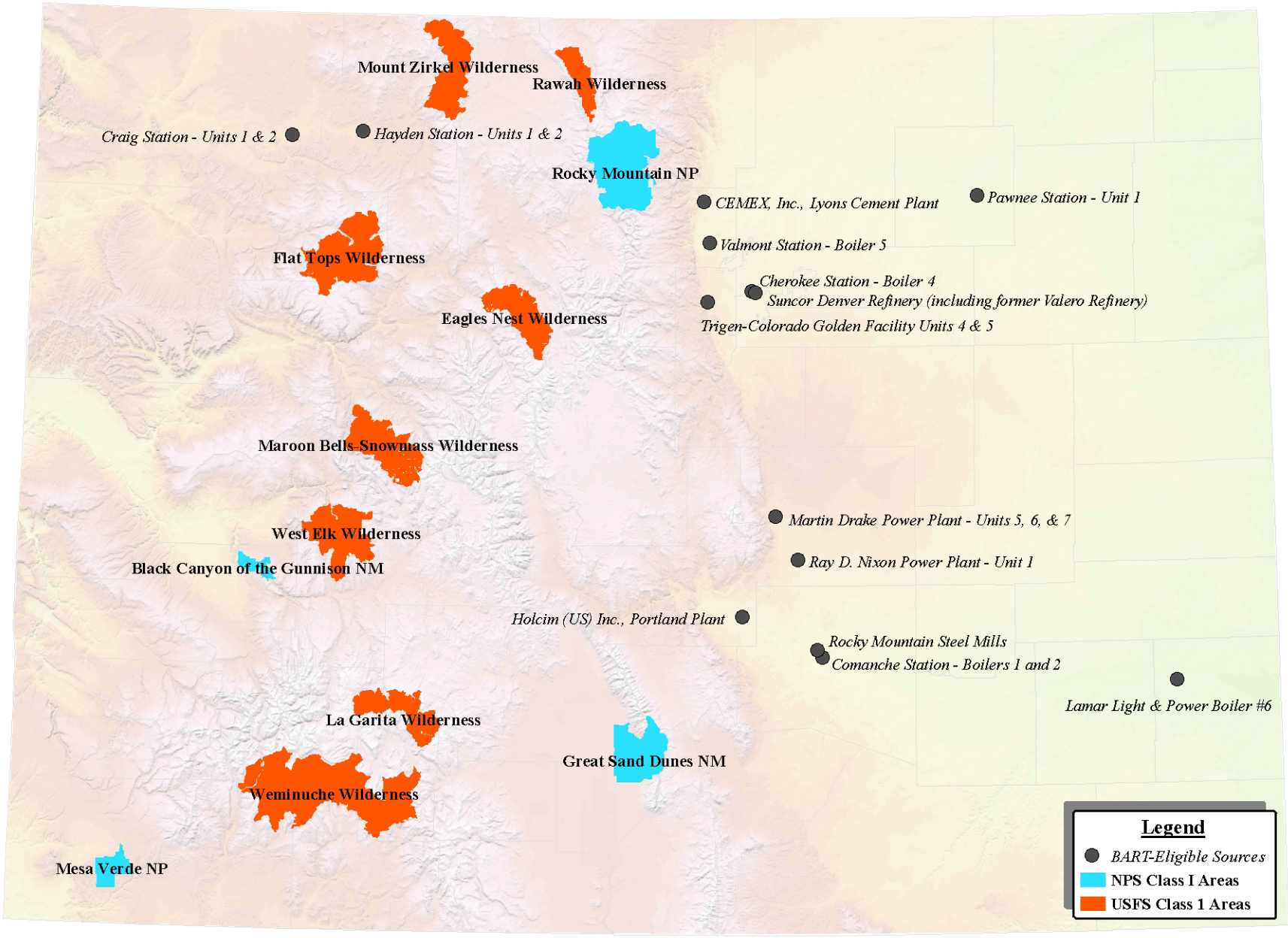
Montana Class I Areas and Potential BART-Eligible Industrial Sources



Individual Source Attribution Visibility Impairment Modeling Analysis
Modeled BART-Eligible Sources



Comparative Visibility Analysis of Colorado & Montana BART Sources

SORTED BY DISTANCE TO CLASS I AREAS

98th Percentile Daily Visibility Change from BART-eligible Sources' Emissions

Natural Background Conditions Compared to "Contribution Threshold"[1]

6th Highest Deciview (dv) Value For One Met Year

BLUE = Potential Montana BART-eligible Sources

Facility	COLORADO'S EMISSION ESTIMATES[2]				WRAP[3] EMISSION ESTIMATES				CO - WRAP Difference	Approx. Distance to Class I Area	Modeled 98th Percentile Change in Deciview From Natural Background	Contribution Threshold	Impacts Contribution Threshold?	Impacted Class I Area
	SO_2 (TPY)	NO_x (TPY)	PM-10 (TPY)	Total (TPY)	SO_2 (TPY)	NO_x (TPY)	PM-10 (TPY)	Total (TPY)	(Total TPY)	(miles)	(dv)	(dv)		
Columbia Falls Aluminum					584	7	224	815		16				Glacier NP
Smurfit-Stone - Missoula Mill					199	1,116	324	1,639		19				Selway-Bitterroot WA
Ash Grove Cement - MT City					234	1,836	262	2,332		21				Gates of the Mountain Wi
Valmont Station - Boiler #5	1,212	3,036	608	5,856	3,786	2,057	73	5,916	-260	23	1.591	0.5	Yes	
CEMEX, Inc., Lyons Cement Plant	1,541	2,900	208	4,657	50	2,179	517	2,746	1,911	26	1.533	0.5	Yes	
Hayden Station - Units 1 & 2 (Boilers)	3,276	8,020	614	12,510	2,068	8,603	310	11,781	729	34	2.538	0.5	Yes	
Cherokee Station - Boiler #4	2,313	6,930	1,542	10,793	15,957	9,476	292	25,715	-14,922	42	1.460	0.5	Yes	
Craig Station - Units 1 & 2 (Coal-fired Power Plant)	6,052	26,478	1,134	33,664	10,391	19,301	445	30,217	3,447	45	4.264	0.5	Yes	
Trigen-Colorado Golden Facility Units 4 & 5 (Boilers)	3,739	2,370	458	6,567	2,342	1,692	33	4,067	2,500	45	1.255	0.5	Yes	
Holcim (US) Inc., Portland Plant (Kiln)	5,344	3,100	245	8,777	242	1,159	232	1,634	7,153	53	0.671	0.5	Yes	
Suncor Denver Refinery (including former Valero Refinery - 9 Sources)	1,790	552	687	3,029	394	207	136	737	2,292	53	0.307	0.5	No	
Holcim - Trident Plant					283	1,500	215	1,998		59				Yellowstone NP
Comanche Station - Boilers #1 & #2	1,941	3,124	1,576	6,641	16,773	8,010	157	25,740	-19,099	70	0.701	0.5	Yes	
Conoco - Laurel Refinery					2,064	974	91	3,129		73				Yellowstone NP
Exxon USA - Billings Refinery					5,351	962	177	6,490		84				North Absaroka WA
PPL Montana - Corette Plant					3,135	1,703	136	4,974		84				North Absaroka WA
MT Sulphur & Chemical					2,403	5	0	2,408		84				North Absaroka WA
Pawnee Station - Unit 1 (Coal-fired Boiler)[4]	20,605	6,790	2,342	29,737	14,833	4,592	595	20,020	9,717	98	1.169	0.5	Yes	
Martin Drake Power Plant - Units 5, 6, & 7 (Steam Driven Electric Gen.)	11,304	5,904	1,202	18,310	8,530	4,265	84	12,919	5,491	102	1.041	0.5	Yes	
Ray D. Nixon Power Plant - Unit 1 (Coal-fired Boiler)	7,884	3,504	100	11,488	4,968	2,031	20	7,019	3,969	121	0.570	0.5	Yes	
PPL Montana - Colstrip Units 1 & 2					16,735	32,031	498	49,264		122				UL Bend WA
Lamar Light & Power - Boiler #6 (Unit 1)	1,114	901	153	2,168	4	287	7	298	1,870	159	0.064	0.5	No	

[1] The "Contribution Threshold" has an implied level of precision reported from the model.

[2] The Colorado annual emissions were calculated from peak 24-hour peak emissions, except for 1 source that used hourly; no annual emissions given.

[3] WRAP = Western Regional Air Partnership.

[4] The BART-eligible status of Pawnee Station is pending.

Met Data Years = 1996, 2001, and 2002.

Comparative Visibility Analysis of Colorado & Montana BART Sources

SORTED BY TOTAL EMISSIONS

98th Percentile Daily Visibility Change from BART-eligible Sources' Emissions
Natural Background Conditions Compared to "Contribution Threshold"[1]
6th Highest Deciview (dv) Value For One Met Year
BLUE = Potential Montana BART-eligible Sources

Facility	COLORADO'S EMISSIONS ESTIMATES[2]				WRAP[3] EMISSION ESTIMATES				CO - WRAP	Approx. Distance to	Modeled 98th Percentile Change in	Contribution	Impact >	Impacted
	SO_2	NO_x	PM-10	Total	SO_2	NO_x	PM-10	Total	Difference	Class I Area	Deciview From Natural Background	Threshold	Contribution Threshold[1]	Class I Area
	(TPY)	(TPY)	(TPY)	(TPY)	(TPY)	(TPY)	(TPY)	(TPY)	(Total TPY)	(miles)	(dv)	(dv)		
PPL Montana - Colstrip Units 1 & 2					16,735	32,631	490	49,854		122				UL Bend WA
Craig Station - Units 1 & 2 (Coal-fired Power Plant)	6,952	25,478	1,124	33,664	10,391	19,301	445	30,217	3,447	45	4.204	0.5	Yes	
Pawnee Station - Unit 1 (Coal-fired Boiler)[4]	20,665	6,790	2,342	29,737	14,033	4,592	595	20,020	9,717	98	1.189	0.5	Yes	
Martin Drake Power Plant - Units 5, 6, & 7 (Steam Driven Electric Gen.)	11,304	5,004	1,202	18,310	8,530	4,205	84	12,819	5,491	102	1.641	0.5	Yes	
Hayden Station - Units 1 & 2 (Boilers)	3,276	8,620	614	12,510	2,868	8,603	310	11,781	729	34	2.538	0.5	Yes	
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PPL Montana - Corette Plant					3,135	1,703	136	4,974		84				North Absaroka WA
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