Table 8-22

Visibility Improvement Cost Effectiveness for Each Class 1 Area (Based on **Average** Visibility Modeling Results)

Class 1 Area	Average Visibility Modeling Results (dv) (98th Percentile, see Note 1)				Visibility Improvements (dv) Calculated from Average Visibility Results (for each Class 1 Area)					Improvement ($/dv) (see Note 4)				
	WRAP (Pre-Consent Decree)	Consent Decree	SCR	Hybrid	Pre-Consent Decree to Consent Decree	Consent Decree to SCR	Consent Decree to Hybrid	Pre-Consent Decree to SCR	Pre-Consent Decree to Hybrid	Pre-Consent Decree to Consent Decree	Consent Decree to SCR	Consent Decree to Hybrid	Pre-Consent Decree to SCR	Pre-Consent Decree to Hybrid
Arches	3.787	3.190	1.848	2.637	0.597	1.342	0.553	1.939	1.15	86,211,055	72,553,651	150,690,778	76,758,638	117,217,391
Bandelier	2.817	1.994	1.270	1.691	0.823	0.724	0.303	1.547	1.126	62,537,060	134,484,807	275,023,102	96,208,791	119,715,808
Black Canyon	2.360	1.643	0.953	1.326	0.717	0.690	0.317	1.407	1.034	71,782,427	141,111,594	262,876,972	105,781,805	130,367,505
Canyonlands	4.993	3.810	2.379	3.220	1.183	1.431	0.590	2.614	1.773	43,506,340	68,041,230	141,240,678	56,937,643	76,029,329
Capitol Reef	2.790	1.748	1.191	1.465	1.042	0.557	0.283	1.599	1.325	49,393,474	174,806,104	294,459,364	93,080,050	101,735,849
Grand Canyon	1.600	1.079	0.685	0.898	0.521	0.394	0.181	0.915	0.702	98,786,948	247,124,365	460,397,790	162,661,202	192,022,792
Great Sand Dunes	1.600	0.809	0.545	0.720	0.791	0.264	0.089	1.055	0.88	65,067,004	368,814,394	936,314,607	141,075,829	153,181,818
La Garita	1.740	1.133	0.674	0.957	0.607	0.459	0.176	1.066	0.783	84,790,774	212,128,540	473,477,273	139,620,075	172,158,365
Maroon Bells	1.203	0.675	0.412	0.588	0.528	0.263	0.087	0.791	0.615	97,477,273	370,216,730	957,839,080	188,160,556	219,186,992
Mesa Verde(a)	5.393	7.322	6.327	7.395	NI	0.995	NI	NI	NI	NA	97,856,281	NA	NA	NA
Pecos	2.537	1.498	0.994	1.355	1.039	0.504	0.143	1.543	1.182	49,536,092	193,188,492	582,741,259	96,458,198	114,043,993
Petrified Forest	1.307	0.788	0.611	0.711	0.519	0.177	0.077	0.696	0.596	99,167,630	550,096,045	1,082,233,766	213,843,391	226,174,497
San Pedro	4.003	3.029	2.003	2.607	0.974	1.026	0.422	2.000	1.396	52,841,889	94,899,610	197,469,194	74,417,500	96,561,605
West Elk	2.547	1.143	0.665	0.931	1.404	0.478	0.212	1.882	1.616	36,658,120	203,696,653	393,075,472	79,083,422	83,415,842
Weminuche	2.080	1.863	1.513	1.809	0.217	0.350	0.054	0.567	0.271	237,179,724	278,191,429	1,543,185,185	262,495,591	497,416,974
Wheeler Peak	1.880	1.089	0.714	0.891	0.791	0.375	0.198	1.166	0.989	65,067,004	259,645,333	420,868,687	127,645,798	136,299,292

Notes:

1. Average of 2001, 2002 and 2003 visibility data taken from Tables 8-8, 8-9, 8-10, and 8-19 for each Class 1 Area
2. NI = No Improvement
3. NA = Not Applicable
4. Total Annualized Costs used in calculating Average Improvement are as follows (in $1,000):

Pre-Consent Decree to Consent Decree	$51,468
Consent Decree to SCR	$97,367
Consent Decree to Hybrid	$83,332
Pre-Consent Decree to SCR	$148,835
Pre-Consent Decree to Hybrid	$134,800

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Table 8-A

Visibility Improvement Cost Effectiveness for Each Class 1 Area (Based on **Average** Visibility Modeling Results)

	Average Visibility Modeling Results (dv) (98th Percentile, see Note 1)				Visibility Improvements (dv) Calculated from Average Visibility Results (for each Class 1 Area)					Improvement ($/dv) (see Note 4)				
Class 1 Area	B&V (Pre-Consent Decree)	Consent Decree	SCR	Hybrid	Pre-Consent Decree to Consent Decree	Consent Decree to SCR	Consent Decree to Hybrid	Pre-Consent Decree to SCR	Pre-Consent Decree to Hybrid	Pre-Consent Decree to Consent Decree	Consent Decree to SCR	Consent Decree to Hybrid	Pre-Consent Decree to SCR	Pre-Consent Decree to Hybrid
Arches	3.675	3.190	1.848	2.637	0.485	1.342	0.553	1.827	1.038	106,119,588	72,553,651	150,690,778	81,464,149	129,865,125
Bandelier	2.643	1.994	1.270	1.691	0.649	0.724	0.303	1.373	0.952	79,303,544	134,484,807	275,023,102	108,401,311	141,596,639
Black Canyon	2.102	1.643	0.953	1.326	0.459	0.690	0.317	1.149	0.776	112,049,347	141,111,594	262,876,972	129,496,810	173,636,754
Canyonlands	4.637	3.810	2.379	3.220	0.827	1.431	0.590	2.258	1.417	62,234,583	68,041,230	141,240,678	65,914,526	95,130,558
Capitol Reef	2.282	1.748	1.191	1.465	0.534	0.557	0.283	1.091	0.817	96,382,022	174,806,104	294,459,364	136,420,715	164,993,880
Grand Canyon	1.377	1.079	0.685	0.898	0.298	0.394	0.181	0.692	0.479	172,711,409	247,124,365	460,397,790	215,079,480	281,419,624
Great Sand Dunes	1.069	0.809	0.545	0.720	0.260	0.264	0.089	0.524	0.349	197,700,384	368,814,394	936,314,607	283,855,690	385,877,863
La Garita	1.520	1.133	0.674	0.957	0.387	0.459	0.176	0.846	0.563	132,877,797	212,128,540	473,477,273	175,858,606	239,289,941
Maroon Bells	0.896	0.675	0.412	0.588	0.221	0.263	0.087	0.484	0.308	233,238,671	370,216,730	957,839,080	307,722,261	438,136,511
Mesa Verde(a)	8.809	7.322	6.327	7.395	1.487	0.995	NI	2.482	1.414	34,604,213	97,856,281	NA	59,957,701	95,309,922
Pecos	1.993	1.498	0.994	1.355	0.495	0.504	0.143	0.999	0.638	103,905,787	193,188,492	582,741,259	148,934,290	211,174,935
Petrified Forest	1.045	0.788	0.611	0.711	0.257	0.177	0.077	0.434	0.334	200,005,181	550,096,045	1,082,233,766	342,674,597	403,190,429
San Pedro	3.902	3.029	2.003	2.607	0.873	1.026	0.422	1.899	1.295	58,977,846	94,899,610	197,469,194	78,389,221	104,119,464
West Elk	1.483	1.143	0.665	0.931	0.340	0.478	0.212	0.818	0.552	151,525,025	203,696,653	393,075,472	182,024,052	244,350,453
Weminuche	2.570	1.863	1.513	1.809	0.707	0.350	0.054	1.057	0.761	72,797,737	278,191,429	1,543,185,185	140,808,893	177,135,348
Wheeler Peak	1.427	1.089	0.714	0.891	0.338	0.375	0.198	0.713	0.536	152,272,189	259,645,333	420,868,687	208,744,741	251,492,537

Notes:

1. Average of 2001, 2002 and 2003 visibility data taken from Tables 8-8, 8-9, 8-10, and 8-19 for each Class 1 Area
2. NI = No Improvement
3. NA = Not Applicable
4. Total Annualized Costs used in calculating Average Improvement are as follows (in $1,000):

Pre-Consent Decree to Consent Decree	$51,468
Consent Decree to SCR	$97,367
Consent Decree to Hybrid	$83,332
Pre-Consent Decree to SCR	$148,835
Pre-Consent Decree to Hybrid	$134,800

Table 8-23

Visibility Improvement Cost Effectiveness for Each Class 1 Area (Based on **Maximum** Visibility Modeling Results)

Class 1 Area	Maximum Visibility Modeling Results (dv) (98th Percentile, see Note 1)				Visibility Improvements (dv) Calculated from Maximum Visibility Results (for each Class 1 Area)					Improvement ($/dv) (see Note 4)				
	WRAP (Pre-Consent Decree)	Consent Decree	SCR	Hybrid	Pre-Consent Decree to Consent Decree	Consent Decree to SCR	Consent Decree to Hybrid	Pre-Consent Decree to SCR	Pre-Consent Decree to Hybrid	Pre-Consent Decree to Consent Decree	Consent Decree to SCR	Consent Decree to Hybrid	Pre-Consent Decree to SCR	Pre-Consent Decree to Hybrid
Arches	4.060	3.828	2.279	3.201	0.232	1.549	0.627	1.781	0.859	221,844,828	62,857,973	132,905,901	83,568,220	156,926,659
Bandelier	3.080	2.326	1.403	1.939	0.754	0.923	0.387	1.677	1.141	68,259,947	105,489,707	215,328,165	88,750,745	118,141,981
Black Canyon	2.430	1.815	1.061	1.411	0.615	0.754	0.404	1.369	1.019	83,687,805	129,133,952	206,267,327	108,718,042	132,286,555
Canyonlands	6.210	4.944	2.876	4.025	1.266	2.068	0.919	3.334	2.185	40,654,028	47,082,689	90,676,823	44,641,572	61,693,364
Capitol Reef	4.000	2.922	1.734	2.288	1.078	1.188	0.634	2.266	1.712	47,743,970	81,958,754	131,438,486	65,681,818	78,738,318
Grand Canyon	2.120	1.505	0.806	1.153	0.615	0.699	0.352	1.314	0.967	83,687,805	139,294,707	236,738,636	113,268,645	139,400,207
Great Sand Dunes	1.740	0.920	0.596	0.776	0.820	0.324	0.144	1.144	0.964	62,765,854	300,515,432	578,694,444	130,100,524	139,834,025
La Garita	1.820	1.163	0.717	1.010	0.657	0.446	0.153	1.103	0.81	78,337,900	218,311,659	544,653,595	134,936,537	166,419,753
Maroon Bells	1.270	0.703	0.440	0.615	0.567	0.263	0.088	0.830	0.655	90,772,487	370,216,730	946,954,545	179,319,277	205,801,527
Mesa Verde(a)	5.540	7.853	6.565	7.721	NI	1.288	0.132	NI	NI	NA	75,595,497	631,303,030	NA	NA
Pecos	2.810	1.693	1.068	1.466	1.117	0.625	0.227	1.742	1.344	46,076,992	155,787,200	367,101,322	85,439,150	100,297,619
Petrified Forest	1.620	1.045	0.738	0.898	0.575	0.307	0.147	0.882	0.722	89,509,565	317,156,352	566,884,354	168,747,166	186,703,601
San Pedro	4.140	3.356	2.139	3.008	0.784	1.217	0.348	2.001	1.132	65,647,959	80,005,752	239,459,770	74,380,310	119,081,272
West Elk	2.990	1.170	0.679	1.010	1.820	0.491	0.160	2.311	1.98	28,279,121	198,303,462	520,825,000	64,402,856	68,080,808
Weminuche	2.200	2.147	1.733	2.197	0.053	0.414	NI	0.467	0.003	971,094,340	235,185,990	NA	318,704,497	44,933,333,333
Wheeler Peak	1.970	1.164	0.776	0.942	0.806	0.388	0.222	1.194	1.028	63,856,079	250,945,876	375,369,369	124,652,429	131,128,405

Notes:

1. Maximum of 2001, 2002 and 2003 visibility data taken from Tables 8-8, 8-9, 8-10, and 8-19 for each Class 1 Area
2. NI = No Improvement
3. NA = Not Applicable
4. Total Annualized Costs used in calculating Improvement are as follows (in $1,000):

Pre-Consent Decree to Consent Decree	$51,468
Consent Decree to SCR	$97,367
Consent Decree to Hybrid	$83,332
Pre-Consent Decree to SCR	$148,835
Pre-Consent Decree to Hybrid	$134,800

Table 8-B
Visibility Improvement Cost Effectiveness for Each Class 1 Area (Based on **Maximum** Visibility Modeling Results)

	Maximum Visibility Modeling Results (dv) (98th Percentile, see Note 1)				Visibility Improvements (dv) Calculated from Maximum Visibility Results (for each Class 1 Area)					Improvement ($/dv) (see Note 4)				
Class 1 Area	B&V (Pre-Consent Decree)	Consent Decree	SCR	Hybrid	Pre-Consent Decree to Consent Decree	Consent Decree to SCR	Consent Decree to Hybrid	Pre-Consent Decree to SCR	Pre-Consent Decree to Hybrid	Pre-Consent Decree to Consent Decree	Consent Decree to SCR	Consent Decree to Hybrid	Pre-Consent Decree to SCR	Pre-Consent Decree to Hybrid
Arches	4.611	3.828	2.279	3.201	0.783	1.549	0.627	2.332	1.41	65,731,801	62,857,973	132,905,901	63,822,899	95,602,837
Bandelier	3.075	2.326	1.403	1.939	0.749	0.923	0.387	1.672	1.136	68,715,621	105,489,707	215,328,165	89,016,148	118,661,972
Black Canyon	2.338	1.815	1.061	1.411	0.523	0.754	0.404	1.277	0.927	98,409,178	129,133,952	206,267,327	116,550,509	145,415,318
Canyonlands	5.872	4.944	2.876	4.025	0.928	2.068	0.919	2.996	1.847	55,461,207	47,082,689	90,676,823	49,677,904	72,983,216
Capitol Reef	3.800	2.922	1.734	2.288	0.878	1.188	0.634	2.066	1.512	58,619,590	81,958,754	131,438,486	72,040,174	89,153,439
Grand Canyon	1.821	1.505	0.806	1.153	0.316	0.699	0.352	1.015	0.668	162,873,418	139,294,707	236,738,636	146,635,468	201,796,407
Great Sand Dunes	1.144	0.920	0.596	0.776	0.224	0.324	0.144	0.548	0.368	229,767,857	300,515,432	578,694,444	271,596,715	366,304,348
La Garita	1.617	1.163	0.717	1.010	0.454	0.446	0.153	0.900	0.607	113,365,639	218,311,659	544,653,595	165,372,222	222,075,783
Maroon Bells	0.917	0.703	0.440	0.615	0.214	0.263	0.088	0.477	0.302	240,504,673	370,216,730	946,954,545	312,023,061	446,357,616
Mesa Verde(a)	9.139	7.853	6.565	7.721	1.286	1.288	0.132	2.574	1.418	40,021,773	75,595,497	631,303,030	57,822,455	95,063,470
Pecos	2.264	1.693	1.068	1.466	0.571	0.625	0.227	1.196	0.798	90,136,602	155,787,200	367,101,322	124,443,980	168,922,306
Petrified Forest	1.448	1.045	0.738	0.898	0.403	0.307	0.147	0.710	0.55	127,712,159	317,156,352	566,884,354	209,626,761	245,090,909
San Pedro	4.190	3.356	2.139	3.008	0.834	1.217	0.348	2.051	1.182	61,712,230	80,005,752	239,459,770	72,567,040	114,043,993
West Elk	1.563	1.170	0.679	1.010	0.393	0.491	0.160	0.884	0.553	130,961,832	198,303,462	520,825,000	168,365,385	243,761,302
Weminuche	3.114	2.147	1.733	2.197	0.967	0.414	NI	1.381	0.917	53,224,405	235,185,990	NA	107,773,353	147,001,091
Wheeler Peak	1.468	1.164	0.776	0.942	0.304	0.388	0.222	0.692	0.526	169,302,632	250,945,876	375,369,369	215,079,480	256,273,764

Notes:

1. Maximum of 2001, 2002 and 2003 visibility data taken from Tables 8-8, 8-9, 8-10, and 8-19 for each Class 1 Area
2. NI = No Improvement
3. NA = Not Applicable
4. Total Annualized Costs used in calculating Improvement are as follows (in $1,000):

Pre-Consent Decree to Consent Decree	$51,468
Consent Decree to SCR	$97,367
Consent Decree to Hybrid	$83,332
Pre-Consent Decree to SCR	$148,835
Pre-Consent Decree to Hybrid	$134,800