

Air Quality Component	Comment
Climate	
Temperature Yellowstone National Park	<u>Mean annual maximum: 60 °F</u> <u>Mean annual minimum: 32 °F</u>
Precipitation	<u>Mean annual precipitation: 14.7 inches</u> <u>Mean annual snowfall: 37.7 inches</u> <u>Mean annual snow depth: 1 inch</u>
Air Pollutant Concentrations	
MAAQS & NAAQS: Criteria pollutants from 1993 – 2003 Rosebud County, Montana	<ul style="list-style-type: none"> <li>- NO<sub>2</sub>:               <ul style="list-style-type: none"> <li>- 1 hour &lt; 15% of MAAQS</li> <li>- annual &lt; 10% of MAAQS</li> </ul> </li> <li>- PM<sub>10</sub> <ul style="list-style-type: none"> <li>- 24 hour:                   <ul style="list-style-type: none"> <li>- 1 exceedance 2003</li> </ul> </li> <li>- annual &lt; 70% of MAAQS</li> </ul> </li> <li>- SO<sub>2</sub> <ul style="list-style-type: none"> <li>- 1 hour &lt; 20% of MAAQS</li> <li>- 3 hour &lt; 5% of NAAQS</li> <li>- 24 hour &lt; 5 MAAQS</li> <li>annual &lt; 10% of MAAQS</li> </ul> </li> </ul>
PSD Class I Increments (MDEQ, 2002)	<ul style="list-style-type: none"> <li>- Yellowstone National Park               <ul style="list-style-type: none"> <li>- .02% of PSD Class I NO<sub>2</sub> annual</li> <li>- .6% of SO<sub>2</sub> annual</li> <li>- 11% of SO<sub>2</sub> 24 hour</li> <li>- 7.2% of SO<sub>2</sub> 3 hour</li> <li>- .1% of PM<sub>10</sub> annual</li> <li>- 2% of PM<sub>10</sub> 24 hour</li> </ul> </li> <li>- North Absaroka Wilderness               <ul style="list-style-type: none"> <li>- .04% of PSD Class I NO<sub>2</sub> annual</li> <li>- 2% of SO<sub>2</sub> annual</li> <li>- 15.6% of SO<sub>2</sub> 24 hour</li> <li>- 12.3% of SO<sub>2</sub> 3 hour</li> <li>- .3% of PM<sub>10</sub> annual</li> <li>- 3.9% of PM<sub>10</sub> 24 hour</li> </ul> </li> <li>- UL Bend Wilderness               <ul style="list-style-type: none"> <li>- .02% of PSD Class I NO<sub>2</sub> annual</li> <li>- .6% of SO<sub>2</sub> annual</li> <li>- 11% of SO<sub>2</sub> 24 hour</li> <li>- 7.2% of SO<sub>2</sub> 3 hour</li> <li>- .1% of PM<sub>10</sub> annual</li> <li>- 2% of PM<sub>10</sub> 24 hour</li> </ul> </li> <li>- Northern Cheyenne Reservation               <ul style="list-style-type: none"> <li>- 50% of PSD Class I NO<sub>2</sub> annual</li> <li>- .25% of SO<sub>2</sub> annual</li> <li>- SO<sub>2</sub> 24 hour exceedance</li> <li>- SO<sub>2</sub> 3 hour exceedance</li> <li>- 3.5% of PM<sub>10</sub> annual</li> </ul> </li> </ul> <p>- 28% of PM<sub>10</sub> 24 hour</p>
<u>Visibility</u>	
Yellowstone National Park	<ul style="list-style-type: none"> <li>- cleanest 20%: 140 – 168 miles</li> <li>- average: 93 – 125 miles</li> <li>- haziest 20%: 59 – 78 miles</li> </ul>

<u>Atmospheric Deposition</u>	
Little Big Horn Battlefield National Monument	<ul style="list-style-type: none"><li>- precipitation<ul style="list-style-type: none"><li>- pH: very slight acidification in 1998 &amp; 1999</li><li>- SO4: &lt;.8 mg/L</li></ul></li><li>- Wet deposition</li><li>- SO4: &lt;.4 kg/ha</li></ul>
Yellowstone National Park	<ul style="list-style-type: none"><li>- Total Sulfur: &lt;50% of guidelines</li></ul>