

The following section supplements the analysis found in Chapter Three, Section 3.22 - [Scenery, Visual Resources, and the Built Environment](#) of the Draft EIS beginning on page 3.450, “Impacts Related to Fluid-Mineral Management”.

### **DIRECT AND INDIRECT IMPACTS**

The potential visual impacts from linear features, well pads, and associated facilities described in the Draft EIS are the same types of impacts that could be expected from the projected GSGP development. However, the potential for impact would be greater given the projected increase of approximately four-times the amount of wells, roads and acres of disturbance. In general, potential oil and gas impacts include altering the landscape by clearing vegetation, installing equipment and facilities, and overall degradation of the natural appearance, especially in foreground areas. The projected increased traffic on roads could also cause increased dust that could impair vistas. The results of the air quality model suggest that there could be impacts to visibility.

The GSGP area is a landscape with generally positive, but ordinary or common, scenic qualities. The landscape has been modified by timber, livestock and mineral management, oil and gas development, as well as agricultural, residential and commercial development on private lands. The GSGP occurs within a portion of the Paradox Basin. As described in the Draft EIS, the current scenic condition throughout the BLM portion of the Paradox Basin is a Visual Resource Management (VRM) Class III - partial retention of existing landscape character, with some areas of VRM Class II and IV. (Please see pages 3.442 through 3.443 of the Draft EIS for definitions of VRM classes.) This area has low visibility due to few viewers, but it also has low screening potential due to the predominantly open landscape. The BLM portion of the Paradox Basin currently has approximately 150 operating wells that give an industrial character to the landscape. Native vegetation has been cleared and numerous access roads constructed. Developing the GSGP could result in approximately 428 additional wells on BLM leased and unleased lands (241 and 187 wells respectively) over the next fifteen to twenty years. While visual resource standards and guidelines and leasing stipulations have been designed to limit the visual impacts of the area, it may not be possible to retain the current VRM classes given the projected shale gas development in the area, which could result in more of the area going from a VRM III to VRM Class IV.

The USFS portion of the Paradox Basin has been inventoried as having moderate scenic integrity, which is a slightly altered landscape character. Again, due to the predominately open landscape, this area has low visibility with few viewers, and low screening potential. It has a well-developed road network and substantial evidence of active vegetation management; however, it does not have the same level of oil and gas development as that of the BLM portion of the Paradox Basin. Currently only 34% of the USFS lands are leased. Developing the GSGP could result in approximately 691 additional wells on USFS leased and unleased lands (111 and 580 wells respectively) over the next fifteen to twenty years. While visual resource standards and guidelines and leasing stipulations have been designed to limit the visual impacts of the area, the GSGP development could likely impact the scenic condition of the area given that there is currently very little oil and gas development on the USFS lands within the GSGP.

There are areas within the GSGP that have been identified for their high scenic value and are protected with a NSO stipulation, including the Mesa Verde Escarpment, Dolores River Canyon (and the rim overlook), and the San Juan Skyway.

**Alternative Comparison:** In general, Alternative A has the least restrictive lease stipulations for protecting visual quality across the alternatives, and proposes the greatest amount of wells, well pads, roads and acres of disturbance. In Alternatives B, C, and D, an NSO stipulation would protect mapped foreground areas with a high scenic integrity or VRM Class II; and a Controlled Surface Use (CSU) stipulation would protect mapped foreground areas with a moderate scenic integrity or VRM Class III. Hence, Alternative A would have the greatest impact to the scenic quality of the area, followed by Alternative D, B and then C. The No Lease Alternative would have the least impact to the scenic quality of the area, as development would only occur on lands currently leased.

## CUMULATIVE IMPACTS

The cumulative impacts boundary for visual impacts analysis is the Paradox Basin of the planning area which includes the GSGP, as well as the adjacent area with conventional and gas shale development, in Montezuma, Dolores and San Miguel counties, and includes the potential impacts from projected oil and gas development on leased and unleased federal lands, and private and state leases.

An additional 1,786 acres of disturbance could result from future development on lands currently held under lease on BLM and USFS mineral estate (1,166 acres from future gas shale development, and approximately 620 acres from conventional gas development). Future development on lands currently held under lease would require pads and access roads and would generally result in the same types of impacts as described for unleased lands, i.e., altering the landscape by clearing vegetation, installing equipment and facilities, degradation of the natural appearance, and impaired vistas from the increased dust caused by road traffic. Mitigations for lands currently held under lease would be similar to the mitigations described for unleased lands and would be specified during project level NEPA analysis using COA based on the Draft LMP, Part Three (see [Design Criteria](#) for a listing of these mitigation measures).

Approximately 2,700 acres of disturbance is projected for future development on private and state lands. The impacts to scenery and visual resources from development on private and state lands would be similar to impacts on federal lands. However, private and state lands are not subject to the same mitigations as federal lands. Hence, development on private and state lands could cumulatively cause an overall deteriorate the vistas and the natural appearance of the landscape.

Cumulatively, all of the potential oil and gas development for private, state, and federal leases is approximately four times as much as could occur on just the unleased lands analyzed above in direct and indirect impacts. This projected development could be visible from county roads that serve as a gateway to the public lands, and the impacts could increase the magnitude and extent of an industrial appearing landscape encountered by residents and visitors.