The following section supplements the analysis found in Chapter Three, Section 3.25 - Economics of the Draft EIS on page 3.486, "Impacts Related to Oil and Gas Exploration and Development".

## DIRECT AND INDIRECT IMPACTS

The new GSGP activity addressed in this Supplement is expected to occur in the remote, southwestern parts of Montezuma, Dolores and San Miguel Counties. Given the limited transportation systems and the location of oil and gas industry support in southwestern Colorado, materials and labor are expected to be brought into the counties from the south during both field development and production.

For this Supplement to the Draft EIS, the model of the five-county Colorado area was updated and a second model was prepared for San Juan County, New Mexico. The focus of the Supplement to the Draft EIS is new drilling and extraction activities anticipated in the GSGP area within the Paradox Basin. Up to 1,700 wells, 1,300 pads, 950 miles of gathering pipelines, and 590 miles of road are analyzed.

Effects associated with all resources other than natural gas were left unchanged from the Draft EIS. New effects are also reported for the base year of 2004 and the selected out-year of 2015. Detailed development activities and production levels were examined by year to 2026.

Employment and income associated with the base year minerals program has been corrected for this Supplement. Improved methodologies used for this Supplement revealed an overstatement of jobs and income attributable to the SJPL minerals program in the Draft EIS. As a result, employment associated with management of the SJPL dropped by 700 and labor income dropped by \$46 million for 2004. These changes are analytical estimates only; they do not reflect actual, on-the-ground changes in jobs or income from the Draft EIS.

*Alternative Comparison*: There is little difference among the action alternatives due to the narrow geographic scope of this Supplement (GSGP area only). This analysis is based on a subset of the complete, reasonable range of management alternatives developed for the entire planning area as presented jointly in this Supplement and the Draft LMP/EIS; therefore, the range of proposed management presented in this Supplement does not represent the full range of alternatives or impacts. Alternatives A and D have the largest number of wells and the greatest production levels. Table S-3.25.1 shows that by 2015, minerals-based employment will increase by 227 jobs for Alternative A and by 219 jobs for Alternatives B and C. The No Lease Alternative could result in about 240 jobs less than either Alternatives A or D in 2015 due to no new lands available for lease.

Employment in San Juan County, New Mexico associated with oil and gas activities on SJPL was estimated to be about 124 jobs in 2004 (Table 3.25.1). Under all alternatives that number would increase to nearly five times base year levels (or 400% more) by 2015. It was assumed that most of the specialized work required in field development would be done by firms in the Farmington, NM area.

The Draft EIS displayed job and income associated with multiple SJPL programs. This Supplement only includes jobs and income associated with the SJPL mineral program, which accounts for the majority of job

growth, specifically from natural gas development. Mining and construction represent the industry sectors<sup>4</sup> that mostly benefit from mineral development.

Minerals	2004	2015	CHANGE FROM ALTERNATIVE A IN 2015			
	Base Year	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	
5-County Colorado Area	196	423	-8	-8	0	
San Juan County, New Mexico	124	630	-14	-14	0	

 Table S-3.25.1 - Projected Changes in Employment (jobs) for the 5-County Colorado Area and

 San Juan County, New Mexico Related to Minerals by Alternative in 2015

The next table provides a look at impacts related to labor income. Labor income includes all wages and salaries, plus benefits, for employees and for the self-employed.

## Table S-3.25.2 - Projected Changes in Labor Income (millions) for the 5-County Colorado Area and San Juan County, New Mexico Related to Oil and Gas by Alternative in 2015

Minerals	2004	2015	CHANGE FROM ALTERNATIVE A IN 2015		
	Base Year	Alternative A (No Action)	Alternative B	Alternative C	Alternative D
5-County Colorado Area	\$12.5	\$27.0	\$-0.6	\$-0.6	\$0.0
San Juan County, New Mexico	\$5.9	\$30.0	\$-0.7	\$-0.7	\$0.0

In the 5-County Colorado area labor income is estimated to increase the most for those affected by the minerals program. Because of activity under current leases, the No Lease Alternative may result in labor income increases of \$15 million across all industries5 compared with 2004 levels. Three quarters of the increase would occur in the Mining and Construction sectors. Compared with Alternative A; however, there would likely be \$12 million less in labor income, most affecting the Mining and Construction industries.

In the Farmington area, all action Alternatives (A through D) would likely result in about \$24 million more in 2015 that were attributable to the SJPL minerals program in 2004. The No Lease Alternative would likely result in increases of \$16 million, about half of labor income estimated for Alternative A. Regardless of the alternative, about 75percent of employment effects in San Juan County, NM would likely be experienced in the Mining, Construction, and Professional Services sectors. Estimates for the No Lease Alternative only consider changes to the SJPL minerals program.

## Summary

The size of anticipated natural gas development and production for all action Alternatives (A through D) dominates the economic effects. Jobs across all sectors in the 5-county Colorado area that are associated with natural gas are expected to more than double, going from about 200 jobs in 2004 to more than 400 in 2015. Given that earnings associated with energy development are relatively high, labor income will increase slightly more than jobs. Labor income generated by energy activity is projected to more than double, increasing from \$12.5 in 2004 to \$27 million in 2015. Job growth related to energy activity on SJPL is expected to grow at a 13% annual rate between 2015 and 2025.

<sup>&</sup>lt;sup>4</sup> See the Draft EIS, Section 3.25 for information on all industry sectors.

The San Juan County, New Mexico area can also expect substantial job growth related to natural gas development and projection on SJPL. Employment and income generated by this activity will increase five times, rising from 124 jobs in 2004 to over 600 in 2015. Labor income will increase from \$6 million in 2004 to \$30 million in 2015. This growth is anticipated to be faster than total job growth projected for the San Juan County, New Mexico area. Beyond 2015, job and labor income related to SJPL energy activity is expected to grow at a 14% rate through 2025.