

Tri-State Montrose-Nucla-Cahone Transmission Line Improvement Project
Preliminary Environmental Assessment
(DOI-BLM-CO-S000-2013-0001)

Appendix E. Summary of Environmental Effects and Basis for Determination

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	Resources							
	Access, Roads, and Transportation	Cultural	Forest and Timber Suitable Timber	Geology and Minerals High Landslide Areas	Lands with Wilderness Characteristics	Soils	Gunnison Sage-Grouse Occupied Habitat	Visual
Alternative A								
Alternative A (Proposed Action) – Realignment of Dolores River Crossing and Upgrade-in-Place at Dry Creek Basin	<i>Negligible to low, short-term effects</i> from use of existing public access roads and several new roads during construction and maintenance. 8.6 miles of new access road; 3.3 miles of reclaimed access road.	<i>Negligible effects where avoided, localized, low and long-term where mitigated.</i> 54 historic properties within general project area, adverse effects would require mitigation. Additional surveys planned. A treatment plan will be implemented.	<i>Moderate and long-term.</i> 110.8 acre clearing in suitable timber.	<i>Negligible to low, and long-term.</i> 76.8 acres of effect to high landslide areas.	<i>Low, long-term beneficial effect</i> due to removing structures and reducing ROW width in Dolores River Canyon. No new clearing or structure footprints. Potential to expand Snaggletooth unit.	<i>Low, short-term and negligible, long-term effect.</i> Total 160.6 acres of new surface disturbance.	<i>Low, new, long-term effects (Dry Creek Basin).</i> New long-term disturbance of 7.3 acres to occupied habitat. Fewer structures and perch discouragers would reduce the presence of avian predators, providing a net benefit to GuSG. Current reduced habitat effectiveness on 4,901 acres would continue.	<i>Low, long-term effects project-wide; moderate, long-term effects (Dolores River Crossing)</i> due to taller structures and wider ROW. Low/moderate: KOP 1, views of north rim Moderate to high: KOP 2 looking north Low/Negligible: 6, 10, 11, 12
Dolores River Crossing realignment only	<i>Negligible, short-term effect.</i> 2.2 miles new access road; 3.3 miles reclaimed access road	<i>Additional survey ongoing in this area; area-specific effects to be determined</i>	<i>Low and long-term.</i> 36.5 acres cleared in suitable timber	<i>Low and long-term.</i> 11.8 acres of effect to high landslide areas; flat slopes (<10%) for construction and maintenance	<i>Low, long-term beneficial effect</i> due to moving structures and reducing ROW width in Dolores River Canyon; decrease in time visible to river user	<i>Low and long-term.</i> Total 11.8 acres of new surface disturbance	<i>Not applicable</i>	<i>Low, long-term effects due to taller structures and wider ROW.</i> Low/moderate: KOP 1, views of north rim Moderate to high effects to KOP 2 in views to north Beneficial effects to KOP 10 and 11 due to visual screening and increased distance KOP 12: Line removed from views to east, west, and south. Visible looking north

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Dry Creek Basin upgrade-in-place only	<i>Negligible, short-term effect.</i> No new access road; no reclaimed access road.	<i>Additional survey ongoing in this area; area-specific effects to be determined.</i>	<i>No effect. Lands Generally Not Suitable for Timber Production.</i>	<i>Low and long-term.</i> 5.2 acres of effect to high landslide areas.	<i>Not applicable.</i>	<i>Low and long-term.</i> Total 8.0 acres of new surface disturbance.	<i>Low, new, long-term effects</i> New long-term disturbance of 7.3 acres to occupied habitat. Fewer structures and perch discouragers would reduce the presence of avian predators, providing a net benefit to GuSG. Current reduced habitat effectiveness on 4,901 acres would continue. Existing road use (authorized in 2006 EA) disturbance would disturb a maximum of 33 acres, including 17.6 acres long-term.	<i>Low, long-term effects</i> due to taller structures; beneficial effects to users along U29 Road in middle of Dry Creek Basin.
Alternative A (Proposed Action) - Existing access road effects (tiered to 2006 EA)	115.2 miles access road 223.4 acres of existing disturbance; 6.5 acres reclaimed; 195.5 acres construction disturbance	37 historic properties included in mitigation plan; mitigation completed on about 20 properties	42.1 acres existing disturbance, 0.06 acres reclaimed; 36.8 acres construction disturbance	135 acres of existing disturbance effect to high landslide areas, 3.2 acres reclaimed; 118.1 acres construction disturbance		223.4 acres of existing disturbance, 6.5 acres reclaimed; 195.6 acres construction disturbance	Existing road use would disturb a maximum of 33 acres, including 17.6 acres long-term.	
Alternative B								
Alternative B - No Action	<i>No new effects;</i> ongoing use of existing public access roads during maintenance 0.0 miles of new access road; 0.0 miles of reclaimed access road; 241 miles of existing access roads.	<i>No new effects.</i>	<i>No new effects;</i> ongoing negligible and long-term maintenance in existing ROW. 156 acres of suitable timber category is in existing ROW; ongoing vegetation management.	<i>No new effects;</i> ongoing erosion requires maintenance in Dolores River Canyon.	<i>No beneficial effect.</i> Existing structures remain in Dolores River Canyon.	<i>No new effects.</i> Existing surface disturbance from roads and structures would not change.	<i>No new effects;</i> Current reduced habitat effectiveness on 4,901 acres would continue. 3,020 acres. No new effects to occupied range.	<i>No new effects.</i> Line is in view from KOP 1 (distant to south), KOP 2 (southeast), KOP 12 (south), KOP 10 and 11 (north).
Alternative B - Existing access road effects for No Action (tiered to 2006 EA)	118.6 miles access road 229.8 acres of existing disturbance; 201.1 acres construction disturbance	37 historic properties included in mitigation plan; mitigation completed on about 20 properties	44.2 acres existing disturbance; 38.6 acres construction disturbance	141.5 acres of effect to high landslide areas, 123.7 acres construction disturbance		229.8 acres of existing disturbance, 201.2 acres construction disturbance	Existing road use would disturb a maximum of 33 acres, including 17.6 acres long-term	
Alternative C								

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Alternative C - Dolores River Crossing Routing Option (Alternative A Incorporating Upgrade-in-Place at Dolores River Crossing)	<i>Intensity and duration of effect is the same as for Alternative A.</i> 7.3 miles of new access roads; 1.7 miles of reclaimed access roads.	<i>Intensity and duration of effect is the same as for Alternative A.</i>	<i>Low to moderate and long-term.</i> Total 79.5 acres clearing in suitable timber.	<i>Low, long-term effects for new access road maintenance</i> Total 78.0 acres of effect to high landslide areas. Extreme slopes (>30%) for construction and maintenance.	<i>Intensity and duration of effect is the same as for Alternative A.</i>	<i>Intensity and duration of effect is the same as for Alternative A.</i> Total 161.9 acres of new surface disturbance.	<i>Intensity and duration of effect is the same as for Alternative A.</i>	<i>Low long-term effects project-wide; moderate long-term effects at Dolores River Crossing.</i> Beneficial: KOP 11 Moderate: KOP 2, 10, 12 Low/Negligible: KOP 1 Structure is an expected part of the existing environment, and frequency, duration and volume of visitor use are low particularly at KOP 2, 10, 11, and 12.
Alternative C - Existing access road effects for the Dolores River Crossing Routing Option (tiered to 2006 EA)	117 miles access road 226.6 acres of existing disturbance; 3.2 acres reclaimed; 198.4 acres construction disturbance	37 historic properties included in mitigation plan; mitigation completed on about 20 properties	44.1 acres existing disturbance; 0.06 acres reclaimed; 38.6 acres construction disturbance	138.2 acres of existing disturbance effect to high landslide areas, 3.2 acres reclaimed; 121 acres construction disturbance		226.6 acres of existing disturbance; 3.2 acres reclaimed; 198.4 acres construction disturbance	Existing road use would disturb a maximum of 33 acres, including 17.6 acres long-term	
Alternative C - Dry Creek Basin Routing Option (Alternative A Incorporating Realignment at Dry Creek Basin)	<i>Intensity and duration of effect is the same as for Alternative A.</i> 17.6 miles of new access roads; 10.7 miles of reclaimed access roads.	<i>Intensity and duration of effect is the same as for Alternative A.</i>	<i>Intensity and duration of effect is the same as for Alternative A.</i> Total 110.8 acres clearing in suitable timber.	<i>Intensity and duration of effect is the same as for Alternative A.</i> Total 100.4 acres of effect to high landslide areas Flat slopes (<10%) for construction and maintenance.	<i>Intensity and duration of effect is the same as for Alternative A.</i>	<i>Intensity and duration of effect is the same as for Alternative A.</i> Total 192.3 acres of new surface disturbance.	<i>Low new, long-term effects; beneficial effects due to decreased habitat fragmentation (Dry Creek Basin).</i> New long-term disturbance of 22.7 acres to occupied habitat. Fewer structures and perch discouragers would reduce the presence of avian predators, providing a net benefit to GuSG. Restored existing roadways total 14 acres in occupied habitat. Long-term reduced habitat effectiveness on 857 acres. Improved habitat effectiveness on 2,163 acres.	<i>Low long-term effects project-wide; moderate long-term effects at Dolores River Crossing and high long-term effects at Dry Creek Basin</i> due to realignment along SH 141. Same as A for Dolores River Crossing

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Alternative C - Existing access road effects for the Dry Creek Basin Routing Option (tiered to 2006 EA)	107.9 miles access road 209.1 acres of existing disturbance; 20.7 acres reclaimed; 183.1 acres construction disturbance	37 historic properties included in mitigation plan; mitigation completed on about 20 properties	42.1 acres existing disturbance; 0.06 acres reclaimed; 36.8 acres construction disturbance	125.8 acres of existing disturbance effect to high landslide areas, 3.2 acres reclaimed; 110 acres construction disturbance		209.1 acres of existing disturbance; 20.7 acres reclaimed; 183.1 acres construction disturbance	Existing road use (authorized in 2006 EA) would disturb a maximum of 6.8 acres, including 3.6 acres long-term.	
Alternative C - Dolores River Crossing and Dry Creek Basin Routing Options (Alternative A Incorporating Upgrade-in-Place at Dolores River Crossing and Realignment at Dry Creek Basin)	<i>Intensity and duration of effect is the same as for Alternative A.</i> 16.3 miles of new access roads; 9 miles of reclaimed access roads.	<i>Intensity and duration of effect is the same as for Alternative A.</i>	<i>Intensity and duration of effect is the same as for Alternative A.</i> Total 79.5 acres clearing in suitable timber.	<i>Low, long-term effects</i> for new access road maintenance. Total 101.6 acres of effect to high landslide areas. Extreme slopes (>30%) for construction and maintenance.	<i>Intensity and duration of effect is the same as for Alternative A.</i>	<i>Intensity and duration of effect is the same as for Alternative A.</i> Total 193.5 acres of new surface disturbance.	<i>Low new, long-term effects; beneficial effects due to decreased habitat fragmentation (Dry Creek Basin).</i> New long-term disturbance of 22.7 acres to occupied habitat. Fewer structures and perch discouragers would reduce the presence of avian predators, providing a net benefit to GuSG. Restored existing roadways total 14 acres in occupied habitat. Long-term reduced habitat effectiveness on 857 acres. Improved habitat effectiveness on 2,163 acres.	<i>Low long-term effects project-wide; moderate long-term effects at Dolores River Crossing and high long-term effects at Dry Creek Basin.</i> Same as Alternative C - Dolores River Crossing Routing Option (Alternative A Incorporating Upgrade-in-Place at Dolores River Crossing) at Dolores River crossing; same as Alternative C - Dry Creek Basin Routing Option (Alternative A Incorporating Realignment at Dry Creek Basin) for Dry Creek Basin
Alternative C - Existing access road effects for the Dolores River Crossing and Dry Creek Basin Routing Options (tiered to 2006 EA)	109.6 miles access road 212.4 acres of existing disturbance; 17.4 acres reclaimed; 186 acres construction disturbance	37 historic properties included in mitigation plan; mitigation completed on about 20 properties	44.1 acres existing disturbance; 0.06 acres reclaimed; 38.6 acres construction disturbance	129 acres of existing disturbance effect to high landslide areas, 3.2 acres reclaimed; 113 acres construction disturbance		212.4 acres of existing disturbance; 17.4 acres reclaimed; 186 acres construction disturbance	Existing road use (authorized in 2006 EA) would disturb a maximum of 6.8 acres, including 3.6 acres long-term.	

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Dolores River Crossing upgrade-in-place only	<i>Negligible, short-term effect.</i> 0.9 miles new access road; 1.7 miles reclaimed access road.	<i>Additional survey ongoing in this area; area-specific effects to be determined.</i>	<i>Low and long-term</i> 5.2 acres clearing in suitable timber.	<i>Low and long-term.</i> 13.0 acres of effect to high landslide areas. Extreme slopes (>30%) for construction and maintenance.	<i>Low, long term beneficial effect</i> due to moving structures and reducing ROW width in Dolores River Canyon. Increase in time visible to river user.	<i>Low and long-term.</i> Total 13.0 acres of new surface disturbance.	<i>Not applicable</i>	<i>Moderate long-term effects at Dolores River Crossing.</i> Beneficial: KOP 11 due to screening Moderate: KOP 2, 10, 12 due to taller structures Low/Negligible: KOP 1 due to distance. Structure is an expected part of the existing environment, and frequency, duration and volume of visitor use are low.
Dry Creek Basin realignment only	<i>Negligible, short-term effect.</i> 9.0 miles new access road; 7.3 miles reclaimed access road.	<i>Additional survey ongoing in this area; area-specific effects to be determined.</i>	<i>No effect.</i> 0 acres clearing in suitable timber. Lands Generally Not Suitable for Timber Production.	<i>Low and long-term.</i> 28.8 acres of effect to high landslide areas.	<i>Not applicable.</i>	<i>Low and long-term.</i> Total 39.6 acres of new surface disturbance.	<i>Low new, long-term effects; beneficial effects due to decreased habitat fragmentation (Dry Creek Basin).</i> New long-term disturbance of 22.7 acres to occupied habitat. Fewer structures and perch discouragers would reduce the presence of avian predators, providing a net benefit to GuSG. Long-term reduced habitat effectiveness on 857 acres. Improved habitat effectiveness on 2,163 acres. Existing road use (authorized in 2006 EA) would disturb a maximum of 6.8 acres, including 3.6 acres long-term.	<i>Moderate to high long-term effects</i> at KOP 6, to residents and to SH 141 travelers. Beneficial effect to U29 Rd travelers in middle of basin