Appendix F3.15

Visual Resources

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Summary of the Southern Nevada and Ely District Visual Resource Inventories

Summary of the Southern Nevada and Ely District Visual Resource Inventories

Visual Resource Inventories for the Southern Nevada and Ely District provide a baseline scenic quality evaluation, a delineation of distance zones, and a sensitivity level analysis. Based on these three factors, BLM-administered lands are placed into one of four VRI classes that represent the relative value of the visual resources. Classes I and II are the most valued, Class III represents a moderate value, and Class IV is of least value. Inventory classes are informational in nature and provide the basis for considering visual values in the development of VRM classes.

Scenic Quality

The VRIs for the Southern Nevada and Ely Districts map and rate scenic quality of BLM lands as Scenic Quality Rating Units (SQRUs). The majority of the SQRUs within each affected basin, as shown in **Table F3.15-1**, are within the Ely District. Rating areas are delineated on a basis of like physiographic characteristics; similar visual patterns, texture, color, variety, etc.; and areas which have similar impacts from man-made modifications. Public lands are given an A, B, or C rating based on the apparent scenic quality which is determined using seven key factors: landform, vegetation, water, color, adjacent scenery, scarcity, and cultural modifications. Class A landscapes have a score of 19 or more and have the highest scenic value. Class B landscapes have a score between 12 and 18 and Class C landscapes have scores of 11 or less.

In the VRI, cultural modifications that affect landform, water, or vegetation may add or detract from the scenic quality of a unit. Negative cultural modification ratings are applied to SQRUs that contain modifications that are discordant and promote strong disharmony in the landscape. **Table F3.15-1** provides the rating for cultural modifications in each SQRU.

Adjacent scenery is identified in the VRI, and included in impact evaluation as the scenic quality of adjacent SQRUs may be impacted by visible proposed facilities. The adjacent scenery rating identifies the degree at which scenery outside an SQRU enhances the overall impression of the scenery within the SQRU. The higher the number the greater the influence of adjacent scenery has on visual quality within a SQRU. **Table F3.15-1** provides the rating for the influence of adjacent scenery in each SQRU.

The VRI vegetation factor rating identifies the degree of variety from patterns, forms, and textures of vegetation. The ratings range from 1, indicating little or no variety or contrast in vegetation, to 5, indicating a variety of vegetative types as expressed in interesting forms, textures, and patterns. **Table F3.15-1** provides the rating for the existing variety in vegetation cover within each SQRU.

Sensitivity Levels

The VRIs for the Southern Nevada and Ely Districts map and rate sensitivity levels for BLM land as SLRU, as shown on **Table F3.15-1**, and provide a measure of public concern for scenic quality. Public lands are assigned high, medium, or low sensitivity levels by analyzing the various factors that include: 1) type of users, 2) amount of use, 3) public interest, 4) adjacent land uses, 5) management objectives of special areas, and 6) other indicators of sensitivity that may be specific to the region under analysis. Areas inventoried with high sensitivity level occur in the vicinity of communities, on highways and other roads that cross through landscapes inventoried with a high scenic quality, and in the vicinity of special management areas, including the areas described above. Otherwise, roads are generally rated with a moderate level of sensitivity. Areas inventoried with a low sensitivity level occur in landscapes with a low to moderate scenic quality in distance zones greater than 5 miles from sensitive viewpoints.

Table F3.15-1

Crossings of Scenic Quality Rating Units

Table F3.15-1 Proposed Action, Alternatives A through C Rights-of-way, Pipeline and Power Line Crossings of Scenic Quality Rating Units

Basin	SQRU Identifier	ROW (acres)	Groundwater Development (acres)	SLRU (high, mod, low)	Total SQRU Score	Cultural Modification	Adjacent scenery	Vegetation	Comments
Cave Valley	63	20	3,795	low, high	16	0.5	4	2	Facilities in high SLRU
	66	1	112	mod, high	13	0.5	3	3	Facilities in high SLRU
	64	-	50	mod, high	(data not available)	0	4.5	3	Facilities in moderate SLRU
Coyote Springs Valley	131	60	-	mod, high	11	-1	3	1.5	Facilities in moderate SLRU
	109	7	-	low, mod, high	9.5	0	3	1.5	Facilities in low & mod SLRU
	038[1]	(data not available)	-		10.5	0	3	1.5	LVFO. Facilities in moderate SLRU
	039[1]	(data not available)	-		11.5	0	3	3	LVFO. Facilities in moderate SLRU
Delamar Valley	117	-	944	mod, high	17	0	3	3.5	Facilities in moderate SLRU
	115	65	4,983	low, mod, high	12.5	-0.5	4	2.5	Facilities in low SLRU
	116	9	1,597	low, mod, high	14.5	-0.5	3.5	4	Facilities in low SLRU
	114	-	518	mod, high	16	0	4	2.5	Facilities in moderate SLRU
Dry Lake Valley	89	-	718	mod, high	19	0	4	2.5	Facilities in high SLRU
	115	6	518	low, mod, high	12.5	-0.5	4	2.5	Facilities in high SLRU
	90	101	7,324	high	12.5	0	4	2.5	Facilities in high SLRU
	116	38	-	low, mod, high	14.5	-0.5	3.5	4	Facilities in low SLRU
	68	4	-	mod, high	10	0	2	3	Facilities in high SLRU
	67	54	-	low, mod, high	13	0	3.5	3.5	Facilities in high SLRU
Garnet Valley	039[1]	(data not available)			11.5	0	3	3	Facilities in moderate SLRU
Hamlin Valley	29	2	-	low, high	14.5	0	4	3	Facilities in low SLRU
Hidden Valley North	039[1]	(data not available)	-		11.5	0	3	3	LVFO. Facilities in moderate SLRU

Table F3.15-1 Proposed Action, Alternatives A through C Rights-of-way, Pipeline and Power Line Crossings of Scenic Quality Rating Units (Continued)

Basin	SQRU Identifier	ROW (acres)	Groundwater Development (acres)	SLRU (high, mod, low)	Total SQRU Score	Cultural Modification	Adjacent scenery	Vegetation	Comments
Lake Valley	33	-	71	mod, high	12.5	0	3	3	Facilities in moderate SLRU
	72	23	-	low, mod, high	17.5	0	4	3	Facilities in high SLRU
	71	26	-	low, mod, high	11	0	4	3	Facilities in high SLRU
	68	-	-	mod, high	10	0	2	3	Facilities in high SLRU
	32	-	-	low, mod, high	14	0	4	3.5	Facilities in low & mod SLRU
	76	8	-	low, mod, high	10	0	2.5	3	Facilities in low SLRU
Las Vegas Valley	035[1]	(data not available)	-		8.5	-0	2.5	1.5	LVFO. Facilities in moderate SLRU
Lower Meadow Valley	119	121	-	mod, high	21.5	-1	0	5	Construction support area in high SLRU
Pahranagat Valley	115	4	-	low, mod, high	12.5	-0.5	4	2.5	Facilities in moderate SLRU
Snake Valley	29	52	9699	low, high	14.5	0	4	3	Facilities in low SLRU
	28	-	1381	mod, high	12	0	4	3	Facilities in mod & high SLRU
	30	-	4594	mod, high	24.5	1.5	4	4	Facilities in high SLRU
Spring Valley	33	3	269	mod, high	12.5	0	3	3	Facilities in mod & high SLRU
	34	3	-	mod, high	16	0.5	4	3	Facilities in high SLRU
	32	202	26836	low, mod, high	14	0	4	3.5	Facilities in low, mod & high SLRU
	30	-	873	mod, high	24.5	1.5	4	4	Facilities in moderate SLRU
Steptoe Valley	37	9	-	mod, high	12	0	3	3	Facilities in high SLRU
	34	3	-	mod, high	16	0.5	4	3	Facilities in high SLRU
	36	7	-	mod, high	11	0	3	3	Facilities in high SLRU

[1] Southern Nevada District VRI. Other SQRUs are in the Ely District.
SLRU = Sensitivity Level Rating Unit.
Source: BLM Southern Nevada District 2011a; BLM Ely District 2011b.

Table F3.15-1

Compliance with Visual Resource Objectives by KOP for Proposed Action ROW

Table F3.15-2 Compliance with Visual Resource Objectives by KOP for Proposed Action ROW Facilities

KOP	Photo-simulation	Visual Resource Objective	Visual Contrast Rating with BLM BMPs, ACMs, and Mitigation	Management Objectives Achieved with BLM BMPs, ACMs, and Mitigation
1	No	IV	Weak	Yes
2	No	IV	Weak	Yes
3	No	IV	Moderate	Yes
4	No	IV	Moderate	Yes
5	Yes	IV	Strong	Yes
6	No	IV	Weak	Yes
7	No	IV	Weak	Yes
8	No	IV	Weak	Yes
9	No	IV	Strong	Yes
10	Yes	IV	Moderate	Yes
11	Yes	IV	Moderate	Yes
12	No	IV	Moderate	Yes
13	Yes	IV	Strong	Yes
14	No	IV	Moderate	Yes
15	Yes	IV	Moderate	Yes
16	No	IV	Moderate	Yes
17	No	III	Moderate	Yes
18	No	III	Moderate	Yes
19	Yes	III	Moderate	Yes
20	No	III	Moderate	Yes
21	No	II	Weak	Yes
22	No	IV	Moderate	Yes
23[1]	Yes	Max Modification[2]	Weak	Yes
24[1]	No	Modification/Partial Retention[2]	Weak	Yes
25[1]	No	IV / Partial Retention[2]	Weak	Yes
26	No	III	Weak	Yes
27	No	III	Weak	Yes
28	No	III	Weak	Yes
29	No	III	Moderate	Yes
30	No	IV	Weak	Yes
31	No	III	Moderate	Yes
32	No	II, III, IV[4]	Moderate	Yes
33	No	III	Weak	Yes
34	Yes	III, IV[4]	Moderate	Yes
35[3]	Yes	III	Moderate	Yes
36	Yes	IV	Moderate	Yes
37	No	III	Moderate	Yes
38	No	III	Moderate	Yes
39	No	III	Weak	Yes
40	Yes	III	Weak	Yes
41	Yes	III	Moderate	Yes

[1] Option 1 (Humboldt – Toiyabe Power Line Alignment)
[2] USFS Humboldt-Toiyabe National Forest Visual Quality Objectives
[3] Option 2 only (North Lake Valley Pipeline Alignment)
[4] Groundwater development area within more than one VRM class

Photographic Simulations

KOP 5 (1 of 2)

Existing Conditions

Photo taken along US 93, approximately 17 miles west of Caliente, NV - looking Northwest

Simulation (No Mitigation Measures Applied)

Simulation Shows:

Proposed Action

- 230 kV + 69 kV Transmission Line: Single steel poles, galvanized steel
- Pipeline Diameter: 72” - 78”
- Pipeline ROW Width: 200’ (permanent + temporary)
- New Improved Access Road
- Dry Lake Valley Regulating Tank Site

KOP 5 (2 of 2)

Existing Conditions

Photo taken along US 93, approximately 17 miles west of Caliente, NV - looking Northwest

Simulation (Mitigation Measures Applied)

Simulation Shows:

Proposed Action

- 230 kV + 69 kV Transmission Line: Single steel poles, core-ten steel
- Pipeline Diameter: 72” - 78”
- Pipeline ROW Width: 200’ (permanent + temporary)
- New Improved Access Road
- Dry Lake Valley Regulating Tank Site moved to south side of road to be co-located with Dry Lake Valley Primary Electrical Substation Site

KOP 10

Existing Conditions

Photo taken along South Cave Valley Road, looking North

Simulation (Mitigation Measures Applied)

Simulation Shows:

Proposed Action

- 69 kV + 25 kV Transmission Line: Single steel poles, core-ten steel
- Pipeline Diameter: 16” - 30”
- Pipeline ROW Width: 75’ (reduced from 200’)
- Existing Improved Road
- Cave Valley Secondary Substation Site with buildings painted with colors from BLM color palette

KOP 11

Existing Conditions

Photo taken along OHV trail, approximately 4 miles west of US Hwy 93 - looking East

Simulation (Mitigation Measures Applied)

Simulation Shows:

Proposed Action

- 230 kV + 69 kV Transmission Line: Single steel poles, core-ten steel
- Pipeline Diameter: 66” - 72”
- Pipeline ROW Width: 200’ (permanent + temporary)
- New Paved Access Road
- Lake Valley Pumping Station Site - includes pumping station building, surge facilities buildings, and generator building, all painted with colors from the BLM color palette

KOP 13

Existing Conditions

Photo taken along White Pine CR 47, approximately 10 miles southeast of US Hwy 93 - looking South

Simulation (Mitigation Measures Applied)

Simulation Shows:

Proposed Action

- 230 kV + 69 kV + 25 kV Transmission Line: Single steel poles, core-ten steel
- Pipeline Diameter: 66” - 72”
- Pipeline ROW Width: 200’ (permanent + temporary)
- New Paved Access Road
- Spring Valley South Pumping Station and Primary Electrical Substation Site - all buildings painted with colors from the BLM color palette

KOP 15

Existing Conditions

Photo taken at Big Spring Wash crossing, looking Northwest

Simulation (Mitigation Measures Applied)

Simulation Shows:

Proposed Action

- 69 kV Transmission Line: Single steel poles, core-ten steel
- Pipeline Diameter: 42” - 54”
- Pipeline ROW Width: 200’ (permanent + temporary)
- New Improved Access Road

KOP 19

Existing Conditions

Photo taken along White Pine County Road 42, approximately 1 miles west of Garrison, Utah – looking west to Great Basin National Park (4.5 miles away).

Simulation 1 (Proposed Action)

Simulation 2 (Mitigation Measures Applied)

Simulations Show:

Simulation 1 Proposed Action 0.5 miles from camera
- 69 kV / 25 kV Transmission Line: Single steel poles, galvanized steel
- Pipeline Diameter: 42” – 52”
- Pipeline ROW Width: 200’ (permanent + temporary)
- New Improved Access Road

Simulation 2 with Mitigation 0.5 miles from camera
- 69 kV + 25 kV Transmission Line: Single steel poles, core-ten steel
- Pipeline Diameter: 42” – 52”
- Pipeline ROW Width: 100’ (reduced from 200’ permanent + temporary ROW)
- New Improved Access Road

KOP 23

Existing Conditions

Photo taken along National Forest Service Road 436, approximately 5 miles west of NV Hwy 893, looking West

Simulation Shows:

Humboldt - Toiyabe Alternative
- 230 kV Transmission Line
Simulation 1 - Single Steel Pole, Galvanized Steel
Simulation 2 - Single Steel Pole, Core-Ten Steel
Simulation 3 - Wood H-Frame

KOP 34

Existing Conditions

Photo taken along US Hwy 93, approximately 4.5 miles south of intersection of US Hwy 6/50, looking northwest

Simulation Shows:

Proposed Action
- 230 kV Transmission Line
- 100’ ROW Disturbance

Simulation 1 - Single Steel Pole, Galvanized Steel
Simulation 2 - Single Steel Pole, Core-Ten Steel
Simulation 3 - Wood H-Frame

KOP 35

Existing Conditions

Photo taken along US Hwy 93, approximately 0.25 miles south of Lake Valley summit - looking South

Simulation (Mitigation Measures Applied)

Simulation Shows:

North Lake Valley Alternative

- 230 kV + 69 kV Transmission Line: Single steel poles, core-ten steel
- Pipeline Diameter: 66” - 72”
- Pipeline ROW Width: 200’ (permanent + temporary)
- New improved access Road
- Lake Valley Pumping Station and Primary Electrical Substation Site - all buildings and tanks painted with colors from the BLM color palette

KOP 36

Existing Conditions

Photo taken along US Hwy 93, approximately 15 miles south of Alamo, NV - looking southeast

Simulation (Mitigation Measures Applied)

Simulation Shows:

Proposed Action

- 230 kV Transmission Line: Wood H-Frame
- 69 kV Transmission Line - Single Steel Pole - core-ten steel
- Pipeline Diameter: 78” - 84”
- Pipeline ROW Width: 200’ (permanent + temporary)
- Coyote Spring Valley Pressure Reducing Station - all buildings and tanks painted with colors from the BLM color palette

KOP 41

Existing Conditions

Photo taken near the Great Basin National Park boundary (3 miles to west), looking east towards Garrison, Utah (2.5 miles to east)

Simulation (Mitigation Measures Applied)

Simulation Shows:

Proposed Action and Alternatives A-C

- 69 kV + 25 kV Transmission Line - core-ten steel
- Pipeline 42”-54” Diameter
- Pipeline ROW Width: 200’ (permanent + temporary)
- New paved access road
- Pumping Station (2.5 miles to the northeast) for Alternatives A, B, C, F, G, H, I

Simulation Does Not Show

- Secondary Electrical Substation and Pumping Station (1.75 miles to the south out of the frame) for Alternatives A, B, C, F, G, H, I
- Future Groundwater Development Areas

Contrast Rating Forms

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Southern Nevada Water Authority
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERV POINT	KOP 1 – on OHV trail east of Hwy 93 into Dry Lake Valley
VRM CLASS	IV
PROPOSED ACTION	230kV + 69kV Transmission Line Pipeline 72”-78” Diameter, 200’ permanent + temporary ROW

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Rugged, steep grades. Numerous large jagged rock outcrops. U-shaped valley.	Complex; irregular patches of grasses; scattered, spotty short shrubs; dotted Joshua trees with moderate height	Tall, vertical, regularly spaced poles.
LINE	Jagged ridgeline, sinuous band of trail winding through concave valley. Diagonal rock banding	Vertical trees; soft, diffuse edge of bushes follows slope; existing OHV trail creates hard edge of bushes/shrubs	Vertical parallel poles, geometric structure construction
COLOR	Tan, gray, dark reds, dark brown	Predominantly dull, with occasional bright green. Light green, dark green, olive gray, tan	Light brown, dark gray, wood color
TEXTURE	Coarse, patchy rock clusters on surface, uneven, rough	Dotted Joshua Trees, gradational shrubs; fine grasslands in low-lying areas	Matte poles, glossy transmission conductors

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Smooth	Low	numerous tall, vertical, regularly repeating poles parallels existing OHV trail and transmission line
LINE	Existing OHV trail will be improved creating a slightly wider and more defined band Permanent and temporary ROW will create band	Banded revegetation along ROW	thin, smooth, vertical, regular repeating, parallels existing OHV trail and transmission line; convex line perpendicular to vertical lines
COLOR	warm gray, tan, buff	Light tan, light green	Light and dark greys, shiny, metallic
TEXTURE	Smooth	Fine, uniform	Smooth, ordered, dotted, shiny metallic finish

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**			x				x			x		
	LINE		x			x						x	
	COLOR			x			x					x	
	TEXTURE			x			x					x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED?
See Ch 3.15 Mitigation section

Vegetation restoration in ROW should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. In addition to the replanting of salvaged Joshua trees and other cacti (ACMs A.1.71 through A.1.78, A.1.80); sage, rabbit brush, and other appropriate shrubs should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERV POINT	KOP 2: Trail adjacent to Delamar Wilderness area East of Hwy 93, south of Dry Lake Valley
VRM CLASS	IV
PROPOSED ACTION	230kV + 69kV Transmission Line Pipeline 72”-78” Diameter, 200’ permanent and temporary ROW Delamar Valley Regulating Tank

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Rugged, steep grades. Large domed mass of rock; concave valley.	Irregularly spaced short trees. Predictable spotty shrubs; amorphous masses of shrubs breaking up smoothly sloped grassland	Tall, vertical, regularly spaced poles.
LINE	Rough, concave ridgeline, sinuous band of trail winding through concave valley. Diagonal rock banding	Vertical trees; sharp boundary of grassland/shrub lands	Vertical parallel poles, geometric structure construction, diagonal guy wires
COLOR	Tan, gray, light gray, dull, warm	Light tan grasslands, vibrant yellow flowers, light green trees, dull green shrubs	dark brown, dark gray, wood color
TEXTURE	Coarse, patchy rock clusters on surface	Dotted Joshua Trees, fine grasslands; patchy shrub lands	Matte poles, glossy transmission conductors

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Smooth	New geometric patch of vegetation removed for regulating tank site. Low, rectilinear	Large, tall, cylindrical block; numerous tall, vertical, regularly repeating poles parallels existing road and transmission line
LINE	New straight improved road parallel to existing trail and transmission line. Permanent and temporary ROW will create band	New gravel road acts as a band, with hard edge breaking up vegetation. Banded revegetation along ROW	thin, smooth, vertical, regular repeating, parallels existing road and transmission line; convex line perpendicular to vertical lines; geometric arrangements, messy
COLOR	warm gray, tan, buff	No Change	Light and dark greys, shiny, metallic
TEXTURE	Smooth	Slightly more discontinuous Fine, uniform	Smooth, ordered, dotted, shiny metallic finish

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**			x				x			x		
	LINE		x				x					x	
	COLOR		x					x			x		
	TEXTURE			x				x				x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes. See Ch. 3-15 Mitigation.
ALL ALTERNATIVES:

Regulating tanks would be concrete structures between 130' – 200' in diameter, and 30'-40' high. Painting the concrete a color that harmonizes with adjacent vegetation and soil colors would reduce the visual prominence of the tank and allow it to blend into the existing landscape. An appropriate color would be "Shadow Gray" from the BLM Standard Environmental Colors Chart CC-001.

Vegetation restoration in ROW should create texture and color that is similar to the surrounding natural vegetation. Sage, rabbit brush, and other appropriate shrubs should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from a revegetated ROW that consists of grasses.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Southern Nevada Water Authority
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERV POINT	KOP 3: on trail across Delamar Dry Lake
VRM CLASS	IV
PROPOSED ACTION	230kV + 69kV Transmission Line 200' permanent + temporary ROW Pipeline 52"-72" Diameter

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Perfectly flat dry lake bed a dominant feature; rugged hills in background	Simple vegetation forms in background; vegetation absent in foreground	Tall, regularly spaced parallel poles.
LINE	Bold horizontal line of lake bed dominant; jagged horizon line	Sharp line dividing lake bed from vegetation	Both vertical and horizontal lines of H-frame poles; geometric
COLOR	Vibrant tans and light browns; dull earth tones in distance	Dark and light greens	Dark brown; dark gray
TEXTURE	Perfectly smooth lake bed	Medium to smooth scrubland in distance	Ordered, continuous pattern of vertical poles

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No Change	No changes in vegetation noticeable from KOP	numerous tall, vertical, regularly repeating poles; parallels existing trail and transmission line
LINE	New straight, angular gravel road parallel with edge of lake bed	No changes in vegetation noticeable from KOP	thin, smooth, vertical, regular repeating, parallels existing trail and transmission line; convex line perpendicular to vertical lines
COLOR	Warm gray, light tan	No changes in vegetation noticeable from KOP	Light and dark greys, shiny
TEXTURE	No change	No changes in vegetation noticeable from KOP	Smooth, ordered, dotted

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x				x		x		
	LINE			x					x		x		
	COLOR			x					x		x		
	TEXTURE				x				x			x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? See Ch. 3-15 Mitigation
Interim and Long-term reclamation grading should match smooth grading to existing lake bed surface.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Southern Nevada Water Authority
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERV POINT	KOP 4: on OHV trail through Delamar Valley
VRM CLASS	IV
PROPOSED ACTION	230kV + 69kV Transmission Line Pipeline 72”-84” Diameter 200’ permanent and temporary ROW

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Smooth, flat plain is dominant; rough rugged rock formations in background	Prominent, irregular, amorphous Joshua trees; numerous short, predictable shrubs	Vertical poles moderate in height
LINE	Jagged horizon line, smooth flat line of valley floor in foreground; straight band of trail prominent in foreground	Complex shapes of Joshua trees, horizontal boundary of shrub steppe in background	Vertical, regular
COLOR	Light tan, light gray, dark reds	Yellow, cool greens, dark greens	Dark brown
TEXTURE	Fairly smooth, lumpy	Dotted Joshua trees, medium continuous shrub cover	Ordered, continuous pattern of vertical poles

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Smooth	Smooth, cleared for 200’ ROW	numerous tall, vertical, regularly repeating poles; parallels existing transmission line
LINE	Banded path	Banded path	thin, smooth, vertical, regular repeating, parallels existing transmission line; convex line perpendicular to vertical lines
COLOR	Lighter	Lighter tans, greens, yellows	Light and dark greys, shiny
TEXTURE	Smooth	Smooth	Smooth, ordered, dotted

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**			x			x				x		
	LINE			x			x					x	
	COLOR			x			x				x		
	TEXTURE				x		x				x		

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES? YES

PROPOSED ACTION: Proposed action not follow existing lines (roads and transmission), creates new lines.

NORTH DELAMAR PIPELINE ALTERNATIVE: follows existing lines (roads and transmission). Less contrast than Proposed Action.

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? See Ch. 3-15 Mitigation

Vegetation restoration in ROW should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. In addition to the replanting of salvaged Joshua trees and other cacti (ACMs A.1.71 through A.1.78, A.1.80); sage and other appropriate shrubs should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Southern Nevada Water Authority
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J Call
KEY OBSERV POINT	KOP 5: Hwy 93 on eastern edge of Dry Lake Valley
VRM CLASS	IV
PROPOSED ACTIVITY	230kV + 69kV Transmission Line Pipeline 72”-84” Diameter Dry Lake Valley Regulating Tank Site Primary Substation (to left of view) 200’ permanent and temporary ROW

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat, slightly rolling plain; rugged blocks on horizon	Prominent, irregular, amorphous Joshua trees; numerous short, predictable shrubs	Vertical poles moderate in height; short blocky (comm. building)
LINE	Bold, straight, hard, vertical (road); jagged horizon	Broken, complex, irregular (Joshua Trees)	Strong, vertical, straight, geometric
COLOR	Dark gray, yellow, white (road); light tan, warm gray	Cool greens, light tans, warm grays, dark green	Dark brown, tan, white
TEXTURE	Smooth, lumpy	Dotted Joshua trees, medium continuous shrub cover	Ordered, continuous pattern of vertical poles

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat ROW	New geometric patch of vegetation removed for regulating tank site	numerous tall, vertical, regularly repeating poles; parallels existing transmission line; Large, tall, cylindrical block
LINE	New vertical, straight gravel road parallels Hwy 93; another new gravel road parallels existing OHV trail and transmission line, perpendicular to Hwy 93.	New gravel road acts as a band, with hard edge breaking up vegetation along Hwy 93	thin, smooth, vertical, regular repeating, parallels existing transmission line; convex line perpendicular to vertical lines
COLOR	Warm gray, light tan	No change	Light and dark greys, shiny, metallic
TEXTURE	Smooth, bare ROW	Slightly more discontinuous	Smooth, ordered, dotted, metallic

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**			x				x		x			
	LINE		x					x		x			
	COLOR		x						x	x			
	TEXTURE			x				x			x		

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES? YES
ALL ALTERNATIVES:

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes, see 3.15 mitigation and below.

ALL ALTERNATIVES: Regulating tanks would be concrete structures between 130' – 200' in diameter, and 30'-40' high. Painting the concrete a color that harmonizes with adjacent vegetation and soil colors would reduce the visual prominence of the tank and allow it to blend into the existing landscape. An appropriate color would be "Shadow Gray" from the BLM Standard Environmental Colors Chart CC-001.

Co-locate facilities on same side of US 93, instead of on both sides. Or set back from highway minimum of 500' to reduce visibility from the viewing cone of drivers.

Vegetation restoration in ROW should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. In addition to the replanting of salvaged Joshua trees and other cacti (ACMs A.1.71 through A.1.78, A.1.80); sage, rabbit brush, and other appropriate shrubs should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J Call
KEY OBSERV POINT	KOP 6: OHV trail 3 miles north of Hwy 93
VRM CLASS	IV
PROPOSED ACTIVITY	230kV + 69kV Transmission Line Pipeline 72”-78” Diameter 200’ permanent and temporary ROW

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, simple valley; rough, rocky horizon	Prominent, irregular, amorphous Joshua trees; numerous short, predictable shrubs	Vertical poles moderate in height, regularly repeating
LINE	Straight, horizontal valley floor; subtle, horizontal OHV trail; prominent curved, sinuous path cut into landscape; jagged horizon	Broken, complex, irregular (Joshua Trees)	Strong, vertical, straight, geometric
COLOR	light tan, warm gray; dark reds and browns in background	Cool greens, light tans, warm grays, dark green	Dark brown
TEXTURE	Fairly smooth, but lumpy	Dotted Joshua trees; even, random shrub cover	Ordered, continuous pattern of vertical poles

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No Change from KOP	No Change	numerous tall, vertical, regularly repeating poles; parallels existing transmission line
LINE	New subtle, horizontal gravel road parallels existing OHV trail and transmission line	Slight horizontal gap in vegetation created by new gravel road and ROW parallel with existing gravel road and transmission line.	thin, smooth, vertical, regular repeating, parallels existing OHV trail and transmission line; convex line perpendicular to vertical lines
COLOR	Light tan	ROW band of vegetation lighter tans, browns, yellows than existing.	Light and dark greys, shiny, metallic
TEXTURE	Smooth	Slightly more discontinuous	Smooth, ordered, dotted

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x				x		x		
	LINE			x				x				x	
	COLOR			x					x		x		
	TEXTURE				x			x				x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? See Ch. 3-15 Mitigation

Vegetation restoration in ROW should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. In addition to the replanting of salvaged Joshua trees and other cacti (ACMs A.1.71 through A.1.78, A.1.80); sage, rabbit brush, and other appropriate shrubs should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERV POINT	KOP 7: OHV trail 20miles north of Hwy 93
VRM CLASS	IV
PROPOSED ACTIVITY	230kV + 69kV Transmission Line Pipeline 72”-78” Diameter 200’ permanent and temporary ROW

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, simple valley; rough, rocky horizon	numerous short, indistinct, predictable shrubs; simple, patchy, low grasses	Numerous short, regularly repeating vertical fence posts
LINE	Straight, horizontal valley floor; curved, sinuous path cut into landscape; jagged, complex horizon	Continuous, smooth; cut by band of road	Strong, vertical, straight, geometric
COLOR	Light tans, warm grays; dark reds and browns on horizon	Olive greens; dark greens; reddish grays; pale yellows	Dark brown; dark gray; pale yellow; rust
TEXTURE	Smooth valley; coarse horizon	Fine to medium grain; uneven, random distribution of grasses	Smooth metal; even, ordered fence line

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No Change from KOP	No Change	New numerous tall (short on the landscape from KOP), vertical, regularly repeating poles;
LINE	New subtle, horizontal gravel road, perpendicular to fence line	Slight horizontal gap in vegetation created by new gravel road and ROW	thin, smooth, vertical, regular repeating
COLOR	Light tan, warm gray	Lighter tans, yellows, browns in ROW	Light and dark greys, shiny, metallic
TEXTURE	No Change from KOP	Slightly more discontinuous	Smooth, ordered, dotted

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x				x			x	
	LINE			x				x			x		
	COLOR			x					x		x		
	TEXTURE				x			x				x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes
New line where no transmission line exists increases contrast.

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes, see 3.15 Mitigation

Vegetation restoration in ROW should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Greasewood and saltbush should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERV POINT	KOP 8: OHV trail 12 miles west of Hwy 93
VRM CLASS	IV
PROPOSED ACTIVITY	230kV + 69kV + 25kV Transmission Line Pipeline 66”-72” Diameter 200’ permanent and temporary ROW

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, simple, rolling, concave valley; rough, rocky, complex horizon	numerous short, indistinct, predictable shrubs; simple, patchy, low grasses; few contrasting large bushes	None
LINE	Straight, horizontal valley floor; long, curved, sinuous band of trail cut into landscape; jagged, complex horizon	Diffuse edge of bushes on horizon; irregular, broken pattern of bushes in foreground; horizontal band of grasses parallel with existing OHV trail; vertical, curving band cuts vegetation in half	None
COLOR	Light tans, warm grays; dark reds and browns on horizon	Grayish greens; yellow tinted green; light greens	None
TEXTURE	Smooth, subtle valley; rough, coarse horizon	Uneven, random, coarse bushes in foreground; uniform, fine, shrubs	None

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No Change	No Change	numerous tall, vertical, regularly repeating poles; parallels existing transmission line
LINE	New subtle, horizontal gravel road parallels existing OHV trail and transmission line; perpendicular to prominent OHV trail in view. Banded ROW	Slight horizontal gap in vegetation created by new gravel road parallel with existing gravel road and transmission line; perpendicular to prominent OHV trail in view	thin, smooth, vertical, regular repeating, parallels existing OHV trail and transmission line; convex line perpendicular to vertical lines
COLOR	Light tan, gray	Lighter tans, browns, yellows in ROW.	Light and dark greys, shiny, metallic
TEXTURE	No Change	Slightly more discontinuous	Smooth, ordered, dotted

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x				x			x	
	LINE			x				x			x		
	COLOR			x					x		x		
	TEXTURE				x			x				x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? See Ch. 3-15 Mitigation

Vegetation restoration in ROW should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Sage and rabbitbrush should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERV POINT	KOP 9: OHV trail 8 miles west of Hwy 93
VRM CLASS	IV
PROPOSED ACTIVITY	230kV Transmission Line 69kV + 25kV Transmission Line Pipeline 66”-72” Diameter Pipeline 16”-30” Diameter 200’ permanent and temporary ROW Dry Lake Valley North Pressure Reducing Station (Nearby, but not fully in view)

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, undulating valley, smooth undulating hills; rocky, rough, complex horizon	Complex, numerous amorphous patterns; patchy bushes/trees; smooth shrub zones	Indistinct, geometric sign post
LINE	Numerous converging curved trail paths; jagged horizon	Broken, complex, soft boundaries	Hard, geometric, simple
COLOR	Light tans, warm grays, reddish browns; dark grays and browns on horizon	Pale greens; burnt brown, dark green; pale yellows; grayish green	Dark brown; white
TEXTURE	Smooth, uniform valley; rough, coarse horizon	Uneven; patchy; random, scattered	Smooth; matte; ordered

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Smoother.	No Change	numerous tall, vertical, regularly repeating poles; parallels multiple existing OHV trails. Pressure reducing station blocky.
LINE	New ROW band	Two subtle perpendicular lines of vegetation parallel with existing OHV trails disturbed from construction; newly planted shrubs and grasses	thin, smooth, two perpendicular lines, regular repeating, parallel existing OHV trails; convex line perpendicular to vertical lines
COLOR	Light tans.	Lighter tans, yellows, browns from revegetating ROW	Light and dark greys, shiny, metallic
TEXTURE	Smooth, bare	Slightly more discontinuous	Smooth, ordered, dotted

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**			x				x		x			
	LINE				x		x			x			
	COLOR			x				x		x			
	TEXTURE				x		x					x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? See Ch. 3-15 mitigation

Screen pumping station within pinions, out of view from road. Plant additional pinion/juniper to screen from roads long-term.

Pumping station should be painted or constructed with colored block using site-specific colors that will best harmonize with the surrounding vegetation and soil colors. Appropriate colors will be selected from the BLM Standard Environmental Colors Chart CC-001. The "Shadow Gray" should be selected if the surrounding vegetation is predominantly sage and brush; the "Beetle" color should be selected if the surrounding vegetation is predominantly pinyon-juniper.

Vegetation restoration in ROW should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Sage, rabbitbrush, pinyon and juniper should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERV POINT	KOP 10: OHV trail in eastern Cave Valley
VRM CLASS	IV
PROPOSED ACTIVITY	69kV + 25kV Transmission Line Pipeline 16”-30” Diameter Cave Valley Secondary Substation Site 200’ permanent and temporary ROW

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, gently sloping valley; rough, rugged, rocky horizon	Irregular pattern of numerous trees moderate in height on slopes; uniform ground cover of shrubs and grasses	None
LINE	Bold, sinuous, path cutting across valley floor; diagonal rock bands	Diffuse edge of trees on slopes; hard, well-defined broken pattern of bushes and grasses cut by trail	None
COLOR	Warm gray; white; dark reds and browns on slopes	Pale greens and yellows, dark green on slopes	None
TEXTURE	Smooth, fine valley; rough, coarse horizon and valley edges	Uniform, fine valley; random, medium, dotted valley edges	None

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Graded pipeline ROW would potentially be more even than existing rough soil surface	Small geometric patch of vegetation removed for substation site	Numerous tall, vertical, regularly repeating poles; parallels existing OHV trail; small, blocky squares in middleground
LINE	New pipeline ROW would parallel the road, but be 10 times wider (200’). With 3.15 mitigation the ROW could be reduced to 50-100 ft.	Subtle vertical, sinuous line of vegetation parallel with existing OHV trail disturbed from construction; newly planted shrubs and grasses	Thin, smooth, vertical, regular repeating, parallels existing OHV trail; convex line perpendicular to vertical lines; geometric arrangements, messy
COLOR	Light tan, reddish brown, light gray	Slight deviation in color parallel to existing OHV trail; lighter in color	Reddish tan, dark gray; light gray
TEXTURE	Smooth ROW	Slightly more discontinuous	Smooth, ordered, dotted; shiny metal

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**		x				x			x			
	LINE		x			x				x			
	COLOR		x				x				x		
	TEXTURE		x					x				x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? See Ch. 3-15 Mitigation

The substation should be painted or constructed with colored block using site-specific colors that will best harmonize with the surrounding vegetation and soil colors. An appropriate color would be "Shadow Gray" from the BLM Standard Environmental Colors Chart CC-001.

Vegetation restoration in ROW should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Sage, rabbitbrush, pinyon and juniper should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERV POINT	KOP 11: OHV trail 4 miles west of Hwy 93
VRM CLASS	IV
PROPOSED ACTIVITY	230kV + 69kV Transmission Line Pipeline 66”-72” Diameter Lake Valley Pumping Station Site and staging area Temporary ROW for pumping station 200’ permanent and temporary ROW

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Prominent, bold, pyramidal, domed ridge; moderately sloping valley; rough, rocky horizon	Diverse, contrasting, complex, irregular, patchy	None
LINE	Curved, convex, rugged	Indented, transitional edge of trees and bushes	None
COLOR	Light gray, reddish browns, tan	Dark green, grays, light greens	None
TEXTURE	Coarse ridge transitioning to smooth, fine valley	Random, medium, patchy, contrasty, dotted	None

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat graded temporary and pumping station site.	Small, geometric square patch of vegetation would be removed for pumping station site	Numerous tall, vertical, regularly repeating poles; parallels existing OHV trail; large, angular, blocky pumping station building
LINE	Existing OHV trail will be paved with asphalt, creating a wider, more prominent band	Subtle, sinuous line of vegetation parallel with existing OHV trail disturbed from construction; newly planted shrubs and grasses	thin, smooth, vertical, regular repeating, parallels existing OH; convex line perpendicular to vertical lines; geometric arrangements, messy
COLOR	Dark gray/black, white, yellow	No Change	Dark gray, light gray, metallic
TEXTURE	Flat, painted.	Slightly more discontinuous	Smooth, ordered, dotted; shiny metal

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**		x				x			x			
	LINE			x			x				x		
	COLOR		x					x			x		
	TEXTURE			x			x				x		

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? See Ch. 3-15 mitigation and simulation.

The substation should be painted or constructed with colored block using site-specific colors that will best harmonize with the surrounding vegetation and soil colors. An appropriate color would be "Shadow Gray" from the BLM Standard Environmental Colors Chart CC-001.

Vegetation restoration in temporary and permanent ROWs should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Sage and rabbitbrush should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERV POINT	KOP 12: On Hwy 93 2 miles north of Lake Valley/Spring Valley summit; within Great Basin National Heritage Area
VRM CLASS	IV
PROPOSED ACTIVITY	230kV + 69kV + 25kV Transmission Line Pipeline 42”-54” Diameter Spring Valley South Secondary Substation Site

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, gently sloping valley; large, rough, rocky horizon	Simple, compatible, short shrubs and grasses	Thin, vertical steel roadside poles short in height
LINE	Straight, prominent, wide highway; jagged, rough ridgeline/horizon; horizontal valley	Highway band creates hard edge; irregular, broken edge of grassland areas; complex, indented edge of trees on edges of valley	Vertical, thin, straight
COLOR	Dark gray/black, yellow, white (road); reddish brown, tan; warm gray	Light, pale green; tans; dark green; pale yellow	Light gray, steel, white, black
TEXTURE	Smooth, fine valley; coarse ridgeline	Medium coarseness; patchy;	Smooth, shiny, reflective

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No Change	No Change	Numerous tall, vertical, regularly repeating poles parallels existing road
LINE	New straight gravel road parallel to existing highway; new straight, paved road perpendicular to highway	New roads act as bands, with hard edge breaking up vegetation into sections. ROW would create new, 200’ wide band parallel to existing road lines.	Thin, smooth, vertical, regular repeating, parallels existing road; convex line perpendicular to vertical lines
COLOR	Warm gray, dark gray/black, white, yellow, tan	Lighter tans, yellows, browns from revegetating ROW	Rusty, reddish tan, light gray, metallic
TEXTURE	No Change	Slightly more discontinuous	Smooth, ordered, dotted, shiny metallic finish

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x				x		x		
	LINE			x				x			x		
	COLOR			x					x			x	
	TEXTURE				x			x			x		

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes, see 3.15 Mitigation.

ALL ALTERNATIVES:

- The substation should be painted or constructed with colored block using site-specific colors that will best harmonize with the surrounding vegetation and soil colors. An appropriate color would be "Shadow Gray" from the BLM Standard Environmental Colors Chart CC-001.

- Vegetation restoration in ROWs should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Sage and rabbitbrush should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERV POINT	KOP 13: on OHV trail on eastern edge of Fortification Range Wilderness
VRM CLASS	IV
PROPOSED ACTIVITY	230kV + 69kV Transmission Line Pipeline 66”-72” Diameter Spring Valley South Primary Electrical Substation Site Spring Valley South Pumping Station Site

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat, smooth, gently sloping, wide valley; prominent, bold, rough, jagged ridgeline	Irregular, contrasting, moderate height trees; low, uniform, numerous bushes	None
LINE	Prominent, wide, straight road cut; horizontal valley floor; jagged, prominent ridgeline	Road band creates hard edge; complex, broken edge of trees	None
COLOR	Dark reds and browns, warm grays, light tans, light grays	Light and pale greens; vibrant greens, dark greens	None
TEXTURE	Coarse, rough ridgeline; smooth, fine valley	Medium to fine shrubs dotted with coarse, sparse, random trees	None

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flattened.	Geometric acre+ of vegetation would be removed for pumping station & substation site	Numerous tall, vertical, regularly repeating poles; parallels existing OHV trail; large, angular, blocky pumping station and warehouse buildings
LINE	Existing OHV trail will be paved with asphalt, creating a wider, more prominent band	Subtle, sinuous line of vegetation parallel with existing OHV trail disturbed from construction; newly planted shrubs and grasses. Band from ROW.	Thin, smooth, vertical, regular repeating, parallels existing OHV trail; convex line perpendicular to vertical lines; geometric arrangements, messy
COLOR	Dark gray/black	Lighter tans, yellows, browns from revegetating ROW	Dark gray, light gray
TEXTURE	No significant change	Slightly more discontinuous	Smooth, ordered, dotted; shiny metal

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x			x		x			
	LINE			x				x			x		
	COLOR		x						x	x			
	TEXTURE				x			x		x			

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? See 3.15 Mitigation

- Match the paint color and concrete color of the structures on the substation site and pumping station site to a color in the existing landscape to reduce the visual prominence of those buildings, and allow them to blend into the existing landscape. An appropriate color would be "Shadow Gray" from the BLM Standard Environmental Colors Chart CC-001.

- Leave the road with the current natural surface. Paved road contrasts with the existing network of natural-surfaced roads – appears blacker.

- Set back buildings 100 or more feet from the existing road.

- Vegetation restoration in ROWs should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Sage and rabbitbrush should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERV POINT	KOP 14: OHV road south of Highland Ridge Wilderness Area
VRM CLASS	IV
PROPOSED ACTIVITY	69kV Transmission Line Pipeline 42" – 54" Diameter Snake Valley Regulating Tank Site

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, gently sloping, rolling valley; prominent rocky, rugged, tall ridge on horizon	Smooth cover of compatible bushes and grasses; random patches of grasses interspersed with shrubs	None
LINE	Slightly diagonal slope, prominent trail/road curving towards horizon; jagged ridgeline	Road/trail band creates hard edge on each side	None
COLOR	Darker tans and grays (soil is wet from recent rain)	Dark green bushes; lighter, paler green and yellow grasses	None
TEXTURE	Smooth, fine valley slope; coarse, rough ridgeline	Patchy, fine grasses dot medium dense shrub cover	None

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flattened along ROW	Geometric acre+ of vegetation would be removed for pumping station & substation site	Large, tall, cylindrical block; numerous tall, vertical, regularly repeating poles
LINE	Straight band parallel with existing OHV trail disturbed from construction.	Disturbed, straight, linear band of shrubs/grasses parallelling existing road	Thin, smooth, vertical, regular repeating, convex line perpendicular to vertical lines parallel existing road
COLOR	Na	Light band of pale yellow, light green along ROW	Rusty, reddish tan, metallic
TEXTURE	Smooth	Low, uniform annual species during reclamation.	Smooth, ordered, dotted

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**			x							x		
	LINE		x					x			x		
	COLOR			x			x					x	
	TEXTURE			x				x			x		

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
PROPOSED: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes, see 3.15 Mitigation

ALL ALTERNATIVES:

- Narrow ROW to the minimum width necessary for construction, per 3.15 Mitigation.
-
- Regulating tanks would be concrete structures between 130' – 200' in diameter, and 30'-40' high. Painting the concrete to harmonize with adjacent vegetation and soil colors would reduce the visual prominence of the tank and allow it to blend into the existing landscape. An appropriate color would be "Shadow Gray" from the BLM Standard Environmental Colors Chart CC-001.

- Vegetation restoration in ROWs should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Sage and rabbitbrush should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 15: OHV trail south of Highland Ridge Wilderness Area, near Big Spring Wash
VRM CLASS	IV
PROPOSED ACTIVITY	69kV Transmission Line Pipeline 42”-54” Diameter

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Prominent, wide, rounded, steep walled wash with flat, smooth top and gently rolling bottom; complex; rough rocky ridgeline on horizon	patches of short, amorphous trees near top of wash, mixed with smooth uniform cover of shrubs on wash slopes, and smooth strip of grasses on wash bottom	None
LINE	Horizontal, bold, smooth; u-shaped; curving channel through wash; jagged, convex ridgeline	Horizontal bands of trees near top of wash; narrow, sinuous patch of grass in wash bottom	None
COLOR	Subtle mixture or reddish tan and light brown; uniform	Dark green; pale green; light green; pale orange	None
TEXTURE	Coarse, uneven, gradational from coarse to smooth	Gradational from coarse on wash top to fine on bottom	None

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	New improved road needed to cross wash, would require lots of cut/fill work; creating a disjointed, complex slope on sides of wash. ROW would create smooth, uniform band.	Cut/fill on slopes of wash would create a patchy, irregular vegetation pattern. Low immature annual species during reclamation.	Tall, vertical, thin poles
LINE	New improved road needed to cross wash; would be sinuous, undulating; ROW would be straight.	Subtle, sinuous line of vegetation disturbed from construction; newly planted shrubs and grasses	Vertical, hard, regular
COLOR	Cut/fill required for road would create areas of contrasting light and dark tans and warm grays. Light soils within disturbed ROW and access road.	Light tans, yellows in ROW.	Dark brown; dark gray, matte (poles); metallic (conductors)
TEXTURE	Coarse; discontinuous access road; smooth ROW band.	Slightly more discontinuous	Smooth, fine

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**		x					x			x		
	LINE		x				x				x		
	COLOR			x			x				x		
	TEXTURE			x				x			x		

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
PROPOSED: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes, see 3.15 Mitigation.

ALL ALTERNATIVES:

- The proposed transmission line, pipeline, and access road routes are shown crossing the existing wash. When crossing, avoid spanning the wash with either two large transmission structures, a road bridge, or with an above ground pipeline supported above the bottom of the wash. Instead, try to have all proposed actions follow the contours of the wash down one slope and back up the other side. This will avoid the need for oversized transmission structures that would be needed to span the wash, as well as an elaborate bridge-type structure needed to support the pipeline and access road. Both of these types of structures would increase the project's visual impact on the landscape.

- Plant new shrubs or trees along edges of any cut/fill areas to help break up the undulating line of the improved road.

- Screen part of the access road from trail views by setting it behind sloping ridgelines on the other side of the transmission line

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 16: on OHV trail 4 miles east of UT Hwy 21; within Great Basin National Heritage Area
VRM CLASS	IV
PROPOSED ACTIVITY	69kV + 25kV Transmission Line Pipeline 42”-54” Diameter

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Complex; rolling, undulating hills parallel weathered, moderately-sloped, rounded wash; prominent, rocky, steep ridgeline on horizon	Complex; numerous small trees dotted throughout; patchy, uneven coverage of shrubs and bushes	None
LINE	Curved, sinuous two track trail curves through wash bottom; irregular; soft; undulating	Complex; irregular; curving band of grass in center of two track	None
COLOR	Light tan and reddish browns; light gray; white	Dark green; dark and light gray; de-saturated greens	None
TEXTURE	Coarse, uneven, random	Coarse, uneven, random; scattered	None

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	New improved road may be needed to cross wash, would require lots of cut/fill work; creating a disjointed, complex slope on sides of wash. ROW would create smooth, uniform band.	Some trees may be removed with construction of transmission line, creating a disjointed patchwork of trees	Tall, vertical, thin poles running parallel to existing OHV trail
LINE	New improved road may be needed to cross wash; would be sinuous, undulating; ROW would be straight.	Narrow, linear patch of young grasses parallel to existing OHV trail indicating pipeline ROW	Vertical, hard, regular
COLOR	Cut/fill required for road would create areas of contrasting light and dark tans and warm grays. Light soils within disturbed ROW and access road.	Light tans, yellows in ROW.	Dark brown; dark gray
TEXTURE	Existing road would likely be improved, graded, widened.	Slightly more discontinuous	Smooth, fine; matte (poles); metallic (conductors)

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**			x				x				x	
	LINE			x			x				x		
	COLOR			x				x				x	
	TEXTURE		x				x				x		

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
PROPOSED: Yes
OTHER ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes, see 3.15 Mitigation.

ALL ALTERNATIVES:

- The proposed transmission line and pipeline routes would cross the existing wash. When crossing, avoid spanning the wash with either two large transmission structures or with an above ground pipeline supported above the bottom of the wash. Instead, try to have both the pipeline and transmission line follow the contours of the wash down one slope and back up the other side. This will avoid the need for oversized transmission structures that would be needed to span the wash, as well as an elaborate bridge-type structure needed to support the pipeline. Both of these types of structures would increase the project's visual impact on the landscape.

- Vegetation restoration in ROWs should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Sage and rabbitbrush, or pinyon and juniper (dependent on specific vegetation cover that is removed) should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 17: on OHV trail 3 miles west of UT Hwy 21 & Pruess Lake, and within Great Basin National Heritage Area
VRM CLASS	III
PROPOSED ACTIVITY	69kV + 25kV Transmission Line Pipeline 42”-54” Diameter Snake Valley South Pumping Station Site Snake Valley Secondary Substation

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Complex; rolling, undulating hills parallel weathered, moderately-sloped, rounded wash; prominent, rocky, steep ridgeline on horizon	Complex; few small trees dotted throughout; patchy, uneven coverage of shrubs and bushes; random patches of grass	None
LINE	irregular; soft; undulating; horizontal surface on top of wash; horizontal rock banding in wash slopes	Complex; irregular; curving band of large shrubs and small trees along wash bottom	None
COLOR	Light tan and reddish browns; light gray; white	Dark green; light green; grayish green	None
TEXTURE	Coarse, uneven, random	medium, uneven, random; scattered	None

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	New improved road needed to cross wash, would require extensive cut/fill work; creating a disjointed, complex slope on sides of wash. ROW would be straight, smooth	Cut/fill on slopes of wash would create a patchy, irregular vegetation pattern. ROW would result in immature band of low vegetation and annual species.	Numerous tall, vertical, regularly repeating poles; large, angular, blocky
LINE	New improved road needed to cross wash; would be sinuous, undulating. ROW would be straight	New improved road would create a broken pattern of vegetation. ROW band of immature vegetation	thin, smooth, vertical, regular repeating, convex line perpendicular to vertical lines; geometric arrangements, messy
COLOR	Cut/fill required for road would create areas of contrasting light and dark tans and warm grays.	Revegetation could produce seasonally inconsistent colors (fall and spring) compared to native vegetation.	Rusty, reddish tan, dark gray, light gray
TEXTURE	Coarse; discontinuous	Smooth in ROW, none (bare) in access road.	Smooth, ordered, dotted; shiny metal

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**			x			x				x		
	LINE			x			x				x		
	COLOR			x				x			x		
	TEXTURE			x			x				x		

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
PROPOSED: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes

ALL ALTERNATIVES:

- The proposed transmission line, pipeline, and access road routes are shown crossing the existing wash. Standard practice may include spanning the wash with either two large transmission structures, a road bridge, or with an above ground pipeline bridge supported above the bottom of the wash. Instead, all proposed actions should follow the contours of the wash down one slope and back up the other side to the extent feasible. Avoid oversized transmission structures that would be needed to span the wash, as well as an elaborate bridge-type structure needed to support the pipeline and access road by following contours. Both of these types of structures would increase the project's visual impact on the landscape.

- Replant salvaged or plant new shrubs or trees along edges of any cut/fill areas to match existing vegetation to help break up the undulating line of the improved road.

- Pumping station and substation should be painted or constructed with colored block using site-specific colors that will best harmonize with the surrounding vegetation and soil colors. An appropriate color would be "Shadow Gray" from the BLM Standard Environmental Colors Chart CC-001.

- Vegetation restoration in ROWs should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Sage and rabbitbrush should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 18: NV Hwy 487 2 miles west of Garrison; within Great Basin National Heritage Area.
VRM CLASS	IV
PROPOSED ACTIVITY	North Snake Valley Pumping Station Site 69kV + 25kV Transmission Line Pipeline 42”-54” Diameter

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat, smooth, wide valley; prominent, bold, rough, steep sloped ridgeline	Even, uniform shrub and grass cover on valley slopes; dense, thick bush and tree cover on ridgeline	Simple, regular, vertical poles moderate in height running parallel to existing highway and OHV trail
LINE	Prominent, straight, wide highway; horizontal, straight OHV trail perpendicular to highway; jagged ridgeline	Highway and OHV trail break up vegetation in valley into geometric, regular blocks; well defined complex indented edge of dense bushes and trees along ridgeline	Vertical, thin, regular
COLOR	Reddish tan; light browns; grays	Saturated greens (light and dark), light tan; pale yellow	Dark browns
TEXTURE	Coarse, rough ridgeline; smooth, fine valley	Medium to fine valley	Smooth, matte

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Smooth band from ROW	Small, geometric square patch of vegetation would be removed for pumping station & substation site	Numerous tall, vertical, regularly repeating poles; perpendicular to highway; large, angular, blocky pumping station and warehouse buildings
LINE	New paved road perpendicular to highway would create a wider, more prominent band; straight ROW band.	New paved road would create a broken pattern of vegetation; ROW would result in linear area with low, immature annual species during reclamation.	Thin, smooth, vertical, regularly repeating, convex lines perpendicular to vertical lines; geometric arrangements, messy
COLOR	Dark gray/black	Light tans, yellows from ROW reclamation	Dark gray, light gray
TEXTURE	Smooth band from ROW	Slightly more discontinuous	Smooth, ordered, dotted; shiny metal

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x		x				x		
	LINE			x			x					x	
	COLOR			x				x				x	
	TEXTURE				x			x				x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes, see Ch. 3.15 Mitigation.

ALL ALTERNATIVES:

- Matching the paint color and concrete color of the structures on the substation and pumping station site to a color in the existing landscape would reduce the visual prominence of those buildings, and allow them to blend into the existing landscape. An appropriate color would be "Shadow Gray" from the BLM Standard Environmental Colors Chart CC-001.

- Vegetation restoration in ROWs should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Greasewood and saltbush should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 19: White Pine County Road 42, approximately 1 miles west of Garrison, Utah – looking west to Great Basin National Park (4.5 miles away) ; within Great Basin National Heritage Area.
VRM CLASS	III
PROPOSED ACTIVITY	69kV + 25kV Transmission Line Pipeline 42”-54” Diameter New paved access road Pipeline ROW Width: 200’ (permanent + temporary)

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, flat, horizontal valley; rough, rocky, prominent, steep ridgeline	Numerous small shrubs interspersed with patchy grasses;	None
LINE	Prominent, wide, straight, vertical OHV trail; horizontal valley floor; jagged, convex ridgeline	OHV trail creates a prominent break in valley vegetation; complex, indented break in vegetation where valley meets ridge	None
COLOR	Light tan, warm gray, dark brown, white	Light and dark greens; light tan to pale yellow grasses	None
TEXTURE	Smooth to fine valley; coarse, rugged ridgeline	Medium to fine; even, random	None

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No Change	Flat, short	Numerous tall, vertical, regularly repeating poles
LINE	New wide, straight, horizontal paved road perpendicular to OHV trail	New paved road would create a horizontal break in vegetation – not apparent from observer position at same elevation (flat terrain), would be visible from higher elevations looking down.	Vertical, thin, regular repeating
COLOR	Dark gray/black	Lighter color (tans, light greens)	Dark gray, light gray, metallic
TEXTURE	No Change	More discontinuous, smooth, even	Smooth, ordered, shiny metal

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				x			x			x		
	LINE			x				x			x		
	COLOR			x				x			x		
	TEXTURE				x			x				x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? See Ch. 3-15 mitigation and simulation

ALL ALTERNATIVES:

Vegetation restoration in ROWs should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Greasewood and saltbush should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 20: on OHV trail, 3.25 miles west of Baker; within Great Basin National Heritage Area.
VRM CLASS	III
PROPOSED ACTIVITY	25kV Transmission Line Pipeline 42”-54” Diameter

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, gently sloping valley; domed, rough, rocky ridgeline on horizon	Continuous coverage of small shrubs interspersed with patchy grasses	Vertical, regular, cylindrical poles, moderate in height
LINE	Prominent, wide band of highway, slightly curving towards horizon	Narrow band of grasses and shrubs paralleling highway that divides valley	Vertical, thin, regular; horizontal; straight
COLOR	Light gray, dark gray, white, yellow, warm gray, tan	Light, pale green; dark green; light tan/pale yellow; grayish green	Dark brown
TEXTURE	Smooth, fine valley; rough, coarse ridgeline	Medium to fine; even; uniform	Smooth, fine, matte

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Smooth along ROW	Low vegetation, uniform along ROW until reclamation is complete.	Numerous, vertical, regular, cylindrical poles, moderate in height
LINE	New straight, improved road will parallel existing transmission lines and highway. ROW will be straight.	New road and ROW will act as band, with hard edge breaking up vegetation into sections; Subtle, straight line of vegetation parallel with existing transmission lines and highway disturbed from construction; newly planted shrubs and grasses	thin, vertical, regular repeating, parallel with existing highway and transmission lines
COLOR	Light gray; warm gray, light tan	Light tans, yellows along ROW.	Dark brown
TEXTURE	Smooth, fine	Slightly more discontinuous	Smooth, fine, matte

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x		x				x		
	LINE			x				x				x	
	COLOR			x				x				x	
	TEXTURE			x				x				x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes, see 3.15 Mitigation.

ALL ALTERNATIVES:

- Vegetation restoration in ROWs should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Sage and rabbitbrush should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.
-

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 21: On OHV trail 1 mile south of Connors Pass Summit; within Great Basin National Heritage Area.
VRM CLASS	II
PROPOSED ACTIVITY	230kV Transmission Line

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Complex; prominent, domed, rugged ridgeline; gently sloping valley; steep, rugged ridgeline on horizon	Uniform coverage of trees dotted with amorphous patches of bare rock and low grasses	None
LINE	Curved, sinuous ridgeline; curved band of highway; jagged ridgeline on horizon	Prominent, sinuous, curved ridgelines and highway form breaks of trees and bare rock	None
COLOR	Light tan; light brown	Dark green, burnt orange, light green	None
TEXTURE	Coarse, uneven, rough	Coarse, uneven, dotted	None

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No Change	No Change	Tall cylinders, regularly spaced. Cleared ROW – path, break but only when perpendicular to view. Break would not be seen from KOP 21
LINE	Subtle, straight, rugged unimproved road	Subtle, straight, rugged unimproved road will create a small break in vegetation	Straight arrangement of structures, vertical, thin
COLOR	Light tan, warm gray, light brown	Lighter vegetation: tans, browns in ROW.	Dark brown, rust colored structures.
TEXTURE	No Change	Slightly more discontinuous	Smooth, fine, matte

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x				x			x	
	LINE			x				x				x	
	COLOR			x					x			x	
	TEXTURE				x			x				x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

Selecting Alignment Option 1 (Humboldt-Toiyabe Power Line Alignment) would have less visual impact than the Proposed Action (Conner Pass Power Line option)

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes
See 3.15 Mitigation

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 22: Intersection of US Hwy 6/50 & NV Hwy 893; within Great Basin National Heritage Area.
VRM CLASS	IV
PROPOSED ACTIVITY	69kV + 25kV Transmission Line Pipeline 42”-54” Diameter

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Smooth, gently sloping valley; rugged, rough, complex, steep ridgeline	Short, uneven coverage of shrubs and bushes, dotted with patches of grasses and bare rock	Short, evenly spaced cylindrical fence posts, multiple geometric road signs
LINE	Wide, straight, prominent highways, running perpendicular to each other; jagged ridgeline	Highways create wide, hard, straight breaks in coverage; diffuse, disjointed edge of taller bushes and trees down ridge slope	Vertical, thin, geometric, regular
COLOR	Light tan, warm gray, dark gray, white, yellow, light brown, yellow, white	Dark olive green, light pale green; pale yellow and tan	Dark brown, light gray, white, yellow
TEXTURE	Smooth, fine valley; coarse, uneven, rough ridgeline	Rough, uneven along ridgeline, transitioning to medium to fine in valley, discontinuous	Smooth, fine, shiny metallic

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Straight band from ROW.	Break in existing mature sagebrush, replaced by band of low, young annual species until reclamation is complete.	Prominent, numerous tall, vertical, regularly repeating cylindrical poles; parallel existing highways
LINE	New straight, angled improved road parallels existing highways. Band from ROW.	New improved road acts as a band, with hard edge breaking up vegetation	thin, vertical, regular repeating, parallels existing highways; convex lines perpendicular to vertical lines
COLOR	Light gray, warm gray, light tan	Light tans, yellows along revegetating ROW	Dark brown, rust, dark gray
TEXTURE	Smooth	Slightly more discontinuous, uneven	Smooth, fine, ordered

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x		x				x		
	LINE			x				x			x		
	COLOR			x			x					x	
	TEXTURE				x			x				x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes, see 3.15 Mitigation.

ALL ALTERNATIVES:

- Vegetation restoration in ROWs should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Sage and rabbitbrush should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 28, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 23: on OHV trail in Humboldt-Toiyabe National Forest, 5 miles west of NV Hwy 893
VQO CLASS	Max Modification
PROPOSED ACTIVITY	230kV Transmission Line (Humboldt-Toiyabe Alternative)

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Complex, steep slopes, domed hills, undulating terrain	Continuous coverage of teardrop-shaped trees with moderate height mixed with short round shrubs/bushes	Multiple parallel sets of tall cylindrical poles; geometric support bars
LINE	Smooth, curved, undulating ridgeline; curved, narrow, sinuous OHV trail	OHV trail creates a subtle break in vegetation	Vertical, geometric, horizontal; thin convex lines perpendicular to vertical poles; multiple parallel sets of vertical lines
COLOR	Dark tan; light gray; reddish brown	Dark green; light green; grayish green; light gray; pale yellow	Dark brown, light brown, light gray
TEXTURE	Coarse, uneven, rough	Coarse, uneven	Matte, fine, smooth

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No Change	Thin band of trees might need to be removed during construction	Tall cylindrical poles, geometric support bars parallel to existing transmission lines
LINE	No Change	Thin band of trees might need to be removed during construction	Vertical lines parallel with existing transmission lines, geometric, horizontal, convex lines perpendicular to vertical poles
COLOR	No Change	No Change	Dark brown, rust, light gray
TEXTURE	No Change	Slightly more discontinuous	Matte, fine, smooth

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				x				x			x	
	LINE				x			x				x	
	COLOR				x				x			x	
	TEXTURE				x			x				x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
Humboldt-Toiyabe Alternative: Yes, see simulation.

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes, see Ch. 3.15 Power line and Conductor Mitigation

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 28, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 24: on OHV trail in Humboldt-Toiyabe National Forest, 3 miles west of NV Hwy 893; within Great Basin National Heritage Area.
VQO CLASS	Modification / Partial Retention
PROPOSED ACTIVITY	230kV Transmission Line (Humboldt-Toiyabe Alternative)

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Complex, moderate to steep slopes, domed hills, undulating terrain; rough, rocky ridgeline on horizon	Complex; uneven distribution of tall to moderate height teardrop-shaped trees; continuous coverage of short bushes/shrubs broken up by patches of bare rock and short grasses	Multiple parallel sets of tall cylindrical and H-frame poles; geometric support bars
LINE	Complex; jagged, undulating ridgeline; curved, narrow, sinuous OHV trail	OHV trail creates a subtle break in vegetation; complex, indented edge of trees	Vertical, geometric, horizontal; thin convex lines perpendicular to vertical poles; multiple parallel sets of vertical lines
COLOR	Dark tan; light gray; reddish brown	Dark green; light green; grayish green; light gray; pale yellow	Dark brown, light brown, light gray
TEXTURE	Coarse, uneven, rough	Coarse, uneven, dotted, scattered	Matte, fine, smooth

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No Change	No Change	Tall cylindrical poles, geometric support bars parallel to existing transmission lines
LINE	No Change	Thin band of trees might need to be removed during construction	Vertical lines parallel with existing transmission lines, geometric, horizontal, convex lines perpendicular to vertical poles
COLOR	No Change	No Change	Dark brown, rust, light gray
TEXTURE	No Change	Slightly more discontinuous	Matte, fine, smooth

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x				x			x	
	LINE				x			x				x	
	COLOR				x				x			x	
	TEXTURE				x			x				x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
Humboldt-Toiyabe Alternative: Yes

The Humboldt-Toiyabe option would result in less visual impact than the Proposed Action (Conner Pass option)

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes

See 3.15 Mitigation

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 28, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 25: at BLM / Humboldt-Toiyabe National Forest boundary, on OHV trail, 2 miles west of NV Hwy 893; within Great Basin National Heritage Area.
VRM / VQO CLASS	4 / Partial Retention
PROPOSED ACTIVITY	230kV Transmission Line (Humboldt-Toiyabe Alternative)

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, gently sloping valley; rough, rocky ridgeline on horizon; narrow, horizontal piles of soil around existing well pad	Scattered moderate height teardrop-shaped trees; continuous coverage of short bushes/shrubs broken up by patches of bare rock and short grasses	Multiple parallel sets of tall cylindrical poles; geometric support bars
LINE	Complex; jagged, undulating ridgeline; straight, narrow OHV trail; horizontal band of disturbed ground around existing well pad	OHV trail creates a subtle break in vegetation; complex, discontinuous edge of trees; horizontal band creates gap in vegetation	Vertical, geometric, horizontal; thin convex lines perpendicular to vertical poles; multiple parallel sets of vertical lines
COLOR	Dark tan; light gray; reddish brown	Dark green; light green; grayish green; light gray	Dark brown, light brown, light gray
TEXTURE	Medium to smooth valley; coarse, uneven, rough ridgeline	Coarse, uneven, dotted, scattered	Matte, fine, smooth

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No Change	Thin band of trees might need to be removed during construction	Tall cylindrical poles, geometric support bars parallel to existing transmission lines
LINE	No Change	Thin band of trees might need to be removed during construction	Vertical lines parallel with existing transmission lines, geometric, horizontal, convex lines perpendicular to vertical poles;
COLOR	No Change	No Change	Dark brown, rust, light gray
TEXTURE	No Change	No Change	Matte, fine, smooth

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x			x			x		
	LINE				x			x				x	
	COLOR				x				x			x	
	TEXTURE				x				x			x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
Humboldt-Toiyabe Alternative: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes, see 3.15 Power and Conductor Design Mitigation

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 26: on NV Hwy 893, 6.5 miles north of US Hwy 6/50; within Great Basin National Heritage Area.
VRM CLASS	III
PROPOSED ACTIVITY	25kV Transmission Line Pipeline 42”-54” Diameter

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, smooth, gently sloping concave valley; prominent rugged, rocky, steep-sloped ridges on either side	Uniform, continuous coverage of low shrubs, dotted with patchy grasses in valley; numerous trees and bushes moderate in height along ridge slopes; patchy clumps of trees in low lying valley (swamp cedars)	Cylindrical poles moderate in height parallel existing highway, regularly spaced
LINE	Concave, simple valley floor; wide, straight band of highway; jagged, irregular ridgelines	Existing highway creates a hard edge breaking up vegetation; diffuse edge transition from trees/bushes to shrubs/grasses along ridge slope	Vertical, horizontal, thin, regular, repeating
COLOR	Warm gray, light tan, light gray, white, yellow	Pale greens; dark green; light green; light brown/tan; pale yellow	Light brown, dark brown, light gray
TEXTURE	Smooth, fine valley floor; rough, coarse, uneven ridgelines	Gradual transition from coarse/medium to fine/smooth along ridge slopes	Smooth, matte,

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Straight, smooth ROW	Thin band of trees might need to be removed during construction	numerous tall, vertical, regularly repeating cylindrical poles parallel existing highway
LINE	New wide, straight, improved road parallel to highway	New road acts as band, with hard edge breaking up vegetation into sections	Vertical, thin, regularly repeating
COLOR	Warm gray, light tan, light gray soils from disturbance in ROW	Light tan, yellows in ROW until revegetation is successful.	Dark brown, light gray
TEXTURE	Smooth	Slightly more discontinuous, uneven	Smooth, fine, matte

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x				x			x	
	LINE			x				x				x	
	COLOR			x					x			x	
	TEXTURE				x			x				x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes, see 3.15 Mitigation.

ALL ALTERNATIVES:

- Vegetation restoration in ROWs should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Sage and rabbitbrush should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 28, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 27: on NV Hwy 488, 2.75 miles west of Baker; within Great Basin National Heritage Area.
VRM CLASS	III
PROPOSED ACTIVITY	25kV Transmission Line Pipeline 42”-54” Diameter

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, gently sloping convex valley; rough, rocky, undulating ridgelines	Continuous coverage of small shrubs interspersed with patchy grasses in valley; taller teardrop-shaped trees along ridge slopes	Tall, angular, geometric roof of shelter, rectangular, flat block of concrete; short blocky forms of seat walls and rusted car; short thin regularly repeating poles
LINE	Subtle bands of curving and straight highways in valley; jagged, undulating ridgelines	Subtle bands with vegetation removed breaks coverage into geometric sections; uneven, indented edge of taller trees along ridge	Vertical, thin, geometric, regularly repeating
COLOR	Tan; dark brown; reddish brown; warm gray	Light, pale green; dark green; light tan/pale yellow; grayish green	Dark brown, light gray, light gray
TEXTURE	Smooth, fine valley; rough, uneven, coarse ridgeline	Medium to fine; even; uniform	Rough, uneven roof and seat wall; smooth, matte

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No Visible Change	ROW band	No Visible Change if distribution line undergrounded.
LINE	Very subtle straight, parallel band from new unimproved road along existing highway	Very subtle band of vegetation removed due to new unimproved road paralleling existing highway	No Visible Change if distribution line undergrounded.
COLOR	Lighter exposed soils.	Lighter yellows, tans	No Visible Change if distribution line undergrounded.
TEXTURE	No Visible Change	Slightly more discontinuous	No Visible Change if distribution line undergrounded.

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x				x				x
	LINE			x				x					x
	COLOR			x					x				x
	TEXTURE				x			x					x

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes, see 3.15 Mitigation

ALL ALTERNATIVES:

- Vegetation restoration in ROWs should create texture and color that is similar to the surrounding natural vegetation to reduce visual impact. Sage and rabbitbrush should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 28, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 28: on NV Hwy 488, 2.75 miles west of Baker; within Great Basin National Heritage Area.
VRM CLASS	III
PROPOSED ACTIVITY	25kV Transmission Line Pipeline 42”-54” Diameter

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, gently sloping convex valley; rough, rocky, undulating, steep ridgelines	Continuous coverage of small shrubs interspersed with taller teardrop-shaped trees along ridge slopes and in stream valleys	Small, blocky, geometric shapes of buildings in Baker
LINE	Subtle bands of curving and straight highways and dry stream beds in valley; jagged, undulating ridgeline on horizon; diagonal, gently sloping ridgeline	Subtle bands with vegetation removed breaks coverage into geometric sections; uneven, indented edge of taller trees along ridge and in stream valley	None visible from KOP
COLOR	Tan; dark brown; reddish brown; warm gray	Light, pale green; dark green; light tan/pale yellow; grayish green	White; brown, blue
TEXTURE	Smooth, fine valley; rough, uneven, coarse ridgeline	Medium to fine; dotted, scattered, discontinuous	Coarse, uneven

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Smooth re-contouring from ROW	Band of vegetation younger, immature in ROW until revegetation is complete.	No Visible Change if distribution line undergrounded
LINE	Very straight, parallel, wide band from new unimproved road along existing highway	Very subtle band of vegetation removed due to new unimproved road paralleling existing highway	No Visible Change if distribution line undergrounded
COLOR	Light gray, tan	Lighter along ROW	No Visible Change if distribution line undergrounded
TEXTURE	Smooth	Slightly more discontinuous	No Visible Change if distribution line undergrounded

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x				x				x
	LINE			x				x					x
	COLOR			x					x				x
	TEXTURE				x			x					x

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED?

ALL ALTERNATIVES:

- Vegetation restoration in ROWs should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Sage and rabbitbrush, and/or pinyon and juniper (dependant on mix of vegetation removed from ROW) should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 29: in Elk Viewing / Interpretive Area off US Hwy 6/50/93; within Great Basin National Heritage Area.
VRM CLASS	III
PROPOSED ACTIVITY	230kV Transmission Line

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, horizontal, gently sloping valley; multiple rough, rocky, domed ridges	Low, sparse, disjointed shrubs mixed with patchy grasses; moderate height, dense trees/bushes on slopes of ridge	Low, parallel cylindrical fence posts
LINE	Horizontal, straight valley floor; complex, jagged ridgeline	Diffuse, gradual edge of trees/bushes on slope	Fences are straight horizontal with vertical poles
COLOR	Warm gray, reddish tan; dark brown	Light green, pale yellow, pale green; dark green	Light gray, dark tan, warm gray
TEXTURE	Smooth, fine valley; coarse, complex, disjointed ridgeline	Gradual transition from coarse/medium to fine/smooth along ridge slopes	Smooth, fine, matte

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No change	Thin break in existing vegetation	Numerous tall, vertical, regularly repeating cylindrical poles, parallel with vertical fence posts
LINE	New narrow, straight, horizontal unimproved road	No Change	Vertical, thin, ordered
COLOR	Warm gray, reddish tan	No Change	Dark brown, light gray
TEXTURE	No Change	No Change	Smooth, fine, matte

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x				x		x		
	LINE			x					x		x		
	COLOR			x					x		x – GALVANIZED	x- SHADOW GREY	
	TEXTURE				x				x			x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
Proposed Action – No

- The proposed transmission structures do not follow any existing linear features and would appear prominently on the landscape across the entire view.

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED?
Proposed Action – Yes, see 3.15 Power Line and Conduction Mitigation

With application of BLM BMPs, ACMs, and 3.15 Mitigation, the Proposed Action would meet visual resource objectives.

The Humboldt-Toiyabe alignment option would have less visual impacts than the Proposed Action (Conner Pass option).

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 30: on NV Hwy 486, 2 miles east of Hwy 6/50/93; within Great Basin National Heritage Area.
VRM CLASS	On Highway ROW near BLM utility corridor managed for VRM IV
PROPOSED ACTIVITY	230kV Transmission Line

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Complex, undulating, concave valley, moderately steep	Complex, patches of trees/bushes moderate height mixed with patches of short grasses, mixed with patches of bare ground, irregular	Multiple prominent, parallel tall cylindrical poles,
LINE	Multiple curving, sinuous existing roads, jagged, domed ridgeline in the background	Existing roads create unnatural, irregular patches	Vertical, thin, parallel, convex, curved
COLOR	Light gray, warm gray, light tan; reddish tan	Light green, dark green, rust, pale green and yellow; grayish green	Dark brown, dark gray, light gray
TEXTURE	Coarse, rough, uneven	Coarse, uneven, disjointed	Smooth, fine, matte, metallic

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No Change	No Change	Numerous tall, vertical, regularly repeating cylindrical poles; parallel existing transmission lines
LINE	No Change	No Change	thin, vertical, regular repeating, parallels existing transmission line; convex lines perpendicular to vertical lines
COLOR	No Change	No Change	Dark brown, rust, dark gray
TEXTURE	No Change	No Change	Smooth, fine, ordered

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x				x			x	
	LINE				x				x			x	
	COLOR				x				x			x	
	TEXTURE				x				x			x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED?
Proposed Action – Yes, see 3.15 Mitigation.

The Humboldt-Toiyabe alignment option would have less visual impacts than the Proposed Action (Conner Pass option).

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 27, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 31: on Hwy 6/50/93 7 miles west of Connor Pass; within Great Basin National Heritage Area.
VRM CLASS	III
PROPOSED ACTIVITY	230kV Transmission Line

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, gently sloping convex valley; complex, rough, rocky ridgelines on valley edges	Uneven coverage of short shrubs, patchy grasses; taller bushes/tress on ridge slopes	Short, scattered cylindrical fence poles
LINE	Horizontal valley floor, jagged, bold ridgelines; prominent, wide highway, straight	Bold, contrasting edge of bushes/trees and shrubs/grasses on ridgeline; highway asks as a hard break in valley	Vertical, thin
COLOR	Warm gray, light tan, white, dark brown	Light, pale green, dark green; grayish green; light tan	Dark gray; dark brown
TEXTURE	Smooth, fine valley; coarse, rough, uneven, ridgelines	Medium to fine valley	Dotted, scattered, smooth, fine

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No Change	No Change	Numerous tall, vertical, regularly repeating cylindrical poles
LINE	New straight, unimproved road would cross existing highway	New unimproved road acts as a band, with hard edge breaking up vegetation	Thin, vertical, regular repeating, convex lines perpendicular to vertical lines; crosses existing highway
COLOR	Light tan, warm gray	No Change	Dark brown, rust, dark gray
TEXTURE	No Change	Slightly more discontinuous, uneven	Smooth, fine, ordered

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x				x		x		
	LINE			x				x			x		
	COLOR			x					x		x-GALVANIZED	x-SHADOW GRAY	
	TEXTURE				x			x				x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
Proposed Action – No

- The proposed transmission structures would stop paralleling the existing highway and cross it at an angle of about 35 degrees, continuing on in a predominantly north-south direction. This crossing, with its large angle structure, would be visually dominant on the landscape when travelling on the scenic byway in both directions.

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED?
Proposed Action – Yes, see 3.15 Mitigation.

With application of BLM BMPs, ACMs, and 3.15 Mitigation, the Proposed Action would meet visual resource objectives.

The Humboldt-Toiyabe alignment option would have less visual impacts than the Proposed Action (Conner Pass option).

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 27, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 32: on OHV trail 1.75 miles east of US Hwy 6/50 near Osceola mining ghost town; within Great Basin National Heritage Area.
VRM CLASS	KOP is in VRM Class II Project is in VRM Class III, IV
PROPOSED ACTIVITY	ROW Power Line and pipeline facilities (6 miles away) Groundwater Development Area (common to all alts, 0.25 miles away)

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, gently sloping convex valley, rough, steep, rugged, complex ridges on either side of valley	Complex, bushes/trees with moderate height broken up by short shrubs/grasses	Tall, cylindrical power line poles; parallel arrangements
LINE	Jagged, uneven ridgelines; straight, horizontal strip of OHV trail follows slope into valley; wide curving OHV trail; horizontal strips of cleared earth (well-pads)	Complex, indented edge of trees/bushes and shrubs/grasses; OHV trails act as a hard edge, breaking up vegetation	Vertical, thin, geometric, convex lines perpendicular to vertical lines
COLOR	Light tan, dark tan; reddish brown; light gray	Dark green; light green; tan;	Dark brown, light brown, light gray
TEXTURE	Uneven, coarse, complex ridgelines; smooth, fine valley	Coarse, uneven, discontinuous	Smooth, fine, matte

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Geometric, square patches with cuts/fills on steeper slopes	Raw, barren	Small wellheads
LINE	New curvilinear and straight dirt access roads	Cleared for new well pads and access roads. Revegetating cuts/fills	Linear power lines extending to several well pads
COLOR	Light tan, bright well pads	Revegetation areas may be lighter brown, green than undisturbed areas	Brown wood power line poles, neutral brown well head structures
TEXTURE	Smooth, flat	Revegetating areas may be smoother, more even than undisturbed areas	Smooth

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**		x					x				x	
	LINE		x					x				x	
	COLOR		x			x							x
	TEXTURE				x			x					x

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
PROPOSED: Yes with mitigation.

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED?

ALL ALTERNATIVES: see 3.15 mitigation

- Wellhead enclosures should be painted with site-specific colors that will best harmonize with the surrounding vegetation and soil colors. An appropriate color would be "Beetle" from the BLM Standard Environmental Colors Chart CC-001.

- Vegetation restoration for well pad clearings should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Sage and rabbitbrush, and/or pinyon juniper, depending on the vegetation removed at clearing sites, should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from revegetation with fast-growing herbaceous species.

- Access roads should be curvilinear; following the curve of the terrain, rather than cutting across contours.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 33: off US Hwy 6/50, 4.25 west of Sacramento Pass; within Great Basin National Heritage Area.
VRM CLASS	III
PROPOSED ACTIVITY	25kV Transmission Line Pipeline 42”-54” Diameter

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, gently sloping valley; prominent, rocky, rough ridgeline	Low, short shrubs with patchy grasses mixed in; taller, more prominent trees/bushes on ridge slopes; patchy clumps of trees in valley floor	Straight poles moderate height, regular pattern
LINE	Wide, slightly curving highway; narrow disturbed strip of earth; jagged ridgeline	Complex, uneven, indented edge of bushes/trees and shrubs/grasses on ridge slope; existing highway and disturbed patch create breaks in vegetation	Vertical, thin, parallel with existing highway; geometric patterns of horizontal lines perpendicular to vertical lines
COLOR	Light tan; light gray, warm gray; dark brown; reddish tan	Light, pale green; dark green; pale yellow	Dark brown, rust, light gray
TEXTURE	Smooth, fine valley; coarse, uneven ridgeline	Smooth, continuous valley slopes, broken up with coarse, dotted patches of trees in valley floor, uneven, coarse ridgelines	Smooth, matte, shiny metallic, fine

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No visible change	No visible change	No visible change if distribution located underground
LINE	Possibility of subtle band of new unimproved road on far side of valley	Possibility of subtle band of disturbed vegetation on far side of valley	No visible change if distribution located underground
COLOR	No visible change	No visible change	No visible change if distribution located underground
TEXTURE	No visible change	No visible change	No visible change if distribution located underground

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x				x				x
	LINE			x				x					x
	COLOR				x				x				x
	TEXTURE				x				x				x

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes, see Ch. 3.15 Mitigation

ALL ALTERNATIVES:

- Vegetation restoration in ROWs should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Sage and rabbitbrush should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 27, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 34: On US Hwy 93, 1.2 miles south of NV Hwy 894; 4.5 miles south of US 6/50
VRM CLASS	III, IV
PROPOSED ACTIVITY	230kV Transmission Line 42" - 54" Pipeline

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide gently sloping valley; rough, rocky, prominent ridgeline	Patchy mix of short, stubble-like grasses, low shrubs, and taller trees/bushes	Short fence row evenly spaced
LINE	Prominent jagged ridgeline; wide, straight highway	Highway creates a hard edged break in grasses, banding along edge of highway; well-defined edge of trees/shrubs at bottom of ridge slope	Vertical, thin, orderly
COLOR	Light gray, reddish brown; tan	Light green, pale green, dark green, pale yellow, tan, orange	Dark brown
TEXTURE	Smooth, fine valley; rough, coarse, uneven ridgeline	Coarse, uneven, patchy, discontinuous	Smooth, matte

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Graded pipeline ROW would be more even than existing rough soil surface	Even in ROW	Tall, prominent power line cylinders, evenly spaced, horizontal cylinders
LINE	New unimproved powerline road, almost perpendicular to existing highway will create straight line of disturbed ground following ridge slope. New pipeline ROW would parallel the highway.	New unimproved road line will create prominent, sharp break in vegetation up ridge slopes. New pipeline ROW would parallel highway shoulder line.	Vertical, horizontal, thin, orderly
COLOR	Light tan, reddish brown, light gray	Even, lighter brown or green vegetation with little vertical height variation.	Brown, dark gray
TEXTURE	Smooth ROW	Disjointed, broken for access road. Smooth, even for pipeline.	Matte, fine, shiny metallic

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x				x		x		
	LINE		x				x				x		
	COLOR		x					x		x – GALVANIZED	x – SHADOW GREY		
	TEXTURE				x			x			x		

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?

Proposed Action – No

The proposed power line structures do not follow existing linear features and would appear prominently on the landscape when crossing the scenic byway and ascending Conner Pass. The removal of existing bushes and trees from the power line along the slopes of the ridge would create a wide path of disturbance that would be visually dominant in views towards the west from the highway, creating strong line and moderate form, color, and texture contrasts. The proposed pipeline would parallel the scenic byway. The new cleared, graded, and revegetated ROW would create moderate line and color contrasts. Combined, these contrasts would not be compatible in a VRM Class III area.

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED?

Proposed Action – Yes, see Chapter 3.15 mitigation for power line design, conductor design, and ROW width. See simulation.

- Wellhead enclosures should be painted with site-specific colors that will best harmonize with the surrounding vegetation and soil colors. An appropriate color would be "Shadow Gray" from the BLM Standard Environmental Colors Chart CC-001.

- Vegetation restoration for well pad clearings and ROWs should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Sage and rabbitbrush should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green line revegetation with fast-growing herbaceous species.

- Access roads ascending Conner Pass should be curvilinear; following the curve of the terrain, rather than cutting across contours.

With application of BLM BMPs, ACMs, and 3.15 Mitigation, the Proposed Action would meet visual resource objectives.

The Humboldt-Toiyabe alternative transmission alignment option would have less of an impact on the landscape, given it follows multiple existing 230kV transmission corridors and its visibility from major US highways would be considerably less than the Proposed Action (Conner Pass option)

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 27, 2009, March 18, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 35: On US Hwy 93, just south of Lake Valley Summit
VRM CLASS	III
NORTH LAKE VALLEY ALIGNMENT OPTION ONLY (PROPOSED ACTION WOULD NOT BE VISIBLE)	230kV + 69kV Transmission Line: Single steel poles, core-ten steel - Pipeline Diameter: 66" - 72" - Pipeline ROW Width: 200' (permanent + temporary) - New improved access Road - Lake Valley Pumping Station and Primary Electrical Substation Site

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, flat valley; rough, rocky, uneven, prominent ridgeline	Short, continuous coverage of shrubs mixed with patches of short grasses	Geometric shapes, moderate in height, mounted on short cylindrical poles
LINE	Prominent, wide straight existing highway; horizontal valley floor, jagged ridgeline	Existing highway creates hard break in vegetation; well defined edge of grass patches	Vertical, rectangular, geometric, trapezoidal
COLOR	Light dray, dark gray, reddish brown; light tan	Light green, dark green, orange; light tan	Yellow, black, light gray, dark brown
TEXTURE	Smooth, fine valley floor; rough, uneven, coarse ridgeline	Medium to smooth coverage of shrubs, with patches of fine, smooth grasses	Fine, smooth, matte

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Break from graded ROW, would appear smoother	Small, geometric square patch of vegetation would be removed for pumping station & substation site. ROW would appear as band of young annual species.	Numerous tall, vertical, regularly repeating poles; parallels existing highway; large, angular, blocky pumping station and warehouse buildings
LINE	New wide, straight, improved road parallel to highway	New road and ROW acts as band, with hard edge breaking up vegetation into sections	Thin, smooth, vertical, regular repeating, parallels existing highway; convex line perpendicular to vertical lines; geometric arrangements.
COLOR	Warm gray, light tan, light gray	Light tans, yellows, greens from ROW revegation.	Rusty, reddish tan, dark gray, light gray
TEXTURE	No Change	Slightly more discontinuous, uneven	Smooth, ordered, dotted; shiny metal

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x			x			x		
	LINE			x				x		x – GALVANIZED	x – SHADOW GREY		

	COLOR			x					x		x		
	TEXTURE				x			x			x		

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?

North Lake Valley Alternative D – No, see simulation.

- Highway 93 is a designated scenic byway along proposed substation and pumping station site. These facilities together with the new transmission line will create visually dominant features on the landscape that is otherwise free from human activity. The KOP also provides views of impacts to landscapes within the great Basin National Heritage Area; however, there is no authority to regulate the impact to Heritage Area features.

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED?

North Lake Valley Option – Yes, see Ch 3. 15 Mitigation. If this option is selected:

- All pumping station and substation buildings and tanks should be painted or constructed with colored block using site-specific colors that will best harmonize with the surrounding vegetation and soil colors. An appropriate color would be "Shadow Gray" from the BLM Standard Environmental Colors Chart CC-001.

- Fences shall be slatted and painted Shadow Grey.

- Paint 230-kV steel poles Shadow Grey or use wood H-frames.

- If feasible, relocate warehouse to different location – at other project facilities not located along scenic byways.

- Vegetation restoration in ROWs should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Sage and rabbitbrush should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

With application of BLM BMPs, ACMs, and 3.15 Mitigation, the Proposed Action would meet visual resource objectives.

The Proposed Action would have less visual impacts than the North Lake Valley alignment option. The proposed action alternative moves the pumping station and primary substation site away from US Highway 93 9.5 miles to the southeast, on the east side of the Fortification Range. This location for the project facilities would not affect the views of those travelers along the scenic byway.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 27, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 36: On US Hwy 93, on eastern edge of Pahranagat National Wildlife Refuge
VRM CLASS	IV
PROPOSED ACTIVITY	Coyote Valley Pressure Reducing Station 230kV Transmission Line Pipeline 78" – 84" Diameter

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Narrow, moderately sloped valley; rough, rocky complex valley walls	Sparse coverage of short grasses with scattered low height bushes/shrubs	Tall and short cylindrical poles
LINE	Curved, wide, prominent highway; diagonal rock bands; vertical rock walls; jagged ridgeline	Highway creates a hard edged break in vegetation; narrow band of shrubs parallels highway	Vertical, thin, geometric arrangement, parallel to existing highway
COLOR	Dark brown, dark gray, light gray, reddish brown	Dark green, light tan, light green, reddish tan, pale yellow	Light brown, white, dark gray
TEXTURE	Coarse, uneven, complex	Uneven, medium coarseness, patchy, discontinuous, dotted	Smooth, fine, matte

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Smooth ROW from grading	Geometric patch of vegetation to be removed for pressure reducing station. ROW would result in low annual species during reclamation.	Large, tall cylindrical tanks; blocky, angular rectangular buildings; numerous tall, vertical, regularly repeating cylindrical poles parallel existing transmission lines
LINE	Existing OHV trail parallel with existing highway likely to be improved, graded, and made wider	Existing OHV trail likely to be improved and made wider, creating a harder edge to grasses	Vertical, thin, geometric arrangements; messy; parallels existing transmission line
COLOR	Light exposed soils	Light tan, yellow in ROW.	Light tan, light gray, dark brown, dark gray
TEXTURE	Existing HOV trail parallel with existing highway likely to be improved, graded, and made smoother	Slightly more discontinuous	Smooth, fine, matte, shiny metallic

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**			x			x			x			
	LINE		x				x				x		
	COLOR			x				x			x		
	TEXTURE		x				x					x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes, see simulation.

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes, see Ch. 3.15 Mitigation.

ALL ALTERNATIVES:

- Station buildings and other facilities will be painted or constructed with colored block using site-specific colors that will best harmonize with the surrounding vegetation and soil colors to reduce the visual prominence of the facility and allow it to blend into the existing landscape. An appropriate color would be "Shadow Gray" from the BLM Standard Environmental Colors Chart CC-001.

- The proposed transmission line should either be located directly adjacent to the ON Line Transmission Project under construction, or directly adjacent to an existing transmission line along Hwy 93 would reduce the visual impacts by consolidating the transmission corridor.

- Vegetation restoration in ROWs should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Sage and rabbitbrush should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

- Set back buildings 100 or more feet from the existing road.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 28, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 37: on US Hwy 93, 23 miles north of NV Hwy 168
VRM CLASS	At boundary of VRM Class III, IV
PROPOSED ACTIVITY	230kV Transmission Line Pipeline 78" – 84" Diameter

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, gently sloping valley; complex, rocky, undulating ridgelines	Continuous, even coverage of short shrubs, bare rock faces on ridgelines	Tall cylindrical poles, regular intervals, parallel with existing highway
LINE	Wide, straight, prominent highway; jagged ridgelines	Highway creates a hard edge band that creates gap in coverage; band of grasses/shrubs on its borders; existing disturbance creates a band of shrubs/grasses on its edges	Vertical, thin, regular, geometric arrangements
COLOR	Dark brown, light brown, reddish brown, light gray	Dark green, light green, yellow	Dark brown
TEXTURE	Smooth, fine valley, rough, coarse ridgelines	Medium, even, random	Fine, smooth, matte

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Smooth	Break in existing vegetation from new ROW; low uniform annual species.	Tall, vertical, thin poles parallel with existing highway
LINE	New ROW and straight, improved road will parallel existing highway	New road will act as band, with hard edge breaking up vegetation into sections; Subtle, straight line of vegetation parallel with existing highway disturbed from construction; newly planted shrubs and grasses	Vertical, hard, regular, parallel with existing highway
COLOR	Light brown, light gray, reddish brown, more exposed soils	Light tans, yellows in ROW	Dark gray, matte (poles); metallic (conductors)
TEXTURE	Smooth graded ROW	Smooth	Smooth, fine

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**			x				x				x	
	LINE		x				x				x		
	COLOR		x					x				x	
	TEXTURE			x			x					x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes, see Ch. 3.15 Power Line and Conductor Design Mitigation

ALL ALTERNATIVES:

- The proposed transmission line route is located on the east side of US Hwy 93 close to the highway. The transmission line should either be located directly adjacent to the ON Line Transmission Project under construction, or directly adjacent to an existing transmission line on the west side of Hwy 93 would reduce the visual impacts by consolidating the transmission corridor.

- Vegetation restoration in ROWs should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Sage and rabbitbrush should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 28, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 38: on US Hwy 93, 12 miles north of NV Hwy 168
VRM CLASS	III
PROPOSED ACTIVITY	230kV Transmission Line Pipeline 78" – 84" Diameter

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, gently sloping valley; complex; multiple rocky, undulating ridgelines	Complex; patch of tall, mature trees forming an RV park; short, random coverage of bushes/shrubs mixed with patches of short grasses; large geometric square of bare rock with vegetation removed	Tall cylindrical poles, regular intervals, parallel with existing highway; short vertical and horizontal poles parallel with existing highway; various blocky, angular, rectangular forms
LINE	Wide, straight, prominent highway; jagged ridgelines; band of distributed ground parallels existing highway	Highway creates a hard edge band that creates gap in coverage; existing disturbance creates gap in vegetation	Vertical, horizontal, thin, regular, geometric arrangements
COLOR	Dark brown, light brown, reddish brown, light gray	Dark green, light green, yellow	Dark brown, white
TEXTURE	Smooth, fine valley, rough, coarse ridgelines	Coarse, uneven, random, discontinuous	Fine, smooth, matte

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	No Change	No Change	Tall, vertical, thin poles parallel with existing highway
LINE	New straight, improved road will parallel existing highway	New road will act as band, with hard edge breaking up vegetation into sections	Vertical, hard, regular, parallel with existing highway
COLOR	Light brown, light gray, reddish brown	No Change	Dark brown; dark gray, matte (poles); metallic (conductors)
TEXTURE	No Change	Slightly more discontinuous	Smooth, fine

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x			x			x		
	LINE			x			x				x		
	COLOR			x				x				x	
	TEXTURE				x		x					x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes, see 3.15 Mitigation

ALL ALTERNATIVES:

- The proposed transmission line route is located on the east side of US Hwy 93 close to the highway. The transmission line should either be located directly adjacent to the ON Line Transmission Project under construction, or directly adjacent to an existing transmission line on the west side of Hwy 93 would reduce the visual impacts by consolidating the transmission corridor.

- Vegetation restoration in ROWs should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Sage and rabbitbrush should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 28, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 39: on US Hwy 93, 11.5 miles south of NV Hwy 168
VRM CLASS	III
PROPOSED ACTIVITY	230kV Transmission Line Pipeline 78" – 84" Diameter

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, gently sloping convex, valley; complex, prominent rocky, undulating, steep ridgelines	Continuous, even coverage of short shrubs, bare rock faces on ridgelines, scattered, dotted, coverage of moderate height Joshua trees	Tall cylindrical poles, regular intervals, parallel with existing highway
LINE	Wide, straight, prominent highway; jagged ridgelines; convex valley floor	Highway creates a hard edge band that creates gap in coverage	Vertical, horizontal, thin, regular, geometric arrangements; convex lines perpendicular to vertical lines
COLOR	Dark brown, light brown, reddish brown, light gray	Dark green, light green, yellow; gray	Dark brown
TEXTURE	Smooth, fine valley, rough, coarse ridgelines	Medium, even, random	Fine, smooth, matte

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Smoother from ROW grading	Break in ROW, with young, uniform annual species	Tall, vertical, thin poles parallel with existing highway and transmission line. Buried water reservoir would be
LINE	New straight, improved road will parallel existing highway	New road and ROW will act as band, with hard edge breaking up vegetation into vertical strips parallel with existing highway and transmission line	Vertical, hard, regular, parallel with existing highway and transmission line
COLOR	Light brown, light gray, reddish brown exposed soils	Light tans, yellows in ROW	Dark gray, matte (poles); metallic (conductors)
TEXTURE	Smoother	Smoother	Smooth, fine

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**			x				x			x		
	LINE			x			x				x		
	COLOR			x				x				x	
	TEXTURE				x		x					x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes, see 3.15 Mitigation

ALL ALTERNATIVES:

- The proposed transmission line should either be located directly adjacent to the ON Line Transmission Project under construction, or directly adjacent to an existing transmission line on the west side of Hwy 93 would reduce the visual impacts by consolidating the transmission corridor.
- Vegetation restoration in ROWs should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Sage and rabbitbrush should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	July 20, 2009, May 17, 2011
EVALUATOR	J. Wiedmeyer, J. Call
KEY OBSERVATION POINT	KOP 40: on US Hwy 93, 6 miles west of I-15
VRM CLASS	III
PROPOSED ACTIVITY	230kV Transmission Line Pipeline 78" – 84" Diameter Buried Storage Reservoir Water Treatment Facility

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, gently sloping valley; complex, prominent rocky, undulating, steep ridgelines; linear road cut creates moderate slopes in valley floor	Continuous, even coverage of short shrubs and grasses, bare rock faces on ridgelines, scattered, dotted, coverage of moderate height Joshua trees	Tall cylindrical poles, regular intervals, perpendicular with existing highway; large, tall blocky form on valley horizon
LINE	Wide, curved, prominent highway; jagged ridgelines; narrow, subtle band of OHV trail perpendicular to highway	Highway and OHV trail creates a hard edge band that create gaps in coverage	Vertical, horizontal, thin, regular, geometric arrangements; convex lines perpendicular to vertical lines
COLOR	Dark brown, light brown, reddish brown, light gray, light tan	Pale green, light green, yellow; gray; reddish gray	Dark brown; gray
TEXTURE	Smooth, fine valley, rough, coarse, uneven ridgelines and road cut	Medium, even, random	Fine, smooth, matte

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Smooth in graded ROW	Break in vegetation from ROW, young annual uniform species	Blocky, angular rectangular buildings; numerous tall, vertical, regularly repeating cylindrical poles parallel with existing transmission lines
LINE	Existing improved road will be paved, ROW would creating a wider and more defined band than existing conditions	New paved road will create a more well defined band, with hard edge breaking up vegetation into sections	Vertical, thin, geometric arrangements; parallels existing transmission line
COLOR	light gray, reddish brown exposed soils	Light tan, yellow ROW	Light tan, light gray, dark gray
TEXTURE	Smooth	Slightly more discontinuous	Smooth, fine, matte, shiny metallic

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**			x			x				x		
	LINE		x				x					x	
	COLOR		x					x				x	
	TEXTURE			x			x					x	

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? Yes

ALL ALTERNATIVES:

- The proposed transmission line should either be located directly adjacent to the ON Line Transmission Project under construction, or directly adjacent to an existing transmission line on the west side of Hwy 93 would reduce the visual impacts by consolidating the transmission corridor.

- Currently, the buried storage reservoir and water treatment facility site is about ½ miles south of US Hwy 93. Moving the site further south, away from the highway and closer to an existing combined cycle gas turbine generation facility 1.5 miles south of the proposed site would reduce the facilities' visual impacts. The structures would appear smaller on the landscape and would seem to be a part of the existing gas facility.

- Water treatment facility structures should be painted or constructed with colored block using site-specific colors that will best harmonize with the surrounding vegetation and soil colors. An appropriate color would be "Shadow Gray" from the BLM Standard Environmental Colors Chart CC-001.

- Vegetation restoration in ROWs should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Appropriate shrubs and cactus should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green stripping the ROW with fast-growing herbaceous species.

VISUAL CONTRAST RATING WORKSHEET

SECTION A: PROJECT INFORMATION

PROJECT NAME:	Clark, Lincoln, & White Pine Counties Groundwater Development Project
DATE(S)	September 30, 2010
EVALUATOR	J. Call
KEY OBSERVATION POINT	KOP 41: Near the Great Basin National Park boundary (3 miles to west), a context-dependent cultural resource site looking towards Garrison, Utah (2.5 miles to east), and in the Great Basin National Heritage Area.
VRM CLASS	III
PROPOSED ACTIVITY	69kV + 25kV Transmission Line Pipeline 42”-54” Diameter New paved access road Pipeline ROW Width: 200’ (permanent + temporary) Secondary Electrical Substation (2+ miles away) Pumping Station (2+ miles away) Future Groundwater Development Areas

SECTION B: CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Wide, flat, horizontal valley; steep hillside	Numerous small shrubs interspersed with patchy grasses;	Clustered town of Garrison with rectangular buildings.
LINE	Prominent, wide, straight, OHV trail; horizontal valley floor;	OHV roads creates a prominent, continuous lines in homogeneous valley vegetation;	None
COLOR	Light tan, warm gray, dark brown, white	Light and dark greens; light tan to pale yellow grasses	Dark green/olive shade trees, bright white buildings
TEXTURE	Smooth to fine valley; coarse, rugged ridgeline	Medium to fine; even, random	Grouped, clustered.

SECTION C: PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat	Flat, short	Numerous tall, vertical, regularly repeating poles
LINE	New wide, straight, horizontal paved road perpendicular to OHV trail	Cleared ROW and paved road would create a horizontal break in vegetation – contrast increased from higher elevations looking down such as Great Basin National Park.	Vertical, thin, regular repeating
COLOR	Dark gray/black	Lighter color (tans, light greens)	Dark gray, light gray, metallic
TEXTURE	Smooth	More discontinuous, smooth, even	Smooth, ordered, shiny metal

SECTION D: CONTRAST RATING

		1. LAND/WATER				2. VEGETATION				3. STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	**FORM**				x			x			x		
	LINE		x				x				x		
	COLOR			x			x				x		
	TEXTURE				x			x				x	

COMMENTS:
Viewer sensitivity is high at this location due to a context-dependent cultural resource site, and proximity to Great Basin National Park, the Great Basin National Heritage Area, and Garrison, UT. Most viewers would see the project either from a) Garrison or Highways 21/159/487 at a similar elevation looking towards Great Basin National Park or b) from elevated points within Great Basin National Park looking down on the broad, flat valley.

Five project components create visual contrasts: 1) the 300' ROW undergoing reclamation (Simulation 82 assumes 5 years of grass re-growth) which results in a solid, smooth, light-colored band across homogenous plant communities; 2) the double-circuit 69kV and 25kV power line which adds new vertical poles within a viewshed that does not contain high-voltage transmission infrastructure; 3) a new paved road that contrasts the existing network of natural-surfaced roads; 4) a secondary electrical substation (beyond 2 miles, not simulated); and 5) a pumping station (beyond 2 miles, not simulated).

D1. DOES THE PROJECT DESIGN MEET VISUAL RESOURCES MANAGEMENT OBJECTIVES?
ALL ALTERNATIVES: Yes

D2. ADDITIONAL MITIGATING MEASURES RECOMMENDED? See Ch. 3.15 mitigation and simulation

ALL ALTERNATIVES:

- Reduce the ROW from 300' to 100-200' to reduce the prominent width of the cleared areas.

- Leave the road with the current natural surface. Paved road contrasts with the existing network of natural-surfaced roads – appears blacker.

- The new road would change travel patterns and likely provide for creation of new OHV trails resulting in additional, indirect visual contrasts. Travel management mitigation (signs, fences) should be incorporated to minimize OHV road creation.

- The power line, substation, pumping station, and wellhead enclosures should be painted with site-specific colors that will best harmonize with the surrounding vegetation and soil colors. An appropriate color would be "Shadow Gray" from the BLM Standard Environmental Colors Chart CC-001.

- Vegetation restoration for well pad clearings and ROWs should create texture and color that is similar to the surrounding natural vegetation to eliminate or minimize visual impact. Greasewood and saltbush should be planted in addition to BLM recommended seed mix to avoid the texture and color contrasts that would occur from Green line revegetation with fast-growing herbaceous species.

- Well site access roads should be curvilinear; following the curve of the terrain, rather than cutting across contours.