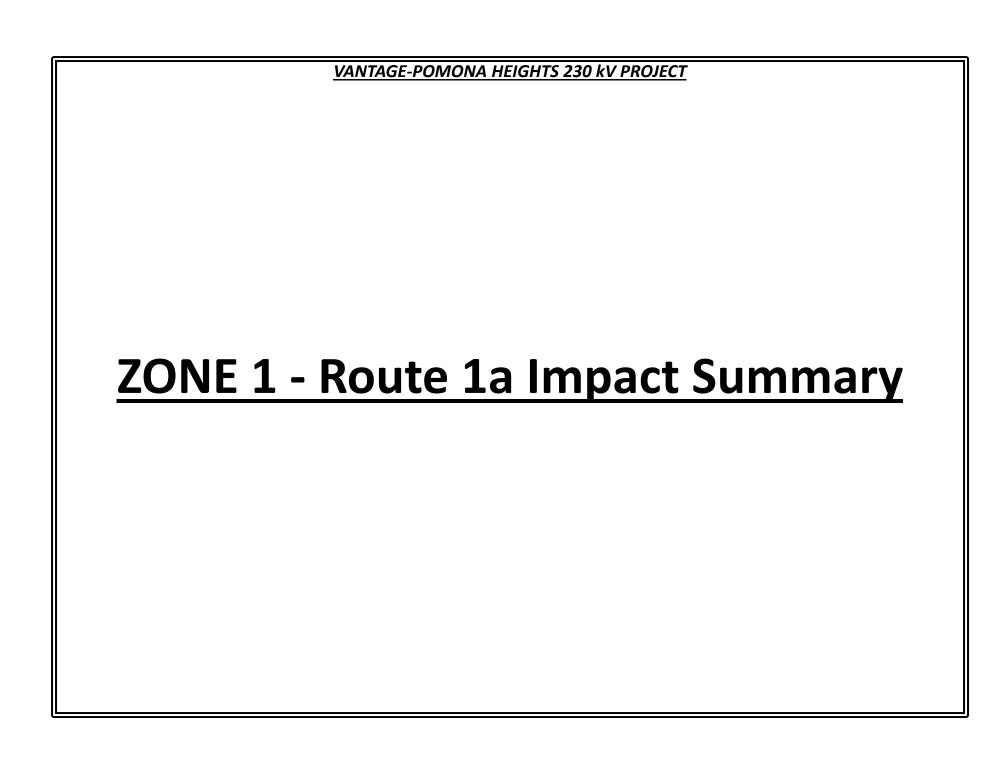
APPENDIX D DETAILED ROUTE IMPACT SUMMARIES AND ROUTE COMPARISONS

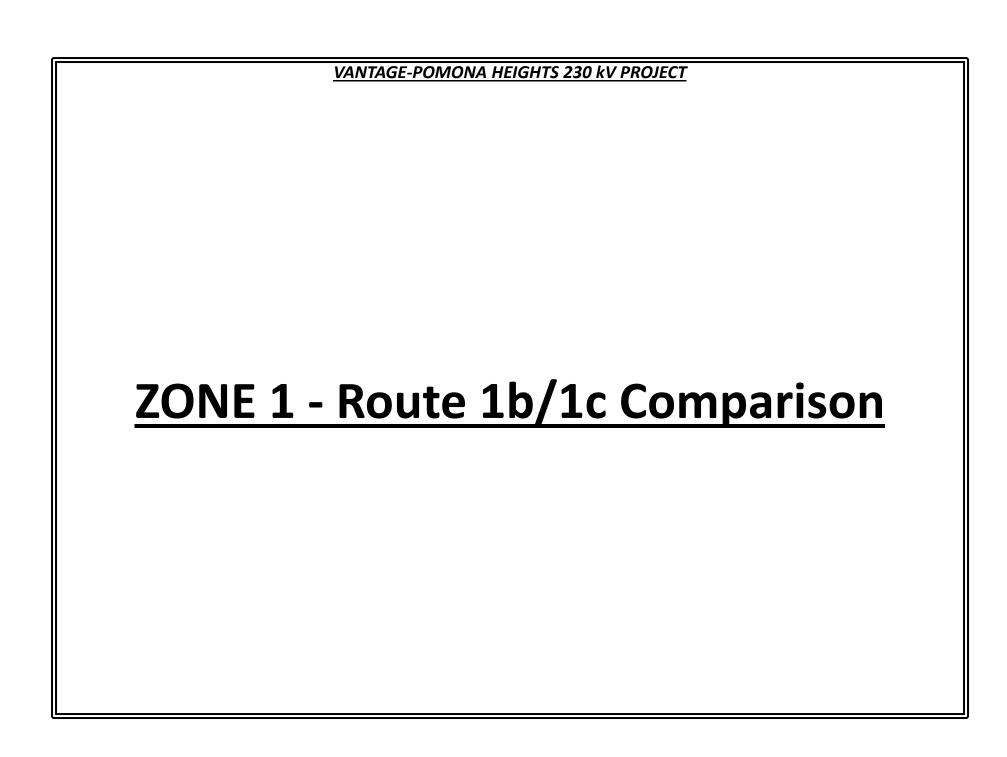


		Zone 1: Route	a Summary (2.2 mi. Length)					
Re	esource							
CI.		Jurisdiction (ml.)	Lar	Land Use. Recreation &Transportation Resources (mi.)				
흷		BLM:	0 Irrigated Agriculture:		0			
됩		JBLM-YTC:	0 # Center Pivots Cros		0			
잂		BOR:	0.3 Statewide Important	Farmland	0.1			
입		Total Federal Land Crossed:	0.3 (13.6%) Unique Farmland		1.8			
Transportation	Inventory	State:	0 Prime if Irrigated		0.1			
∞ಶ	Summary	Private:	2.0 (90.9%) Public (Fod (State))	Public (Fed./State) Lease Land (Oil/Gas/Grazing):				
되		Linear Features (mi.)	Public (Fed./State) L	ease Land (On/Gas/Grazing).	U			
Recreation,		Parallels Existing HVTL:	0 # Recreation Trails 0	Crossed:	0			
2		Within Designated Utility Corridor:	0 # Residences w/in 5	00':	63			
<u></u>		% of Federal Land crossed within Designated Corridor:	- # Parcels Crossed:		21			
			# Private Landowne	rs:	14			
35			# (State/Federal) High	ghway Crossings:	0			
Land Use		2.0 mile Moderate land use impact						
<u>[</u>	Impacts/ Key Issues	1.8 acres long-term disturbance to residential land uses Requires 0.9 miles new road construction						
	Rey Issues	CRP Land (potential LT impact, acres): 0						
		- Immediate foreground views from residences, - Crosses primarily resid	ential character areas - Existing transmission lines infras	structure in area - Generally weak landscape of	contrast			
	Inventory	primarily	influencing character	,				
0	Summary	- Strong to moderate/strong structure contrast						
Visual		- Moderate to moderately	trong project contrast					
>	Impacts/	2.3 miles High impact on residences						
	Key Issues	 0.5 miles High impact to moderately sensitive viewers Scenic views from residences toward background mountains and valleys affer 						

Resour	rce		201	ic i. Noute ia	Julilliary (2.2	iiii. Lenguij				
T	100			Habitat Tu		the Ductost Avec (2)				
			۲	erennial Grassland	144.5	Sagebrush/Pere				
				Riparian	5.2		Trees/Asper	1 0.7		
				Basalt Cliff/Rock	0					
			Sage Grouse Habitat (Acres	1						
			(Regularly Occupied)		3,816	Tier 3 (Occasional)	y Occupied)	0		0 0 0 0 0 Short Term % Disturbed win Project Area 0 0 0 0 <1 0 <1 0 0 <1 0 0 <1 0 0 NOT within 0.25 mile of
	nventory	Tier 4	(Expansion Habitat)		0					
s	Summary				Sage-Grouse L	eks and Observation	s			
Ì			Active or Inactive Leks (#)					PHS Histor	ic Leks (#)	
		V	Vithin 0.6 mile		0		Withi	n 0.6 mile		0
		v	/ithin 2.0 miles		0		Within	n 2.0 miles		0
		v	fithin 3.0 miles		0		Within	n 3.0 miles		Short Term % Disturbed wiin Project Area 0 0 0 0 1 0 <1 0 Short Term % Disturbed wiin Project Area 0.3% 0 0 0 s NOT within 0.25 mile of
					Observations (#)	Trees/Aspen 0.7 Tier 3 (Occasionally Occupied) 0 PHS Historic Leks (#) Within 0.6 mile 0 Within 2.0 miles 0 Within 3.0 miles 0 Within 3.0 miles 0 Sturbance to Habitat Short Term Urbed w/in Project Area Ac. Disturbed % Disturbed w/in Project 0				
						1988-2000		0		
					Disturba	nce to Habitat				
				Long Te						
		December 1	Ac. Disturbed		% Disturbed	w/in Project Area			% D	,
ر وي		Perennial Grassland Riparian	U			0		•		•
Wildlife		Riparian Basalt Cliff/Rock	0			0		0		0
Ξ.		Trees/Aspen	0			0		0		0
_,		Riparian	ů			0		0		0
		Sagebrush/Perennial Grassland	0.4			<1		2.2		<1
		Trees/Aspen	0			0		0		0
					sturbance to Sage	-Grouse Priority Hab	itats			
			A. District	Long Term	At District			4. 6.4.4.4		
In	mpacts/Key	Tier 1 (Regularly	Ac. Disturbed		% Disturbed	w/in Project Area		Ac. Disturbed	% D	isturbed w/in Project Area
	ssues	Occupied)	1.8		•	0.1%		9.7		0.3%
		Tier 3 (Occasionally	0			٥		0		
		Occupied)	U			U		U		U
- 1		Tier 4 (Expansion Habitat)	0			0		0		0
		Tidotaty		Est	imated Number o	New Structures Inst	talled			
			Total Number of Structures					lumber of New Struc	tures NOT within 0.25	mile of
								Existing Transi	mission Line	
		Na bassa astisa astasatisa labas	40					18		
		 No known active or inactive leks w Long- and short-term disturbance 		nd.						
		-0.5 miles of moderate impacts to		in.						
		-0.8 mile of moderate impacts to sa	age-grouse habitat.							
ı		-2.2 miles of low impacts to special	status species.							

Zone 1: Route 1a Summary										
	Resource		Route Se	gment 1a (2.2 mi. Length)						
		Vegetation Type Crossed (ml.)	1	Special Status & Priority Habitats Crossed (mi.)						
		Riparian	0	Habitat Suitability						
		Sagebrush/Perennial Grassland	0.5	Suitable	0.5					
	Inventory Summary	Trees (Aspen/Poplar)	0	Marginal	1.1					
	inventory outlinary		,	Special Status Plants & Communities Crossed (mi.)						
<u>6</u>			,	NHP Special Status Polygons	0					
<u>=</u>			,	Special Status Plants Found During Survey	0					
Vegetation				NHP Priority Plant Communities	s 0 y 0					
8		Long Term Disturbance to Riparian Vegetation	0	Moderate Impacts to General Vegetation (mi.)	0.5					
		Long Term Disturbance to Sagebrush/Perennial Grassland	0.4	Moderate Impacts to Special Status Plant Species and their Habitat (mi.)	0.5					
	Impacts/Key Issues				1.3					
	,,	Long Term Disturbance to Trees (Aspen/Poplar)	0	Overall Long Term Impacts to All Vegetation (acres long term disturbance)						
		No known special status plants within 1 mile.								

		7	Zone 1: F	Route 1a Summa				
Re	source			Route Segmen	t 1a (2.2 mi. Length)			
Cultural	Inventory Summary	Cultural Resort Districts Archeological Sites Isolated Finds Architectural Resources Total Cultural Resources National Register Status of Sites	eurces within 75-feet of Centerlines Eligible Not Eligible Unevaluated	0 0 0 0 0 0	Cultural Resour Districts Archeological Sites Isolated Finds Architectural Resources Total Cultural Resources National Register Status of Sites	rces within 250-feet of Centerlines Eligible Not Eligible Unevaluated	0 0 0 0 0 0	
	Impacts/ Key Issues	Very limited previous surveys conduction. No land within 250 feet of route previous racheological resources, if present, if No resources likely to be visually sending the properties of the resources expected to	ously surveyed. kely to be located along drainages. sitive within 250 feet					
Other Resources (Water, Wetlands, Soils & Geology)	Inventory Summary	Intermittent Stream/Gully 100-year floodplain Total Miles of Water Resource (Long Total Acres of Water Resource (Long Perennial Streams Total Miles of Water Resource (Long Total Acres of Water Resource (Long To	ng Term) Disturbance 0 High Water erodibility (mi. crossed) High Water erodibility (ac. long-term disturbance) ng Term) Disturbance 0 Low reclamation potential (ac. long-term disturbance) ng Term) Disturbance 0					
Other Issu	Impacts/ Key Issues	2.2 miles Low Impact to Water Res 1.8 acres of long-term disturbance or 1.6 acres long term disturbance on h 0.1 acre long term disturbance on mo	moderate wind erosion soils gh water erosion soils					
Total Sho	rt-Term Groun	d Disturbance (ac.)			10.17			
Total Lon	g-Term Ground	d Disturbance (ac.)			1.78			
Engineeri	ng & Costs				nillion Total construction cost (w/ou stures (Single wood pole construction			
Overall K	ey Issues		 Mostly private land, 0.3 mi. B Moderate residential land use 2.3 mi. High visual impact on Small amount of Sagebrush-I 1.8 ac. Tier 1 Sage-Grouse Pr 	e impacts residences Perennial Grass				



				ZONE 1:Route 1b	/1c Com	parison			
Re	source	Rou	te Segment 1b (12.5 mi. Length)		Route Se	gment 1c (12	2.9 mi. Length)	
Land Use, Recreation, & Transportation	Inventory Summary	Jurisdiction (n BLM: JBLM-YTC: BOR: Total Federal Land Crossed: State: Privale: Linear Features: Parallels Existing HVTL: Within Designated Utility Corr % of Federal Land crossed Designated Corridor:	0 12.5 0 12.5 (100%) 0 0.0 0.0 0.0 0.0	Land Use, Recreation & Transg Resources (mi.) Irrigated Agriculture: # Center Pivots Crossed: Statewide Important Farmland Unique Farmland Prime if Irrigated Public (Fed./State) Lease Land (Oil/Gas/Grazing): # Recreation Trails Crossed: # Residences w/in 500': # Parcels Crossed: # Private Landowners:	0 0 1.5 0.1 6.0 0 0 2 3 2	Jurisdiction (mi.) BLM: JBLM-YTC; BOR: Total Federal Land Crossed: State: Private: Linear Features (mi.) Parallels Existing HVTL: Within Designated Utility Corridor: % of Federal Land crossed within Designated Corridor:	0 0 0 1.0 (7.8%) 11.9 (92.2%) 0 0	Land Use, Recreation & Transportat Resources (mi.) Irrigated Agriculture: # Center Pivots Crossed: Statewide Important Farmland Unique Farmland Prime if Irrigated Public (Fed./State) Lease Land (Oil/Gas/Grazing): # Recreation Trails Crossed: # Residences w/in 500': # Parcels Crossed: # Private Landowners:	0.4 0 0 0.1 0
Land Use,	Impacts/ Key Issues	12.6 miles <i>Moderate</i> land use 11.2 acres long-term disturbar uses - Lower impacts on resident	ice to military land	# (State/Federal) Highway Crossings: - Requires 5.8 miles new road or (Not Utilizing JBLM-YTC Roads - CRP Land (potential LT impact -Lower Impacts on agriculture	s) , acres): 0	O.1 mile High land use impact 2.1 miles Moderate land use impact 19.0 acres long-term disturbance to resid 0.3 acres long-term disturbance to irrigate 1.5 acres long-term disturbance to dryland - Higher impacts on residential land use	d agriculture d agriculture	# (State/Federal) Highway Crossings: Requires 8.3 miles new road constr (Not Utilizing JBLM-YTC Roads) - CRP Land (potential LT impact, acr -Higher impacts on agricultural land us	res): 0
	Comparison Inventory Summary	Higher impacts on military Sensitive viewers Foreground and middleground Some immediate foreground Crosses primarily Class C soc Some residential character ar No existing transmission lines	land uses d views from residence views from residence enery ad industrial characte	s r areas	struction	Lower impact on military land uses Sensitive viewers Immediate foreground/foreground and m Crosses primarily Class C scenery Some residential character, agricultural of the existing transmission lines or similar.	character and ind	- Requires more road construction rs from residences, primarily	
Visual	Impacts/ Key Issues	2.8 miles <i>High</i> impact on resid 0.5 miles <i>High</i> impact to mode 10.0 miles <i>Moderate</i> impact or	rately sensitive viewe	Generally weak lands contrast Strong structure contr Moderate to moderate project contrast	ast	6.2 miles <i>High</i> impact on residences 0.2 miles <i>High</i> impact on moderately sent 10.2 miles <i>Moderate</i> impact on scenic qu		Generally weak to moderate landscap contrast Strong structure contrast Moderate to strong project contrast	oe
	Summary Comparison	Reduced visual impacts on re Further from sensitive viewers Lower landscape contrast due	5	lding		Higher visual impacts on residences Scenic views from residences toward ba Stronger landscape contrast due to incre			

					ZONE 1:Rou	te 1b/1c Compa	rison				
Res	ource		Route Segn	nent 1b (12.5 r	ni. Length)			Route Segm	nent 1c (12.9 m	ii. Length)	
		Hab	oitat Types (Acres)	within the Projec	t Area (2 mile corrido	r)	Hab	itat Types (Acres)	within the Project	Area (2 mile corrido	r)
		Basalt Cliff/Rock		0	Sagebrush/Perennial Grassland	5,147	Basalt Cliff/Rock			gebrush/Perennial assland	4,701.9
		Perennial Grassland		3,688.2	Trees/Aspen	1.4	Perennial Grassland		3,399.3 Tre	es/Aspen	1.4
		Riparian		61.0			Riparian		60.2		
		Sage Gr	rouse Habitat (Acres)			Sage Grou	Sage Grouse Habitat (Acres)			
	Inventory	Tier 1 (Regularly Occup	pied)	17,046	Tier 3 (Occasionally Occupied)	820	Tier 1 (Regularly Occupi	ed)	16,837 Tie	er 3 (Occasionally Occ	cupied) 1,519
	Summary	Tier 4 (Expansion Habit	at)	0			Tier 4 (Expansion Habita	ıt)	0		
			Sage-Gro	use Leks and Ob	servations			Sage-Grou	se Leks and Obse	rvations	
		Active or Inactive Leks	<u>(#)</u>		PHS Historic Leks (#)	!	Active or Inactive Leks (#)		PHS	Historic Leks (#)	
		Within 0.6 mile		0	Within 0.6 mile	1	Within 0.6 mile		0 With	in 0.6 mile	0
	Within 2.0 miles 2 With Within 3.0 miles 2 With Observations (#) 200 198 Disturbance to Habitat Long Term Ac. Disturbed Win Project Area Basalt Cliff/Rock 0 0 0 0	Within 2.0 miles	2	Within 2.0 miles		2 With	in 2.0 miles	2			
		Within 3.0 miles		2	Within 3.0 miles	4	Within 3.0 miles		2 With	in 3.0 miles	3
		Observa	ations (#)		2001-2011	13	Observation	ns (#)			10
					1988-2000	7					7
										d Tam	
						% Disturbed w/in			g Term % Disturbed w/ii	1988-2000 ance to Habitat sm Short Tem 5 Disturbed w/in Project Area 0 0 0 0 <1 3.7 <1 0 0 0 <1 11.3 <1 0 0 0	
			Ac. Disturbed		Disturbed	Project Area		Ac. Disturbed	Project Area	Ac. Disturbed	Project Area
an.					0	0	Basalt Cliff/Rock	0	0	0	0
≝		l		-		<1	Perennial Grassland	2		Short Term % Disturbed w Project Area 0	
₿			-	0	0	0		0	0	0	0
>	Basalt Cliff/Rock	11.3	<1								
		Trees/Aspen				29	Trees/Aspen			*	0
					•		Disturbance to Sage-Grouse Priority Habitats				
	Impacts/Key		Lon	g Term		rt Term	Long Term Short Term				
	Issues		Ac. Disturbed	% Disturbed w/i Proiect Area	n Ac. Disturbed	% Disturbed w/in Project Area		Ac. Disturbed	% Disturbed w/ii Project Area	Ac. Disturbed	% Disturbed w/in Project Area
		Tier 1 (Regularly	11.3	0.1%	46.6	0.3%	Tier 1 (Regularly	22.5	0.1%	46.0	0.3%
		Occupied)	11.3	U. 170	40.0	U.37a	Occupied)	22.5	U. 1%	40.0	U.37o
		Tier 3 (Occasionally Occupied)	0	0	0	0	Tier 3 (Occasionally Occupied)	0.6	< 0.1%	1.8	0.1%
		Tier 4 (Expansion					Tier 4 (Expansion				
		Habitat)	0	0	0	0	Habitat)	0	0	0	0
				ber of New Struc					ber of New Structi		
		Total Number of Structures	Estimated N		uctures NOT within 0.2 ensmission Line	25 mile of	Total Number of Structures	Estimated		uctures NOT within 0 nsmission Line	25 mile of
		89			85		92			38	
		-Same number of active					-Same number of active/	inactive leks within 2			
		-Similar long-term impac		sland and sagebru	sh/perennial grassland	l.	-Similar long-term impac		sland and sagebrus	h/perennial grassland	
	Summary	 -More long-term impacts -Less long-term impacts 		hitat Similar short	term impacts to Tier 1	Hahitat	-No long- or short-term impacts to aspen.				1 Priority Habitat
	Comparison	-No impacts to Tier 3 Pr		Diat. Omiliai Silon	Commission to Hell I	i rabitat.	 -More long-term impacts to Tier 1 Priority Habitat. Similar short-term impacts to Tier 1 Priority Habitat. -More short- and long-term impacts to Tier 3 Priority Habitat. 				Aony Fabilia.
		-3.5 miles of moderate			n 1 mile).		-3.2 miles of moderate impacts to nesting burrowing owls (w/in 1 mile).				
		-5.4 miles of moderate -3.2 miles of moderate			Area for long hilled our	dow (w/in 1 mile)	-3.1 miles of moderate in -0.1 miles of moderate in			rea for long billed our	daw (w/in 1 mile)
		-0.2 IIIIICS OF INOUCIALE	impacis io a riionity	opedes regional	Area for long-billed cur	-0.1 Hilles of Houerate II	iipavis iu a mionily	opeules Regional F	rea for long-billed cul	icw (w/iii i filile).	

					ZONE 1:Route 1b/1c C	ompa	rison				
Res	ource	Ro	ute Segment	1b (12.5	i mi. Length)		Rout	te Seç	ment 1c	(12.9 mi. Length)	
		Vegetation Type Crossed (mi.)					Vegetation Type Crossed (mi.)			
		Riparian		0			Riparian		0		
		Sagebrush/Perennial Grassland		6.3			Sagebrush/Perennial Grassland		3.1		
	Inventory	Trees (Aspen/Poplar)		0.1			Trees (Aspen/Poplar)		0		
	Summary	Spec Habitat Suitability		_	ats Crossed (mi.) atus Plants & Communities Crossed (r	mi.)	Spe Habitat Suitability	cial Sta		ity Habitats Crossed (mi.) Special Status Plants & Communities Cro	ossed (mi.)
		Suitable	6.3		NHP Special Status Polygons	0	Suitable	3.2		NHP Special Status Polygons	0
		Marginal	5.1	Special	Status Plants Found During Survey NHP Priority Plant Communities	0.4 0	Marginal	8.5	Specia	al Status Plants Found During Survey NHP Priority Plant Communities	0
Vegetation		Long Term Disturbance to Ripari (acres)	ian Vegetation	0	Moderate Impacts on General Vegetation (mi.)	6.4	Long Term Disturbance to Riparian Vegetation		0	Moderate Impacts on General Vegetation (ml.)	3.1
Keg	Impacts/ Key Issues	Long Term Disturbance to Sagel Grassland (acres)	brush/Perennial	5.1	Moderate Impacts on Special Status Species (mi.)	6.4	Long Term Disturbance to Sagebrush/Perennial Grassland		5.9	Moderate Impacts on Special Status Species (mi.)	3.2
		Long Term Disturbance to Trees acres)	(Aspen/Poplar;	0.1	Overall Long Term Impacts to All Vegetation (acres long term disturbance)	10.5	Long Term Disturbance to Trees (Aspen/Poplar)		0	Overall Long Term Impacts to All Vegetation (acres long term disturbance)	22.2
	Summary Comparison	- Similar long-term disturbance to sagebrush/perennial grassland More long-term disturbance to trees (aspen) Lower overall disturbance to ALL vegetation types combinedSpecial status plants identified during plant survey (Nuttall's sandwort; hedgehog cactus)Hoover's tauschia is known to occur within 1 mileMore miles with moderate impacts to special status plants and potential habitat						vegetand during withing to ge	ation types on ng survey; h n 1 mile. eneral vegeti	owever most of the route is non-federal	land and

			ZONE 1:Route 1b/1c Com	parison	1			
	Resource	Route Segment 1	b (12.5 mi. Length)		Route Se	gment 1c	(12.9 mi. Length)	
		Cultural Resources wit	hin 75-feet of Centerlines		Cultural Res	ources with	nin 75-feet of Centerlines	
		Districts 0	National Register Sites		Districts	0	National Register Sites	
		Archeological Sites 0	Eligible	0	Archeological Sites	0	Eligible	0
		Isolated Finds 0	Not Eligible	0	Isolated Finds	0	Not Eligible	0
		Architectural Resources 0	Unevaluated	0	Architectural Resources	0	Unevaluated	0
Cultural Resources	Inventory Summary	Total Cultural Resources	0		Total Cultural Resources		0	
	inventory Summary	Cultural Resources with	nin 250-feet of Centerlines		Cultural Res	ources withi	in 250-feet of Centerlines	
l se		Districts 0	National Register Sites		Districts	0	National Register Sites	
≝		Archeological Sites 0	Eligible	0	Archeological Sites	0	Eligible	0
밀		Isolated Finds 0	Not Eligible	0	Isolated Finds	0	Not Eligible	0
릨		Architectural Resources 0	Unevaluated	0	Architectural Resources	0	Unevaluated	0
히		Total Cultural Resources	0		Total Cultural Resources		0	
1	Impacts/	 No previous surveys conducted within 75' of r Archeological resources, if present, likely to be 	oute.		No previous surveys conducted with a special research.			
	Key Issues	No resources likely to be visually sensitive with	hin 250 feet		 Archeological resources, if present, No resources likely to be visually se 			
	,	- Impacts to all resources expected to be Low.			- Impacts to all resources expected to be Low .			
	Summary Comparison	 Cultural resources not likely to be a factor in re Similar to Route 1c 	oute selection.		 Cultural resources not likely to be a Similar to Route 1b 	factor in rou	ute selection.	
		Water Resources (mi. crosses)			Water Resources (mi. crosses)			
		Intermittent Stream/Gully 0.8	Perennial Streams	0.3	Intermittent Stream/Gully	0	Perennial Streams	0.4
		100-year floodplain 0.0		0.0	100-year floodplain	0)	0.4
l		Total Miles of Water Resource (Long Term) Distu			Total Miles of Water Resource (Long 1			
		Total Acres of Water Resource (Long Term) Dist Geologic Resources	urbance 1.3 acres		Total Acres of Water Resource (Long Geologic Resources	Term) Distur	rbance 2.9 acres	
3	Inventory Summary		Managed Lands Ede (LEGE LISTS of	4.0			M M A.P.L. M.P.L. M	
		30% Slope or greater crossed (mi.) 0.8	Mapped Landslide (High Hazard)	1.0	30% Slope or greater crossed (mi.)	0.3	Mapped Landslide (High Hazard)	1.7
ျှင်		Soil Resources			Soil Resources			
Other Resources Water, Wetlands, Soils & Geology)		High Water erodibility (mi. crossed) 4.8	High Water erodibility (ac. long-term disturbance)	5.0	High Water erodibility (mi. crossed)	4.4	High Water erodibility (ac. long-term disturbance)	7.1
S So		Low reclamation potential (ac. long-term disturbance)	4.8		Low reclamation potential (ac.	long-term sturbance)	5.9	
and;		Moderate Impact to Water Resources (mi.)	0.1		Moderate Impact to Water Resources		0.2	
		Total Acres of Water Resources Disturbed	1.3		Total Acres of Water Resources Distu	rbed	2.9	
5	Impacts/	High impacts to soils in areas of high water			High impacts to soils in areas of high		2.0	
Vat	Key Issues	erosion potential and low reclamation potential	2.3		erosion potential and low reclamation		0.9	
2		(mi.)		•	(mi.)			.
		 Long term disturbance to Kittitas Canyon Creel perennial streams 		5	Long term disturbance to Kittitas Ca perennial streams	nyon Creek,	Washout Gulch, 7 intermittent streams,	4
		- Slightly lower impact to water resources, cross			- Slightly higher impact to water reso			
	Summary Comparison	 More miles of High impact from due to high er Crosses less mapped landslide areas 	rosion potential-low reclamation potential		Fewer miles of <i>High</i> impact from due to high erosion potential-low reclamation potential Crosses more mapped landslide areas			
		- Crosses more steep slopes			Crosses fewer steep slopes	unau/		

	ZONE 1:Route 1b/1c Comparison	
	Route Segment 1b (12.5 mi. Length)	Route Segment 1c (12.9 mi. Length)
Other Issues		
Total Short-Term Ground Disturbance (ac.)	46.63	47.80
Total Long-Term Ground	11.27	23.09
Disturbance (ac.)		
Engineering & Costs	\$3.28 million total construction cost (w/out ROW)	\$3.50 million total construction cost (w/out ROW)
Engineering & costs	89 Structures (H-frame wood pole construction typical)	92 Structures (H-frame wood pole construction typical)
	- Less long-term ground disturbance due to reduced road construction	Constant on the second district on the fact of the second on the
	- Follows existing roads generally causing reduced ground	- Greater long-term ground disturbance due to increased road construction
	disturbance and overall impacts	- Longer route & More structures
	- Shorter route & Fewer Structures	- Reduced potential impact to military training operations
	- Lower Construction and ROW acquisition costs due to single (military) ownership	- Higher land use and visual impacts on private landowners
	- Potential for impacts to military training operations on YTC	- Increased construction and ROW acquisition costs
Overall Key Issues &	- Reduced land use and visual impacts on private landowners	- Potential impact to Unique Farmland
Comparison	- Lower impacts to Sagebrush/Perennial Grassland habitat	- Higher impact to Sagebrush/Perennial Grassland habitat
	- Higher impact to trees (aspen)	- No impact to trees
	- Similar potential cultural impacts	- More impact to Tier 1 Sage-Grouse Priority habitat
	- Lower impacts to water resources & fewer stream crossings	- Higher water resource impacts
	- Higher impacts on soils	- Lower soils impacts
	- Less mapped landslide area crossed	- Crosses more mapped landslide area
	- Crosses fewer steep slopes	- Crosses fewer steep slopes

VANTAGE-POMONA HEIGHTS 230 kV PROJECT **ZONE 2 - Route 2a/2d Impact Summary**

	ZONE 2:Route 2a/2d Summary Resource Route Segment 2a (1.0 mi. Length) Route Segment 2d (7.0 mi. Length)											
	Resource	Route Segn	nent 2a (1.			Route Se	egment 2d (7.	.0 mi. Length)				
		Jurisdiction (mi.)		Land Use, Recreatio <u>&Transportation Reso</u> (mi.)		Jurisdiction (mi.)		Land Use, Recreation & Transportation Resources (mi.)				
		BLM:	0	Irrigated Agriculture:	0	BLM:	1.0	Irrigated Agriculture:	0			
 El		JBLM-YTC:	0	# Center Pivots Crossed:	0	JBLM-YTC:	0	# Center Pivots Crossed:	0			
& Transportation		BOR:	0	Statewide Important Farmland	0.2	BOR:	0	Statewide Important Farmland	0.1			
spor		Total Federal Land Crossed:	0	Unique Farmland	0.4	Total Federal Land Crossed:	1.0 (14.3%)	Unique Farmland	2.3			
l E		State:	0	Prime if Irrigated	0	State:	0	Prime if Irrigated	0.1			
 	Inventory Summary	Private:	1.0 (100%)			Private:	6.0 (85.7%)	1				
		Linear Features (mi.)		Public (Fed./State) Lease Land (Oil/Gas/Grazing):	0	Linear Features (mi.)		Public (Fed./State) Lease Land (Oil/Gas/Grazing):	0.8			
Land Use, Recreation,		Parallels Existing HVTL:	0	# Recreation Trails Crossed:	0	Parallels Existing HVTL:	0	# Recreation Trails Crossed:	0			
6 €		Within Designated Utility Corridor:	0	# Residences w/in 500':	0	Within Designated Utility Corridor:	0	# Residences w/in 500':	0			
d Use		% of Federal Land crossed within Designated Corridor:	-	# Parcels Crossed:	5	% of Federal Land crossed within Designated Corridor:	-	# Parcels Crossed:	13			
<u>e</u>				# Private Landowners:	2			# Private Landowners:	3			
-"				# (State/Federal) Highway Crossings:	0			# (State/Federal) Highway Crossings:	0			
	Impacts/	1.0 mile Low land use impact		- Requires 0.8 miles new	road			- Requires 6.2 miles new road constru	uction			
	Key Issues	CRP Land (potential LT impact, acres	s): 0	construction		6.8 mile Low land use impact		- CRP Land (potential LT impact, acre	es): 0.3			
		- Middleground views from residence	s			Background views from residences Foreground views from the Columbia Rive	er					
Visual	Inventory Summary	- Crosses Class C scenery - No existing transmission lines or sin	nilar infrastruc	ture		Crosses primarily Class C scenery Also crosses Class B scenery along Colur No existing transmission lines or similar in						
	Impacts/ Key Issues	0.1 miles <i>High</i> impact on residences 0.2 miles <i>Moderate</i> impact to moderate sensitive viewers.	ately	Weak to moderate landscape contrast Strong structure contrast	е	1.9 miles <i>Moderate</i> impact on residences 2.2 miles <i>Moderate</i> impact on moderately services.	sensitive	Generally moderate to strong landsca contrast Strong structure contrast	pe			
	Ney issues	1.0 mile <i>Moderate</i> impact on scenic		- Strong/moderate project con	trast	3.1 miles <i>High</i> impact on scenic quality		- Strong to moderate project contrast				

					ZONE 2:Ro	ute 2a/2d Summ	nary				
Res	ource		Route Segr	ment 2a (1.0 m	ii. Length)			Route Seg	ment 2d (7.0 mi.	Length)	
		Hab	itat Types (Acres)	within the Project	Area (2 mile corridor	r)	Hab	itat Types (Acres)	within the Project A	rea (2 mile corrido	or)
		Basalt Cliff/Rock		0	Sagebrush/Perennial Grassland	745.2	Basalt Cliff/Rock		5.3 Sagebro	ush/Perennial Gras	sland 9,960
		Perennial Grassland		184.0	Trees/Aspen	0	Perennial Grassland		503.6 Trees/A	spen	0.2
		Riparian		41.4			Riparian		0.3		
		Sage	Grouse Habitat				Sage Gr	ouse Habitat			
	Inventory	Tier 1 (Regularly Occupi	ied)	2,829.0	Tier 3 (Occasionally Occupied)	422.9	Tier 1 (Regularly Occupio	ed)	9,984.3 Tier 3 (0	Occasionally Occup	sied) 890
	Summary	Tier 4 (Expansion Habita		0			Tier 4 (Expansion Habita	t)	0		
			Sage-Gro	use Leks and Obs	servations			Sage-Grou	ise Leks and Observ	ations	
		Active or Inactive Leks (#)			PHS Historic Leks (#)		Active or Inactive Leks (#	<u>£)</u>	PHS H	listoric Leks (#)	
		Within 0.6 mile		0	Within 0.6 mile	0	Within 0.6 mile		0 Within	0.6 mile	0
		Within 2.0 miles		0	Within 2.0 miles	0	Within 2.0 miles			2.0 miles	0
		Within 3.0 miles		0	Within 3.0 miles	0	Within 3.0 miles			3.0 miles	0
		<u>Observat</u>	tions (#)		2001-2011	0	Observatio	ns (#)	2001-2		1
					1988-2000	0			1988-2	2000	0
				turbance to Habita a Term		rt Term			turbance to Habitat	O.	
				% Disturbed w/ir		% Disturbed w/in			ng Term % Disturbed w/in		ort Term % Disturbed w/in
			Ac. Disturbed	Project Area	Disturbed	Project Area		Ac. Disturbed	Project Area	Ac. Disturbed	Project Area
Wildlife		Basalt Cliff/Rock	0	0	0	0	Basalt Cliff/Rock	0	0	0	0
릴		Perennial Grassland	0.2	<1	0.4	<1	Perennial Grassland	0	0	2.6	<1
≥		Riparian	0	0	0	0	Riparian	0	0	0	0
		Sagebrush/Perennial Grassland	0	0	0	0	Sagebrush/Perennial Grassland	12.7	<1	21.3	<1
		Trees/Aspen	0	0	0	0	Trees/Aspen	0	0	0	0
				Sage-Grouse Price			Disturbance to Sage-Grouse Priority Habitats				
			Long Term		Short Term			Long Term		Short Term	
	Impacts/Key		Ac. Disturbed	% Disturbed w/ir Project Area	n Ac. Disturbed	% Disturbed w/in Project Area		Ac. Disturbed	% Disturbed w/in Project Area	Ac. Disturbed	% Disturbed w/in Project Area
	Issues	Tier 1 (Regularly Occupied)	2.1	0.1%	4.0	0.1%	Tier 1 (Regularly Occupied)	15.3	0.2%	26.5	0.3%
		Tier 3 (Occasionally Occupied)	0	0	0	0	Tier 3 (Occasionally Occupied)	0	0	0	0
		Tier 4 (Expansion Habitat)	0	0	0	0	Tier 4 (Expansion Habitat)	0	0	0	0
		Transferry	Estimated Num	ber of New Struct	ures Installed		Trashary	Estimated Num	ber of New Structure	es Installed	
		Total Number of	Estimated N		uctures NOT within 0.2	5 mile of	Total Number of	Estimated	Number of New Struc	tures NOT within 0	.25 mile of
		Structures			nsmission Line		Structures		Existing Transi		
		7			7		50	-11111	50		
	-No known active or inactive leks within 0.6, 2 or 3 miles.					 One known active or inal -Long- and short-term dis 				tion of PDFs.	
		-No impacts to sagebrus					-Moderate impacts for 5.			ilius.	
		-1.0 mile of low impacts					-Moderate impacts for 0.			a for chukar (w/in 1	mile).
		-1.0 mile of low impacts					-Moderate impacts to 5.8	miles of sage grou	ise habitat.	,	
							-Moderate impacts to 4.5	miles of nesting ra	ptors (ferruginous ha	wk and prairie falco	n; w/in 1 mile).

			ZONE 2:Route 2a/2d Summar			
	Resource	Route Segm	ent 2a (1.0 mi. Length)	Route Segm	ent 2d (7.0 mi. Length)	
		Vegetation Type Crossed (mi.)		Vegetation Type Crossed (mi.)		
		Riparian	0	Riparian	0	
		Sagebrush/Perennial Grassland	0	Sagebrush/Perennial Grassland	5.6	
		Trees (Aspen/Poplar)	0	Trees (Aspen/Poplar)	0	
	Inventory Summary	Special Status &	Priority Habitats Crossed (mi.)	Special Status	& Priority Habitats Crossed (mi.)	
		<u>Habitat Suitability</u>	Special Status Plants & Communities Crossed (mi.)	Habitat Suitability	Special Status Plants & Communities Crossed (mi.)	
 		Sultable 0	NHP Special Status Polygons 0	Suitable 5.6	NHP Special Status Polygons 2.1	
Vegetation		Marginal 1.0	Special Status Plants Found During 0 Survey	Marginal 1.4	Special Status Plants Found During 0.6 Survey	
Š			NHP Priority Plant Communities 0		NHP Priority Plant Communities 0	
		Long Term Disturbance to Riparian Vegetation	Low Impacts on General 0 Vegetation (mi.) 1.0	Long Term Disturbance to Riparian Vegetation 0	Moderate Impacts on General Vegetation (mi.) 5.2	
	Impacts/	Long Term Disturbance to Sagebrush/Perennial Grassland	Low Impacts on Special Status 0 Species (mi.) 1.0	Long Term Disturbance to Sagebrush/Perennial Grassland	Moderate Impacts on Special Status Species (mi.) 6.8	
	Key Issues	Long Term Disturbance to Trees (Aspen/Poplar)	Overall Long Term Impacts to All Vegetation (acres long term disturbance) 2.1	Long Term Disturbance to Trees (Aspen/Poplar)	Overall Long Term Impacts to All Vegetation (acres long term disturbance)	
				-Special status plants identified during plant s -Awned halfchaff sedge is known to occur wi		

				ZONE 2:Route 2a/2d Sur	nmary				
F	Resource	Route Segm	ent 2	a (1.0 mi. Length)		Route Se	egment :	2d (7.0 mi. Length)	
		Cultural Resource	es withi	in 75-feet of Centerlines		Cultural Res	ources wi	thin 75-feet of Centerlines	
		Districts	0	National Register Sites		Districts	0	National Register Sites	
		Archeological Sites	0	Eligible	0	Archeological Sites	1	Eligible	0
		Isolated Finds	0	Not Eligible	0	Isolated Finds	0	Not Eligible	0
		Architectural Resources	0	Unevaluated	0	Architectural Resources	0	Unevaluated	1
81	Inventory Summary	Total Cultural Resources		0		Total Cultural Resources		1	
Cultural Resources		Cultural Resource	es withir	250-feet of Centerlines		Cultural Res	sources wit	hin 250-feet of Centerlines	
<u> </u> 8		Districts	0	National Register Sites		Districts	0	National Register Sites	
اق		Archeological Sites	0	Eligible	0	Archeological Sites	1	Eligible	0
<u>ia</u>		Isolated Finds	0	Not Eligible	0	Isolated Finds	0	Not Eligible	0
🛱		Architectural Resources	0	Unevaluated	0	Architectural Resources	0	Unevaluated	1
흥		Total Cultural Resources	Total Cultural Resources 0					1	
	Impacts/ Key Issues	No previous surveys conducted within 7 Archeological resources, if present, likel No resources likely to be visually sensiti Impacts to all resources expected to be	ly to be ive withi	located along drainages. n 250 feet		- Limited surveys within one mile 9 sites recorded within one mile (or side of Columbia River) Sites include lithic scatters - Reported burial site within 0.25 mile Potential disturbance to Hanford Gi (Chicago, Milwaukee, & St. Pa Railroad) causing High physic	e rade ul	- 3.2% land within 250 feet surveyed - Burial site may be visually sensitive - Wanapum Village site of special con (2.3 mi. from route) - Impacts to all resources expected to to High Crosses property of special concern	
(АВО		Water Resources (mi. crosses) Intermittent Stream/Gully 0.1 100-year floodplain 0 Total Miles of Water Resource (Long Term Total Acres of Water Resource (Long Term) Distur		0	Water Resources (mi. crosses) Intermittent Stream/Gully 100-year floodplain Total Miles of Water Resource (Long Total Acres of Water Resource (Long	Term) Distu		0
8	Inventory Summary	Geologic Resources				Geologic Resources			
S 8	inventory Summary	30% Slope or greater crossed (mi.) 0		Mapped Landslide (High Hazard)	0	30% Slope or greater crossed (mi.)	0.9	Mapped Landslide (High Hazard)	1.9
Other Resources Wetlands, Soils & Geology)		Soil Resources High Water erodibility (mi. crossed) 1.0 Low reclamation potential (ac. long-term disturbance)	0	High Water erodibility (ac. long-term disturbance)	2.1	Soil Resources High Water erodibility (mi. crossed) Low reclamation potential (ac. long-ter disturbance)	4.7 rm	High Water erodibility (ac. long-term disturbance) 4.0	10.2
ठ ≶		Low Impact to Water Resources (mi.)		0.1		Moderate Impact to Water Resources	(mi.)	0.1	
(Water,		Total Acres of Water Resources Disturbed		0.1		Total Acres of Water Resources Distu	rhad	2.8	
(W	Impacts/ Key Issues	High impacts to soils in areas of high verosion potential and low reclamation pote (mi.)	water	0		High impacts to soils in areas of high erosion potential and low reclamation (mi.)	water	0	
		- Long term disturbance to Coyote Springs	Creek.			- Long term disturbance to Cold Cree	k and 12 ur	nnamed intermittent streams	

	ZONE 2:Route 2a/2d Summary	
	Route Segment 2a (1.0 mi. Length)	Route Segment 2d (7.0 mi. Length)
Other Issues		
Total Short-Term Ground Disturbance (ac.)	3.95	59.61
Total Long-Term Ground Disturbance (ac.)	2.06	35.72
Engineering & Costs	\$275,000 total construction cost (w/out ROW) 7 Structures (H-frame wood pole construction typical)	\$2.0 million total construction cost (w/out ROW) 50 Structures (H-frame wood pole construction typical)
Overall Key Issues	- Low land use impact - 0.1 miles High Visual impact on residences - 0.2 miles Moderate Visual impact to moderately sensitive viewers - 1.0 mile Moderate Visual impact on scenic quality - No impact to Riparian vegetation, Sagebrush/Perennial Grassland or trees - 1.0 mile of LOW impact to General Vegetation - 1.0 mile of LOW impact to Special Status Plants and Communities - Impacts to all Cultural resources expected to be Low to Moderate - Low impacts to soils, water and geological resources	- Low land use impact - 1.9 miles Moderate Visual impact on residences - 2.2 miles Moderate Visual impact to moderately sensitive viewers - 3.1 mile High Visual impact on scenic quality - No impact to Riparian vegetation or trees - 12.7 acres impact on Sagebrush/Perennial Grassland - 5.2 mile of Moderate impact to General Vegetation - 6.8 mile of Moderate impact to Special Status Plants and Communities - 1 Lek within 3 miles - 1 Sage-Grouse observation 1988-2011 - 15.3 acres of disturbance in Tier 1 Priority Sage-Grouse Habitat - 15.2 acres of Long Term impact to All Vegetation - Impacts to all Cultural resources expected to be Low to High - 0.1 mile Moderate impacts to water resources
		- One cultural resource within 250'

VANTAGE-POMONA HEIGHTS 230 kV PROJECT ZONE 2 - Route 2b/2c Comparison

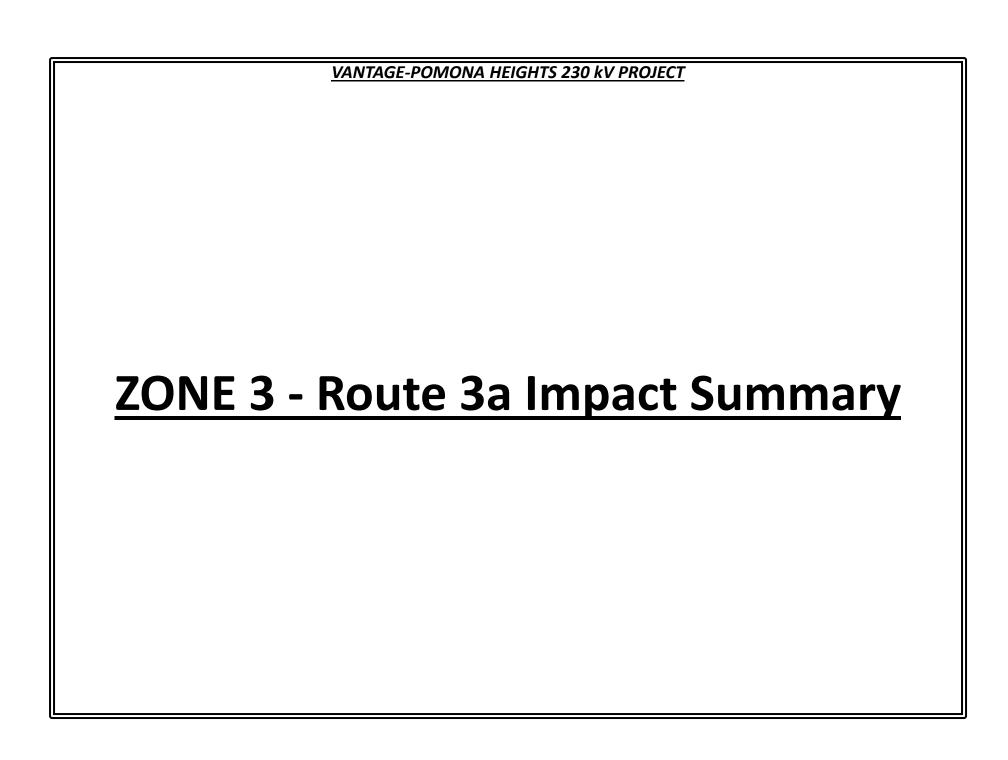
R	esource	Route Se	gment 2b (19	6.4 mi. Length)		Route 8	Segment 2c (1	8.1 mi. Length)	
		Jurisdiction (mi.)		Land Use, Recreation &Transport Resources (mi.)	rtation	Jurisdiction (n	ni.)	Land Use, Recreation & Transpo Resources (mi.)	ortation
		BLM:	0.7	Irrigated Agriculture:	0	BLM:	0	Irrigated Agriculture:	0.
		JBLM-YTC:	0	# Center Pivots Crossed:	0	JBLM-YTC:	0	# Center Pivots Crossed:	5
뒤	1	BOR:	0	Statewide Important Farmland	0.4	BOR:	0	Statewide Important Farmland	2.
崽		Total Federal Land Crossed:	0.7 (4.3%)	Unique Farmland	3.4	Total Federal Land Crossed:	0	Unique Farmland	6.
딍	1	State:	0	Prime if Irrigated	0.5	State:	1.0 (5.5%)	Prime if Irrigated	1.
S	Inventory	Private:	15.7 (95.7%)	Public (Fed./State) Lease Land	0.7	Private:	17.1 (94.5%)	Public (Fed./State) Lease Land	
등	Summary	Linear Features (mi.)		(Oil/Gas/Grazing/Ág):	0.7	Linear Features (m	1.)	(Oil/Gas/Grazing/Ag):	1.
E	1	Parallels Existing HVTL:	0	# Recreation Trails Crossed:	0	Parallels Existing HVTL:	8.6	# Recreation Trails Crossed:	0
~		Within Designated Utility Corridor:	0	# Residences w/in 500':	0	Within Designated Utility Corridor:	0	# Residences w/in 500':	1
ation		% of Federal Land crossed within Designated Corridor:	, -	# Parcels Crossed:	5	% of Federal Land crossed within Designated Corridor:	-	# Parcels Crossed:	44
20	1			# Private Landowners:	2	1		# Private Landowners:	8
8				# (State/Federal) Highway Crossings:	0			# (State/Federal) Highway Crossings:	(
Land Use, Recreation, & Transportation	Impacts/ Key Issues	16.4 miles Low land use impact 0 acres long-term disturbance to irrigated CRP Land (potential LT impact, acres): 4.	agriculture 8	- Requires 17.1 miles new construction	oad	0.5 mile <i>High</i> land use impact 2.5 miles <i>Moderate</i> land use impa 2.5 acres long-term disturbance to lead to the agriculture CRP Land (potential LT impact, acre	rigated	- Requires 11.3 miles new road construction	
	Summary Comparison	Lower impacts on agricultural and res uses Higher impacts on BLM lands	idential land	Higher potential impacts to CRP lan- Requires more new road construction Lower ROW acquisition costs		Higher impacts on agricultural residential land uses Potential Interference with center plvot irrigation Requires less road construction -More landowners and higher ROW acquisitio costs			
	Inventory Summary	Background or seldom-seen views from Crosses primarily Class C scenery	residences, prim	arily		Middleground and background view Immediate foreground and foreground some residential character, agricul	and views from so	me residences	
		- No existing transmission lines or similar	infrastructure			 Crosses primarily Class C scenery Parallels existing transmission line 		е	
Visua	Impacts/ Key Issues	0.1 miles <i>High</i> impact on residences 2.6 miles <i>Moderate</i> impact to moderately 14.6 miles <i>Moderate</i> impact on scenic quality.		Strong to moderate landscape Strong structure contrast Strong to strong/moderate procontrast Compliant with Interim VRM C	ect	0.7 miles <i>High</i> impact on residence 4.0 miles <i>Moderate</i> impact on mode sensitive viewers 8.7 miles <i>Moderate</i> impact on sceni	erately co	Senerally moderate to weak landscape ntrast Strong to moderate structure contrast Aoderate to strong project contrast	3
- Lower visual impacts on residences - Further from sensitive viewers - Further from sensitive viewers - Lower impacts on agricultural character areas - Higher impacts on agricultural character areas - Parallels existing facilities reducing proliferation					acter areas	ss landscape (scenic quality impacts)			

					ZONE 2:Rot	ute 2b/2c Compa	rison				
Res	ource		Route Segr	ment 2b (16.4 m	ni. Length)			Route Segr	ment 2c (18.1 mi.	Length)	
		Hat	oitat Types (Acres)	within the Project	Area (2 mile corride	or)	Habi	itat Types (Acres)	within the Project Ar	ea (2 mile corrido	r)
		Perennial Grassland		1,152	Sagebrush/Perennia Grassland	al 13,857	Perennial Grassland		412 Sagebru	sh/Perennial Grass	sland 6,968
		Riparian		0	Trees/Aspen	0	Riparian		0 Trees/As	spen	0
		Basalt Cliff/Rock		1.2			Basalt Cliff/Rock		0.3		
		<u>Sag</u>	e Grouse Habitat				Sage Gr	ouse Habitat			
	Inventory	Tier 1 (Regularly Occup	pied)	22,412.9	Tier 3 (Occasionally Occupied)	516.4	Tier 1 (Regularly Occupie	ed)	18,800.6 Tier 3 (C	occasionally Occup	ied) 6300.6
	Summary	Tier 4 (Expansion Habit	tat)	0			Tier 4 (Expansion Habita	t)	0		
			Sage-Gro	use Leks and Obs	ervations			Sage-Grou	ise Leks and Observ	ations	
		Active or Inactive Leks	(#)		PHS Historic Leks (#	<u>*)</u>	Active or Inactive Leks (#	1)	PHS H	istoric Leks (#)	
		Within 0.6 mile		-	Within 0.6 mile	0	Within 0.6 mile			0.6 mile	0
		Within 2.0 miles		2	Within 2.0 miles	0	Within 2.0 miles			2.0 miles	0
		Within 3.0 miles		2	Within 3.0 miles	0	Within 3.0 miles			3.0 miles	0
		Observa	ations (#)		2001-2011	4	Observation	ns (#)	2001-2		0
					1988-2000	1			1988-2	000	0
				sturbance to Habita ng Term		ort Term	Disturbance to Habitat Long Term Short Term				
				% Disturbed w/in		% Disturbed w/in			% Disturbed w/in		% Disturbed w/i
			Ac. Disturbed	Project Area	Disturbed	Project Area		Ac. Disturbed	Project Area	Ac. Disturbed	Project Area
		Basalt Cliff/Rock	0	0	0	0	Basalt Cliff/Rock	0	0	0	0
<u>:</u>		Perennial Grassland	1.6	0	2.5	<1	Perennial Grassland	0.1	<1	0.4	<1
Wildlife		Riparian Sagebrush/Perennial	0	0	0	0	Riparian Sagebrush/Perennial	0	0	0	0
\geq		Grassland	25.5	<1	40.3	<1	Grassland	8.0	<1	16.8	<1
		Trees/Aspen	0 District consents	0 Sage-Grouse Price	0	00	Trees/Aspen	0	0	0	00
	Impacts/Key			ng Term		ort Term	Disturbance to Sage-Grouse Priority Habitats Long Term Short Term				
	Issues			% Disturbed w/in		% Disturbed w/in			% Disturbed w/in		% Disturbed w/ii
			Ac. Disturbed	Project Area	Disturbed	Project Area		Ac. Disturbed	Project Area	Ac. Disturbed	Project Area
		Tier 1 (Regularly	35.7	0.2%	59.6	0.3%	Tier 1 (Regularly	21.6	0.1%	60.7	0.3%
		Occupied) Tier 3 (Occasionally					Occupied) Tier 3 (Occasionally				
		Occupied)	0	0	0	0	Occupied)	1.1	<0.1%	5.4	0.1%
		Tier 4 (Expansion Habitat)	0	0	0	0	Tier 4 (Expansion Habitat)	0	0	0	0
				nber of New Struct					ber of New Structure		
		Total Number of	Estimated		uctures NOT within 0	.25 mile of	Total Number of	Estimated	Number of New Struc		.25 mile of
		Structures 116			smission Line 16		Structures 124		Existing Transr 60	hission Line	
			andive leke within 2		10		-No active or inactive leks	s known to occur w		wn/active leks know	wn within 3 miles.
		 Two known active or in More long- and short-te 			and sagebrush/perer	nnial grassland	-Less long- and short-ten			sagebrush/perenr	nial grassland.
		-More miles of moderat				mar gradorana.	-Fewer miles of moderat -Less long-term impacts				
	Summary	-More long-term impact	s to Tier 1 Priority H	abitat.	,		-Similar short-term impacts				
	Comparison	-Similar short-term impa		t.			-More short- and long-ter				
	1	-No impacts to Tier 3 Pr		lad laakrabbit /w/ia	f mile)		-5.3 miles of moderate in			e).	
		 -1.9 miles of moderate -Fewer number of new 		ieu jackrabbit (w/in '	r mile).		-0.8 miles of moderate in	mpacts to a long-bil			
		-i ewel number of new :	au ucturea requireu.				-More new structures req	uired.			

					ZONE 2:Route 2b/2c Com	parisor	1			
	Resource			ment 2	b (16.4 mi. Length)		Ro	oute Seg	ment 2c (18.1 mi. Length)	
		Vegetation Type Crossed (m	<u>ii.}</u>				Vegetation Type Crossed (mi.)		
		Riparian		0			Riparian		0	
		Sagebrush/Perennial Grasslar	nd	11.1			Sagebrush/Perennial Grassl	and	4.6	
		Trees (Aspen/Poplar)		0			Trees (Aspen/Poplar)		0	
	Inventory Summary	Speci	Special Status & Priority Habitats Crossed (mi.)				<u>s</u>	Special Sta	tus & Priority Habitats Crossed (mi.)	
		Habitat Suitability		Speci	al Status Plants & Communities Crossed (mi.)	Habitat Suitability		Special Status Plants & Communities Crosse	ed (mi.)
		Suitable	11.4	NHP:	Special Status Polygons	0.5	Suitable	4.6	NHP Special Status Polygons	0
Vegetation		Marginal	3.9	Speci	al Status Plants Found During Survey	0.5	Marginal	6.0	Special Status Plants Found During Survey	0
8				NHP	Priority Plant Communities	0			NHP Priority Plant Communities	0
🖇		Long Term Disturbance to Rip Vegetation	arian	0	Moderate Impacts on General Vegetation (mi.)	11.1	Long Term Disturbance to Riparian Vegetation	0	Moderate Impacts on General Vegetation (mi.)	4.6
	Impacts/ Key Issues	Long Term Disturbance to Sagebrush/Perennial Grasslar	nd	25.5	Moderate Impacts on Special Status Species (mi.)	11.8	Long Term Disturbance to Sagebrush/Perennial Grassland	8.0	Moderate Impacts on Special Status Species (mi.)	4.6
		Long Term Disturbance to Tre (Aspen/Poplar)	es	0	Overall Long Term Impacts to All Vegetation (acres long term disturbance)	33.5	Long Term Disturbance to Trees (Aspen/Poplar)	0	Overall Long Term Impacts to All Vegetation (acres long term disturbance)	17.5
	Summary Comparison	More long-term disturbance to sagebrush/perennial grassland. Higher overall disturbance to ALL vegetation types combined. Special status plants identified during plant survey (Columbia milkvetch). More miles with moderate impacts to general vegetation. More miles with moderate impacts to special status plants and potential habitat.					- Less long-term disturbance to sagebrush/perennial grassland Lower overall disturbance to ALL vegetation types combined No special status plants were found during the survey; however most of the route is no land and was not surveyedColumbia milkvetch is known to occur within 1 mileFewer miles with moderate impacts to general vegetationFewer miles with moderate impacts to special status plants and potential habitat.			on-federal

			ZONE 2:Route 2b/2c Com	parisor	1			
	Resource	Route Segment 2t	(16.4 mi. Length)		Route	Segment 2	c (18.1 mi. Length)	
		Cultural Resources with	in 75-feet of Centerlines		Cultural R	Resources wit	thin 75-feet of Centerlines	
		Districts 0	National Register Sites		Districts	0	National Register S	tes
		Archeological Sites 0	Eligible	0	Archeological Sites	0	Eligible	0
		Isolated Finds 0	Not Eligible	0	Isolated Finds	0	Not Eligible	0
		Architectural Resources 0	Unevaluated	0	Architectural Resources	0	Unevaluated	0
	Inventory Summary	Total Cultural Resources	0		Total Cultural Resource		0	
		Cultural Resources withi					hin 250-feet of Centerlines	
8		Districts 0	National Register Sites		Districts	0	National Register S	
≣		Archeological Sites 0	Eligible	0	Archeological Sites	1	Eligible	0
န္တ		Isolated Finds 0	Not Eligible	0	Isolated Finds	0	Not Eligible	0
œ		Architectural Resources 0	Unevaluated	0	Architectural Resources	0	Unevaluated	1
<u> </u>		Total Cultural Resources	0		Total Cultural Resource	es	1	
Cultural Resources	Impacts/ Key Issues	Washington DAHP WISAARD indicates no surveys within one mile. 36 sites recorded within one mile. Historic sites include trash scatters and remains of homesteads. 0.3% land within 75' of route surveyed. Know burial site 0.85 mil from route	- Talus pit 0.6 mile from route - Similar resource may exist - 0.5% land within 250 feet surveyed - Burial site and talus pit may be visua sensitive - Impacts to all resources expected to to Moderate.	- Limited cultural surveys within o - 1/3 of route crosses cultivated la - c. ½ of route parallels existing tr line - 12 previously recorded sites with includes lithic scatters & tal - Historic trash scatters & stage stop/outbuildings	and ansmission nin one mile;	Burial site within 0.5 mile of route No lands within 75 of route surveyed No land within 250 feet of route surveyed Talus & burial sites could be visually sensitive Stage stop may be visually sensitive; integrity in question No site of special concern identified Impacts to all resources expected to be Lite Moderate.		
	Summary Comparison	-Higher probable impacts to cultural resources	- Greater amount of recorded sites within	n 1 mi.	- Lower probable impacts to cultu	ral resources	- Previously disturbed areas	
স		Water Resources (mi. crosses) Intermittent Stream/Gully 2.6 100-year floodplain 0.0 Total Miles of Water Resource (Long Term) Disturb Total Acres of Water Resource (Long Term) Disturb		0	Water Resources (mi. crosse Intermittent Stream/Gully 100-year floodplain Total Miles of Water Resource (Lor Total Acres of Water Resource (Lor	ng Term) Distu		
의	Inventory Summary	Geologic Resources	Marca de la della	0.0	Geologic Resources			
8		30% Slope or greater crossed (mi.) 0.2	Mapped Landslide (High Hazard)	0.2	30% Slope or greater crossed (mi.)	0	Mapped Landslide (High Hazard)	0
8 8		Soil Resources			Soil Resources			
Other Resources Wetlands, Soils & Geology)		High Water erodibility (mi. crossed) 7.3	High Water erodibility (ac. long-term disturbance)	15.2	High Water erodibility (mi. crossed)	12.7	High Water erodibility (ac. long disturbance)	term 17.0
튅		Low reclamation potential (ac. long-term disturbance)	14.1		Low reclamation potential (ac. long-term disturbance)	2.8	
Other		Moderate Impact to Water Resources (mi.)	0.1		Moderate Impact to Water Resource	ces (mi.)	0.3	
		Total Acres of Water Resources Disturbed	5.8		Total Acres of Water Resources Di	sturbed	3.6	
(Water,	Impacts/ Key Issues	High impacts to soils in areas of high water erosion potential and low reclamation potential (ml.)	0		High impacts to soils in areas of high erosion potential and low reclamation (ml.)	on potential	0.1	
		- Long term disturbance to Firewater Canyon and 2			- Long term disturbance to 22 unna			
	Summary Comparison	Higher impact to water resources, crosses more Fewer miles of <i>High</i> impact from due to high ero Crosses more mapped landslide areas Crosses more steep slopes			Lower impact to water resources, crosses fewer streams More miles of <i>High</i> impact from due to high erosion potential-low reclamation potential Crosses fewer mapped landslide areas Crosses fewer steep slopes			

	ZONE 2:Route 2b/2c Comparison			
041	Route Segment 2b (16.4 mi. Length)	Route Segment 2c (18.1 mi. Length)		
Other Issues Total Short-Term Ground Disturbance (ac.)	59.61	66.11		
Fotal <i>Long-Term</i> Ground Disturbance (ac.)	35.72	22.66		
Engineering & Costs	\$4.03 million total construction cost (w/out ROW)	\$4.78 million total construction cost (w/out ROW)		
	116 Structures (H-frame wood pole construction typical)	124 Structures (H-frame wood pole construction typical)		
	- Crosses Federal land	- Crosses only private and state land		
	- Does not parallel existing transmission lines	- Longer route & more structures		
	- Greater long-term ground disturbance due to increased road	- Less overall ground disturbance due to decreased road construction		
	construction	- Greater construction costs and more parcels and landowners crossed		
	- Fewer structures & shorter route	- More residences within 500'		
	- Lower construction costs and fewer parcels and landowners crossed	- Greater visual impact due to proximity to residences and proximity to		
	- Reduced land use and visual impacts on private landowners	highway		
	- Greater (intact) scenery impacts	- Greater impact to Statewide Important/Unique/Prime if Irrigated		
	- Less impact on Statewide Important/Unique/Prime if Irrigated Farmland	Farmland - Impacts 2.5 acres of irrigated farmland and 5 pivots		
Overall Key Issues & Comparison	- No irrigated agriculture impacts	- Less potential impact to CRP land		
	- Greater potential for impacts to CRP lands	- Parallels existing transmission lines and roads		
	- Greater impacts to Sagebrush-Perennial Grassland habitat	- Less impact to Sagebrush-Perennial Grassland habitat		
	- Greater # of Sage-Grouse leks within 2 miles	- 2 Leks within 3 miles		
	- Greater # of Sage-Grouse observations 1988-2011	- No Sage-Grouse observations 1988-2011		
	- Greater impact to Tier 1 Sage-Grouse Priority habitat	- Less impact to Tier 1 Sage-Grouse Priority habitat		
	- Crosses more Suitable Sage-Grouse Habitat, Less Marginal habitat	- Crosses more Marginal habitat		
	- Higher impacts to special status plants and potential habitat	- Crosses less Suitable habitat		
	- Higher probability of cultural resource impacts	- Fewer impacts on Special Status Plants & Potential Communities		
	- Crosses more steep slope and mapped landslide areas	- Lower probability of cultural resource impacts		



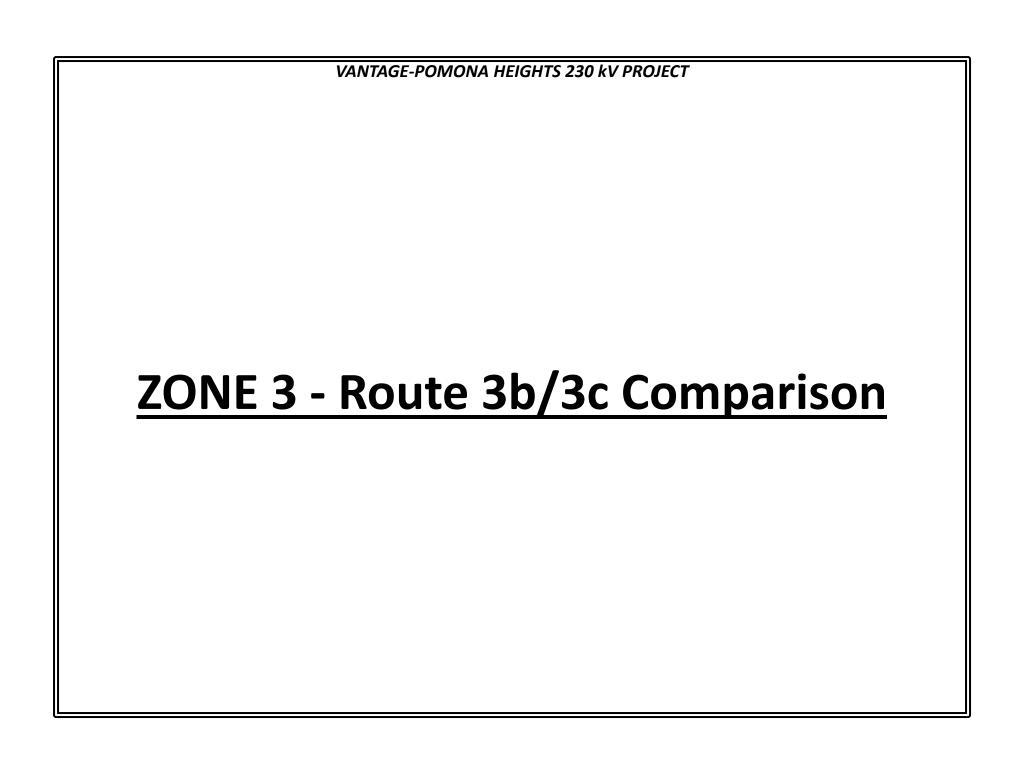
Re	source	Zone	3: Route 3a Summary 0.1	l mi. Length	
5		Jurisdiction (mi.)		Land Use, Recreation &Transportation Resources	mi.)
Transportation		BLM:	0	Irrigated Agriculture:	0
		JBLM-YTC:	0	# Center Pivots Crossed:	0
8		BOR:	0	Statewide Important Farmland	0
[g]		Total Federal Land Crossed:	0	Unique Farmland	0
	Inventory	State:	0	Prime if Irrigated	0
60	Summary	Private:	0.1 (100%)		
<u>.</u> 5		Linear Features (mi.)		Public (Fed./State) Lease Land (Oil/Gas/Grazing):	0
Recreation,		Parallels Existing HVTL:	0.1	# Recreation Trails Crossed:	0
5		Within Designated Utility Corridor:	0	# Residences w/in 500':	0
22		% of Federal Land crossed within Designated Corridor:	=	# Parcels Crossed:	0
ارو ا				# Private Landowners:	1
				# (State/Federal) Highway Crossings:	0
Land Use,	Impacts/ Key Issues	0.1 mile Low land use impact Requires minimal new road construction CRP Land (potential LT impact, acres): 0			
na n	Inventory Summary	- Immediate foreground views from road - Crosses primarily industrial cl	naracter area - Weak co	ontrasts	
Visual	Impacts/ Key Issues	0.1 miles Low impact on Moderately Sensitive viewers			

	Resource		Zo	ne 3: Route 3a S	ummary 0.1 mi. Len	gth	
			Habitat	Types (Acres) within	the Project Area (2 mile	corridor)	
	- 1	1	Perennial Grassla	ind 2.2	Sagebrush/Perennial G	Grassland 2,120	
1	- 1	İ	Ripari	an 0	Trees/Aspen	0	
		1	Basalt Cliff/Ro	ock 0			
				Sage Grous	e Habitat (Acres)		
		Tier 1	(Regularly Occupied)	0	Tier 3 (Occasionally Oc	ccupied) 2,193.5	
		ł	(Expansion Habitat)	0	, ,		
	Inventory Summary		` '	Sage-Grouse Le	eks and Observations		
			Active or Inactive Leks (#)			PHS Historic	c Leks (#)
			Within 0.6 mile	0		Within 0.6 mile	0
		1	Within 2.0 miles	0		Within 2.0 miles	0
			Within 3.0 miles	0		Within 3.0 miles	0
				Observations	2001-2011	0	
1				<u>(#)</u>			
		-		Dist. I	1988-2000	0	
			Long	Disturbai Term	nce to Habitat		Short Term
١ ,	,, l		Ac. Disturbed		w/in Project Area	Ac. Disturbed	% Disturbed w/in Project Area
Wildlife	<u> </u>	Perennial Grassland	0	70 210111111000	0	0	0
] =]	Riparian	0		0	0	0
\$	SI	Basalt Cliff/Rock	0		0	0	0
	- 1	Trees/Aspen	0		0	0	0
1		Riparian	0		0	0	0
1	- 1	Sagebrush/Perennial Grassland	0.1		<1	1,1	<1
		Trees/Aspen	0	Disturbance to Cone	-Grouse Priority Habitats	0	0
				Term	-Grouse Priority Habitats	•	Short Term
	Impacts/Key		Ac. Disturbed		w/in Project Area	Ac. Disturbed	% Disturbed w/in Project Area
	Issues	Tier 1 (Regularly Occupied)	0		0	0	0
	- 1	Tier 3 (Occasionally Occupied)	0.1	<	0.1%	0.5	<0.1%
		Tier 4 (Expansion Habitat)	0		0	0	0
	- [Estimated Number of	New Structures Installe		NOT within 0.05 with of
	1		Total Number of Structures		1	Estimated Number of New Struct Existing Transn	
		1	3			CAISONG TRANSI	IIISSICII EIIIG
		-No known active or inactive leks v					
	- 1	-Long- and short-term disturbance					
		-0.1 mile of low impacts to habitat.		and blook tailed icolors	shit (culia 1 mila)		
	1	-moderate impacts (0.1 mile) to sa	igebrush lizard, striped whipsnake, nightsnake a ty Species Regional Area for mule deer (w/in 1 r	and biack-tailed jackrat mile)	obit (w/in 1 mile).		
		-Low impacts to Tier 3 (Occasiona		iliej.			

		Zone 3: Route 3a Summ	ary (0.1 mi. Length	1	
	Resource				
		Vegetation Type Crossed (mi.)	Special Status & Priority Habitats Crossed (mi.)		
		Riparian	0	Habitat Suitability	
티	Inventory Summary	Sagebrush/Perennial Grassland	0.1	Suitable	0.1
		Trees (Aspen/Poplar)	0	Marginal	0
				Special Status Plants & Communities Crossed (mi.)	
Vegetation				NHP Special Status Polygons	0
				Special Status Plants Found During Survey	0
ĕ				NHP Priority Plant Communities	0
		Long Term Disturbance to Riparian Vegetation	0	Low Impacts to General Vegetation (mi.)	0.1
		Long Term Disturbance to Sagebrush/Perennial Grassland	0.1	Low Impacts to Special Status Species (mi.)	0.1
	Impacts/Key Issues	Long Term Disturbance to Trees (Aspen/Poplar)	0	Overall Long Term Impacts to All Vegetation (acres long term disturbance)	0.1
		No special status plants are known to occur within 1 mile.		•	

			Zone 3: Route 3a S	ummary (0.1 mi	Length)		
Res	source						
		Cultural Resources v	vithin 75-feet of Centerlines		Cultural Resource	s within 250-feet of Centerlines	
		Districts		0	Districts		0
		Archeological Sites		2	Archeological Sites		2
	Inventory	Isolated Finds		0	Isolated Finds		0
	Summary	Architectural Resources		1	Architectural Resources		1
		Total Cultural Resources		3	Total Cultural Resources		3
<u> </u>		National Register Status of Sites	Eligible	1	National Register Status of Sites	Eligible	1
Cultural			Not Eligible	1		Not Eligible	1
리			Unevaluated	1		Unevaluated	1
	Impacts/ Key Issues	All land within 75 feet of route surveyed Impacts may be <i>High</i> on unevaluated site All land within 250 feet of route surveyed Vantage Substation, Midway to Vantage #1 Tra No sites of special concern within 3 miles of route surveyed Overall impacts expected to be <i>Low</i>		umbia #1 Transmissi	on Line recorded as cultural resources		
			urces (mi. crosses)		<u>Ge</u>	ologic Resources	
er Resources Wetlands, Soils & Geology)		Intermittent Stream/Gully		0	30% Slope or greater crossed (mi.)		0
		100-year floodplain		0	Mapped Landslide (High Hazard)		0
	Inventory	Total Miles of Water Resource (Long Term) Dist		0		Soil Resources	
양말등	Summary	Total Acres of Water Resource (Long Term) Dist	urbance	0	High Water erodibility (mi. crossed)		0
Metlands, Geology)		Perennial Streams		0	High Water erodibility (ac. long-term disturbar	,	0
Other Resources iter, Wetlands, Soil Geology)		Total Miles of Water Resource (Long Term) Dist		0	Low reclamation potential (ac. long-term distu	rbance)	0.1
원회		Total Acres of Water Resource (Long Term) Dist	urbance	0			
(Water,)	Impacts/ Key Issues	- No impacts to water resources					

Zone 3: Route 3a Summary (0.1 mi. Length)						
Other Issues						
Total Short-Term Ground Disturbance (ac.)	1.08					
Total Long-Term Ground Disturbance (ac.)	0.14					
Engineering & Costs	\$224,000 Total construction cost (w/out ROW) 3 Structures (Single steel pole construction typical)					
Overall Key Issues	- Low impacts due to existing transmission and substation development - All private land - Impacts to 0.1 acres Sagebrush-Perennial Grassland habitat, primarily - 0.1 acres disturbance to Tier 3 Sage-Grouse Priority Habitat - Crosses 0.1 mile Suitable (Special Status & Priority) habitat - All land within 75 feet of route surveyed for Cultural Resources - Impacts may be High on unevaluated cultural sites					



			ZONE 3:Route 3b/3c	Comparisor	1			
Resource Route Segment 3b (21.7 mi. Length)		nt 3b (21.7 mi. Length)		Route Segment 3c (25.4 mi. Length)				
		Jurisdiction (mi.)	Land Use, Recreation &Transportation Re	Use, Recreation &Transportation Resources (mi.)		tion (mi.)	Land Use, Recreation & Transportation Resources (mi.)	
		BLM: 0.4	Irrigated Agriculture:	0	BLM:	4.4	Irrigated Agriculture:	2.7
51		JBLM-YTC: 0.8	# Center Pivots Crossed:	0	JBLM-YTC:	0	# Center Pivots Crossed:	9
iš		BOR: 1.4	Statewide Important Farmland	4.5	BOR:	5.2	Statewide Important Farmland	3.4
port		Total Federal Land 2.7 (12.4%) Crossed:	Unique Farmland	0.6	Total Federal Land Crossed:	9.6 (37.8%)	Unique Farmland	8.1
S S	Inventory	State: 0	Prime if Irrigated	0.3	State:	0	Prime if Irrigated	1.1
	Summary	Private: 17.5 (87.6%)			Private:	15.6 (62.2%)		
80		<u>Linear Features (mi.)</u> Parallels Existing HVTL: 2.1	Public (Fed./State) Lease Land (Oil/Gas/Grazing):	0.5	<u>Linear Featu</u>		Public (Fed./State) Lease Land (Oil/Gas/Grazing):	4.5
	1	Marie D. S. and Hurth Co. 14	# Recreation Trails Crossed:	1	Parallels Existing HVTL		# Recreation Trails Crossed:	1
l ea	1	Within Designated Utility Corridor: 0	# Residences w/in 500':	21	Within Designated Utilit	y Comdor: 6.2	# Residences w/in 500':	14
8		% of Federal Land crossed within Designated	# Parcels Crossed:	55	% of Federal Land cross		# Parcels Crossed:	79
02		Corridor: -	# Private Landowners:	3	Designated Corridor:	65%	# Private Landowners:	27
S			# (State/Federal) Highway Crossings:	1	O A seile High land on a i		# (State/Federal) Highway Crossings:	1
Land Use, Recreation, & Transportation	Impacts/ Key Issues	0 mile <i>High</i> land use impact 1.7 miles <i>Moderate</i> land use impact	Requires 8.5 miles new road construction CRP Land (potential LT impact, acres): 0		irrigated agriculture		- Requires 11.9 miles new road construction - CRP Land (potential LT impact, acres): 0	
	Summary Comparison	Lower impacts on agricultural land uses Fewer # landowners affected	- Requires less new road construc	ction	 Higher impacts on res agricultural land uses Greater # landowners 	affected	- Requires more road construction	
	Inventory Summary	Immediate foreground and foreground views fr Immediate foreground views from John Wayne Some immediate foreground views from reside Crosses primarily Class B scenery	Pioneer Trail	- Immediate foreground and foreground views from Columbia River, Beverly Sand Dunes OHV Park, Nunnally Lake fisting access, John Wayne/Milwaukee Road Trail, Saddle Mountains (recreation area, hang gliding), Burkett Lake Recreation Area - Immediate foreground views from residences along "N" Road, "O" Road, & north of Beverly - Immediate foreground views from residences along "N" Road, "O" Road, & north of Beverly				
		Some residential character, agricultural character. Existing transmission lines or similar infrastructer.	ture only at Wanapum crossing			nes or similar infrastr	dential-agricultural character areas ucture (industrial character) north of Columbia	a River
Visual	Impacts/ Key Issues	3.4 miles <i>High</i> impact on residences 3.2 miles <i>High</i> impact to highly sensitive viewers (recreation/travel) 6.7 miles <i>High</i> impact on moderately sensitive viewers (recreation/travel) 4.3 miles <i>High</i> impact on scenic quality	 Generally strong/moderate 	to moderate	5.9 miles High impact on residences 2.6 miles High impact to highly sensitive viewers (recreation/travel) 4.0 miles High impact on moderately sensitive viewers (recreation/travel) 5.3 miles High impact on scenic quality - Generally weak landscape contrast, stronger in Saddle Mountains - Generally strong structure contrast where not paralleling existing lines - Moderate to strong/moderate project contrast - Compliant with Interim VRM Class III (4.5 mi.)			
	Summary Comparison	Generally lower visual impacts on residences a Parallels John Wayne Trail Higher impacts on adjacent water recreationist Stronger structure contrasts because generally		Higher visual impacts on residences, agricultural character areas, and recreationists Scenic views to and from Saddle Mountains affected Generally reduced structure contrasts due to proximity to existing transmission lines				

						te 3b/3c Compa	<u>rison</u>					
Reso	ource	Route Segment 3b (21.7 mi. Length)					Route Segment 3c (25.4 mi. Length)					
		Habitat Types (Acres) within the Project Area (2 mile corridor)					Habitat Types (Acres) within the Project Area (2 mile corridor)					
		Perennial Grassland		3,908	Sagebrush/Perennial Grassland	16,413	Perennial Grassland		2.9 Sagebro	sh/Perennial Grass	land 14,031	
		Riparian		415	Trees/Aspen	0	Riparian		172.9 Trees/A	spen	0.2	
		Basalt Cliff/Rock		20.6			Basalt Cliff/Rock		8.3			
	Inventory	Sage Gro	ouse Habitat (Acres	1			Sage Gro	ouse Habitat				
		Tier 1 (Regularly Occupi	ed)	17,702.0	Tier 3 (Occasionally Occupied)	8227.0	Tier 1 (Regularly Occupie	ed)	2,494.6 Tier 3 (0	Occasionally Occup	ed) 17,795.7	
	Summary	Tier 4 (Expansion Habita	at)	0			Tier 4 (Expansion Habitat)	3290.9			
			Sage-Gro	use Leks and Ob	servations			Sage-Grou	ise Leks and Observ	ations		
		Active or Inactive Leks (<u>#)</u>		PHS Historic Leks (#)		Active or Inactive Leks (#	1	PHS H	istoric Leks (#)		
		Within 0.6 mile		0	Within 0.6 mile	0	Within 0.6 mile		0 Within	0.6 mile	0	
		Within 2.0 miles		1	Within 2.0 miles	0	Within 2.0 miles		0 Within	2.0 miles	0	
		Within 3.0 miles		1	Within 3.0 miles	0	Within 3.0 miles		0 Within	3.0 miles	0	
		<u>Observat</u>	tions (#)		2001-2011	2	Observation	ns (#)	2001-2		4	
					1988-2000	1			1988-2	000	0	
				turbance to Habi		4.7			turbance to Habitat	01-	4 T	
		i		g Term % Disturbed w/i		rt Term % Disturbed w/in		_	ng Term % Disturbed w/in		rt Term % Disturbed w/in	
			Ac. Disturbed	Project Area	Disturbed	Project Area		Ac. Disturbed	Project Area	Ac. Disturbed	Project Area	
		Basalt Cliff/Rock	0.2	<1	0.3	1.5	Basalt Cliff/Rock	0.6	7	1.1	13	
Wildlife		Perennial Grassland	0.7	<1	2.5	<1	Perennial Grassland	0	0	0	0	
		Riparian	0.4	<1	0.7	<1	Riparian	0.3	<1	1.2	<1	
≅l		Sagebrush/Perennial Grassland	6.4	<1	19.2	<1	Sagebrush/Perennial Grassland	11.9	<1	37.7	<1	
		Trees/Aspen	1.2	6	5.9	28	Trees/Aspen	0	0	0	0	
	Immanta/Kau			Sage-Grouse Pri					Sage-Grouse Priori			
	Impacts/Key Issues			g Term % Disturbed w/i		t Term % Disturbed w/in		Lor	ng Term % Disturbed w/in	Sho	rt Term % Disturbed w/in	
			Ac. Disturbed	Project Area	Disturbed	Project Area		Ac. Disturbed	Project Area	Ac. Disturbed	Project Area	
		Tier 1 (Regularly	22.5	0.1%	54.1	0.3%	Tier 1 (Regularly	3.6	0.1%	6.7	0.3%	
		Occupied) Tier 3 (Occasionally					Occupied) Tier 3 (Occasionally					
		Occupied)	5.4	0.1%	14.8	0.2%	Occupied)	12.9	0.1%	45.0	0.3%	
		Tier 4 (Expansion Habitat)	0	0	0	0	Tier 4 (Expansion Habitat)	4.4	0.1%	13.2	0.4%	
		Trabitaty	Estimated Num	ber of New Struc	tures Installed		Tidolidiy	Estimated Num	ber of New Structure	es Installed		
		Total Number of	Estimated		ructures NOT within 0.2	5 mile of	Total Number of	Estimated	Number of New Struc		25 mile of	
		Structures 181			nsmission Line		Structures		Existing Trans			
		181			160		-No active or inactive leks	known to occur w	ithin 2 or 3 miles	'		
	Summary Comparison	-One known active or inactive lek within 2 and 3 miles.					No active or inactive leks known to occur within 2 or 3 miles. More long- and short-term disturbance to basalt cliffs/rock and sagebrush/perennial grassland.					
		-Less long- and short-term disturbance to basalt cliffs/rock and sagebrush/perennial grassland.					-Less long- and short-term impacts to Tier 1 Priority Habitat; more long- and short-term disturbance to					
		-More long- and short-term disturbance to perennial grassland and trees/aspen.					Tier 3 and 4 Priority Habitat.					
			-More long- and short-term disturbance to Tier 1 Priority Habitat; less long- and short-term disturbance to Tier 3 Priority Habitat; and no disturbance to Tier 4 Priority Habitat.					-5.1 miles of moderate impacts to sagebrush lizard, striped whipsnake and nightsnake (w/in 1 mile)1.7 miles of moderate impacts to black-tailed jackrabbit (w/in 1 mile).				
		-6.8 miles of moderate impacts to sagebrush lizard, striped whipsnake and nightsnake (w/in 1 mile)					-2.7 miles of moderate impacts to Priority Regional Species Areas for chukar14.3 miles of moderate impacts to nesting raptors (prairie falcon, peregrine falcon, golden eagle; wfin 1					
								mpacts to nesting	raptors (prairie falcon	peregrine falcon, g	olden eagle; w/in 1	
	L						mile).					

				ZONE 3:Route 3b/3c Cor	npariso	<u>n</u>				
	Resource	Route Segment 3b (21.7 mi. Length)				Route Segment 3c (25.4 mi. Length)				
		Vec	pe Crossed (mi.)	Vegetation Type Crossed (mi.)						
		Riparian	0.2			Riparian	0	3		
		Sagebrush/Perennial Grassland	5.4			Sagebrush/Perennial Grassland	9	8		
		Trees (Aspen/Poplar)	1.7			Trees (Aspen/Poplar)	()		
	Inventory Summary	Special Stat	ity Habitats Crossed (mi.)	Special Status & Priority Ha	bitats C	rossed (mi.)				
		Habitat Suitability	Spec	cial Status Plants & Communities Crossed	Habitat Suitability		Special Status Plants & Communities Crossed (mi.)			
		Suitable 7.4	NHP	Special Status Polygons	7.3	Suitable	10.5	NHP Special Status Polygons	5.4	
		Marginal 1.8	Spec	ial Status Plants Found During Survey	1.2	Marginal	5.7	Special Status Plants Found During Survey	0	
ا د			NHP	Priority Plant Communities	0			NHP Priority Plant Communities	2.9	
Vegetation	Impacts/ Key Issues	Long Term Disturbance to Riparian Vegetation	0.4	Moderate Impacts on General Vegetation (mi.)	7.3	Long Term Disturbance to Riparian Vegetation	0.3	Moderate Impacts on General Vegetation (mi.)	9.8	
Veg		Long Term Disturbance to Sagebrush/Perennial Grassland	6.9	Moderate Impacts on Special Status Species (mi.)	8.3	Long Term Disturbance to Sagebrush/Perennial Grassland	11.9	Moderate Impacts on Special Status Species (mi.)	13.3	
		Long Term Disturbance to Trees (Aspen/Poplar)	1.2	Overall Long Term Impacts to All Vegetation (acres long term disturbance)	10.5	Long Term Disturbance to Trees (Aspen/Poplar)	0	Overall Long Term Impacts to All Vegetation (acres long term disturbance)	19.0	
	Summary Comparison	caespitose evening primrose).	tion. bes combined. bey (Nuttall's sandwort; Columbia milkvetch bed spike rush, and Kalm's lobelia are known vegetation.	and was not surveyed.	arian veg vegetatio cur (NHP milkvetch to gener	etation. In types combined. data); however most of the route is non-fed, gray cryptantha, and Hoover's desert pars al vegetation.				

			Zone 3: Route 3a S	ummary (0.1 mi	. Length)		
Res	source						
		Cultural Resource	es within 75-feet of Centerlines	Cultural Resources within 250-feet of Centerlines			
		Districts		0	Districts		0
		Archeological Sites		2	Archeological Sites		2
	Inventory	Isolated Finds		0	Isolated Finds		0
	Summary	Architectural Resources		1	Architectural Resources		1
		Total Cultural Resources		3	Total Cultural Resources		3
2		National Register Status of Sites	Eligible	1	National Register Status of Sites	Eligible	1
Cultural			Not Eligible	1		Not Eligible	1
디		- Extensive surveys conducted around Wana	Unevaluated	1		Unevaluated	1
	Key Issues	All land within 250 feet of route surveyed Vantage Substation, Midway to Vantage #1 No sites of special concern within 3 miles of Overall impacts expected to be Low	route.	umbia #1 Transmiss			
n.XI			esources (mi. crosses)		_	ologic Resources	
~ <u>~</u>		Intermittent Stream/Gully		0	30% Slope or greater crossed (mi.)		0
S S		100-year floodplain	N. I. I	0	Mapped Landslide (High Hazard)		0
들었었	Inventory Summary	Total Miles of Water Resource (Long Term) [0		Soil Resources	
	oullinary	Total Acres of Water Resource (Long Term)	Disturbance	0	High Water erodibility (mi. crossed)		0
Other Resources (Water, Wetlands, Soils & Geology)		Perennial Streams	Note to a con-	0	High Water erodibility (ac. long-term disturba	,	0
		Total Miles of Water Resource (Long Term)		0	Low reclamation potential (ac. long-term distr	urbance)	0.1
티힐		Total Acres of Water Resource (Long Term)	Disturbance	0			
Na.	Impacts/ Key Issues	- No impacts to water resources					

	ZONE 3:Route 3b/3c Comparison				
	Route Segment 3b (21.7 mi. Length)	Route Segment 3c (25.4 mi. Length)			
Other Issues		T			
Total Short-Term Ground	76.97	95.53			
Disturbance (ac.) Total Long-Term Ground					
Disturbance (ac.)	30.92	26.29			
Engineering & Costs	\$12.0 million total construction cost (w/out ROW) 181 Structures (Single wood pole construction typical)	\$9.98 million total construction cost (w/out ROW) 186 Structures 88 H-frame wood pole structures 60 Single wood pole structures			
	- Crosses less Federal land				
	- More structures				
	- Longer route	- Crosses more Federal land			
	- Higher construction costs but fewer parcels and landowners resulting in lower ROW acquisition costs	- Parallels more existing transmission line			
		- Crosses irrigated land and pivots			
	- No agricultural impacts	- Crosses more Unique/Prime if Irrigated Farmland			
	- Crosses more Statewide Important Farmland				
	- Crosses less Unique & Prime if Irrigated Farmland	- Greater impact on public oil/gas/grazing lease land			
	- More residences within 500' (due to proximity to houses located in Auvil Fruit Co.), but fewer within immediate foreground view of line	- More parcels and landowners increasing ROW acquisition costs			
		- Greater residential visual impacts			
	- Greater visual impact on recreationists due to more dispersed use	- Greater scenery impacts			
Overall Key Issues & Comparison	(Priest Rapids Lake, Columbia River Corridor): 3.2 miles High impact - highly sensitive viewers; 6.7 miles High impact -moderately sensitive	- No active/historic leks			
· · · · · · · · · · · · · · · · · · ·	viewers	- More Sage-Grouse observations (1988-2011)			
	- 1 active/inactive lek within 2 and 3 miles	- Greater disturbance to Tier 3 and Tier 4 Priority habitat			
	- Fewer Sage-Grouse observations (1988-2011)	- Greater disturbance to Basalt/Rock and Sagebrush-Perennial Sagebrush habitats			
	- Greater disturbance to Tier 1 Priority Habitat	- Higher impacts to Special Status Plants and potential habitat			
	- Greater disturbance to Riparian and Tree habitats				
	- Special Status Plants identified during surveys	- Greater overall impacts to general vegetation			
	- More cultural resources within 75' & 250'	- Crosses fewer streams greater lower overall water impacts			
	- Crosses more streams but lower overall water impacts	-Crosses more steep slope			
	-Greater soil impacts				
	-Crosses more mapped landslide areas				

