

APPENDIX X
FRAMEWORK WILDLIFE AND PLANT
CONSERVATION MEASURES PLAN

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ACRONYMS

Applicant	TransWest Express LLC, also TransWest
BA	Biological Assessment
BE	Biological Evaluation
BLM	Bureau of Land Management
BMP	Best Management Practice
BO	Biological Opinion
CO-E	Colorado Endangered Species
COM Plan	Construction, Operation, and Maintenance Plan
CO-SE	Colorado – State Endangered
CO-ST	Colorado State Threatened
CSU	Controlled Surface Use
CWA	Clean Water Act
DEIS	Draft Environmental Impact Statement
EMM	Environmental Mitigation Measure
ESA	Endangered Species Act of 1973
FC	Federal Candidate
FE	Federally Endangered
FEIS	Final Environmental Impact Statement
FLPMA	Federal Land Policy and Management Act of 1976
FT	Federally Threatened
HMA	Herd Management Area
NAGPRA	Native American Graves Protection and Repatriation Act of 1990
NDOW	Nevada Department of Wildlife
NEPA	National Environmental Policy Act of 1969
NMFS	National Marine Fisheries Service
NSU	No Surface Use
NTP	Notice to Proceed
NV-CE	Nevada Critically Endangered
NV-CY	Nevada Protected Cactus/Yucca
NV-P	Nevada - Protected
NV-PCE	Nevada Proposed Critically Endangered
PAC	Protected Activity Center
Plan	Wildlife and Plant Conservation Measures Plan
POD	Plan of Development
Project	TransWest Express Transmission Project, also TWE Project
Reclamation	Bureau of Reclamation
ROD	Record of Decision
ROW	right-of-way
SUA	Special Use Authorization
TransWest	TransWest Express LLC, also Applicant
TWE Project	TransWest Express Transmission Project, also Project
U.S.C.	United States Code
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
UT-CAS	Utah Conservation Agreement Species
UT-SC	Utah Special Concern
UT-SS	Utah Special Status Species
Western	Western Area Power Authority
WWEC	West-wide Energy Corridor

X1.0 INTRODUCTION

This document presents the framework Wildlife and Plant Conservation Measures Plan (Plan) to be undertaken by TransWest Express LLC (TransWest or Applicant) and its Construction Contractor(s) for the avoidance and minimization of impacts to special-status wildlife and plant species as related to construction activities for the TransWest Express Transmission Project (TWE Project or Project). The Plan summarizes the avoidance and minimization measures implemented during siting and routing of the TWE Project and outlines Environmental Mitigation Measures (EMM) to be implemented to protect state- or federally-listed species, Bureau of Land Management (BLM) sensitive species, or United States Forest Service (USFS) special-status species or their habitats that are identified within, or adjacent to, the TWE Project right-of-way (ROW).

X1.1 Plan Purpose

The purpose of the Plan is to describe and recommend management actions that will meet regulatory requirements for ROW clearing, habitat disturbance, and impacts to special-status wildlife and plant species. This document provides a framework for the final Plan to be developed prior to initiation of construction.

The objectives of the Plan are to recognize the substantial effort already invested by TransWest in avoiding and minimizing impacts and to present a comprehensive plan that does the following:

- Meets the intent of the current BLM and USFS management guidance for federal lands;
- Ensures compliance with the Endangered Species Act (ESA) and other state and federal protections for special-status species;
- Apply protection measures from a practical perspective based on differences in land ownership and management patterns of the Project; and
- Balances cost, practicality and feasibility of Project implementation with avoiding or minimizing environmental impacts.

X1.2 Plan Updates

The plan will be updated for the Record of Decision (ROD) Plan of Development (POD) based on the selected Agency Preferred Alternative and Best Management Practices (BMPs) and Mitigation Measures defined in the Final Environmental Impact Statement (FEIS), Biological Assessment/Biological Opinion (BA/BO), Biological Evaluation (BE), and through additional consultation with federal and state agencies. Updates in the ROD POD may include: refined species lists per region/line segment, habitats per region/line segment, applicable mitigation, and pre-construction survey requirements.

This Plan will be further updated for the Notice to Proceed (NTP) POD and will have identified impacts and applicable BMPs and Mitigation Measures based on the final engineering and design and results of the pre-construction field surveys. The Construction Contractor(s) will be responsible for implementing the final Wildlife and Plant Conservation Measures Plan.

X1.3 Agency-Specific Requirements

Federal and state agency regulations concerning special status wildlife and plant species are presented in the following sections.

X1.3.1 All Lands

Relevant regulations applicable to all lands include:

- ESA, as amended Section 7(a)(2)
- Fish and Wildlife Conservation Act (16 United States Code [U.S.C.] §§2901 – 2912)
- Bald and Golden Eagle Protection Act (16 U.S.C. §668 et seq.)

X1.3.2 Bureau of Land Management

Relevant regulations applicable to BLM lands include:

- National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. §4321)
- Federal Land Policy and Management Act (FLPMA) 43 U.S.C. §1701
- BLM Field Office Resource Management Plans
- Wild Free-Roaming Horses and Burro Act (Public Law 92-195)

X1.3.3 United States Forest Service

Relevant regulations applicable to USFS lands include:

- FLPMA
- Special Use Authorization (SUA) under the National Forest Management Act (16 U.S.C. §§1601-1614)
- USFS Land and Resource Management Plans
- Forest Service Manual 2670.22, 2670.32

X1.3.4 Bureau of Reclamation

Relevant regulations applicable to Bureau of Reclamation (Reclamation) lands include:

- FLPMA
- Right of Use Authorization

X1.3.5 States

Relevant requirements applicable to operations within each affected state include:

- Wyoming Statutes 23-3-102, 23-3-103
- Colorado Revised Statutes 33-1-101
- Utah Code 23-15-6, 23-15-7, and 23-20-3

- Nevada Administrative Code 503-015-104 and Nevada Revised Statutes 503.584-589 and 503.610

X2.0 SPECIAL STATUS SPECIES PROTECTION MEASURES

The special status species protection measures presented in this section will be finalized based on mitigation measures identified in the FEIS, BA/BO, BE, ROD and through additional agency consultation. Updated mitigation measures will be included in the ROD POD and NTP POD versions of this Plan. Sections X2.0 and X3.0 provide a description of what may be required in future versions of this Plan. All actions described below are subject to change in future versions of this Plan.

The TWE Project has been divided into four regions for analysis in the Draft Environmental Impact Statement (DEIS). The species analyzed within the TWE Project scope are described in this Plan by these four regions. Pre-construction surveys for certain species will be conducted prior to initiation of construction. During these surveys, habitat and/or locations of these species will be identified. Appropriate buffers or restricted areas, identified through current BLM and USFS management plans, state and federal documents, and additional agency consultation, will be applied based on these surveyed locations.

Portions of the TWE Project are located within identified habitats or in proximity to biological resources that may be constrained from construction during certain times of the year (seasonal) or while a resource is present. The DEIS identifies timing and spatial use restrictions for the states of Wyoming and Utah, USFS office jurisdiction, and BLM field office jurisdiction crossed by the TWE Project. No Surface Use (NSU) areas are areas where surface use or permanent structures are not allowed. Controlled Surface Use (CSU) restrictions involve areas where use is permitted under certain constraints such as construction methods or survey requirements. Timing limitations restrict use during key time periods essential to a resource. These restrictions may include a buffer to define the restricted area around a resource. It is important to note that there are additional timing and spatial restrictions related to nesting birds. These measures are discussed in the Avian Protection Plan (Appendix B).

Tables X1, X2, X3, and X4 provide species-specific timing limitations and buffers which were identified in the DEIS from current BLM and USFS management plans, state documents, and federal documents and may be applied to the TWE Project. The restrictions presented below are not to be considered complete at this time.

X2.1 Region I

Region I spans from the northern terminus near Rawlins, Wyoming to southern Moffat County near Massadona, Colorado. The Applicant Proposed and Agency Preferred Alternatives are both considered in this Plan. The routes in Region I cross three BLM Field Offices: Rawlins, Little Snake, and White River. The region is dominated by sagebrush and saltbush shrublands.

TABLE X1 SPECIAL STATUS SPECIES AND TEMPORAL/ SPATIAL RESTRICTIONS FOR REGION I

SPECIES	REGULATORY STATUS WITHIN PROJECT AREA	TIMING RESTRICTION	BUFFER / SPATIAL USE RESTRICTION
Mammals			
White-tailed prairie dog (<i>Cynomys leucurus</i>)	BLM	None	Active towns <10 acres, NSU ²
		4/1 – 6/15 ²	No surface disturbing activities ²
Wyoming pocket gopher (<i>Thomomys clusius</i>)	BLM	Year-round ⁴	Active mounds 75 meters ⁴
Canada lynx (<i>Lynx canadensis</i>)	FT; BLM; CO-SE	None	NSU ² (mapped habitat)
Black-footed ferret (<i>Mustela nigripes</i>)	EXP/NE; BLM; CO-SE	None	Reintroduction areas Occupied habitat Prairie dog towns CSU ^{2, 3} 50 meters, CSU ¹ (prairie dog towns >200 acres)
All Big Game	Big game	12/1 – 4/30 (crucial winter habitat) ²	Area closed ²
		12/1 – 4/30 ³ (severe winter range)	No development, TBD ³
		5/15 – 8/15 ³ (summer range)	Conditional, TBD ³
		5/1 – 6/30 ³ (parturition areas)	No surface disturbing activities ³
Elk (<i>Cervus canadensis</i>)	Big game	4/16 – 6/30 ² (parturition areas)	No surface disturbing activities ²
		5/1 – 7/15 ² (winter range)	CSU
<hr/>			
Pronghorn (<i>Antilocapra americana</i>)	Big game	5/1 – 7/15 ² (parturition areas)	No surface disturbing activities ²
Rocky Mountain bighorn sheep (<i>Ovis canadensis</i>)	USFS; Big game	5/1 – 7/15 ² (parturition areas)	No surface disturbing activities ²
		5/1 – 7/15 ² (winter range)	Limited activity ²
Wild horses		Horse Management Area 3/1 – 6/30 ²	HMA closed to motor vehicles ²
		Water sources 3/1 – 12-1 ²	1 mile, no drilling or development ²
		Foaling areas 3/1 – 6/15 ³	Limited activity TBD ³
Birds			
All Waterfowl		None identified	NSU ³
All Raptors		Year-round ¹ (active nests)	NSU, 825 feet no structures requiring repeated human presence ¹
		2/1 – 7/15 or 7/31 ¹	0.5 – 1 mile ¹

SPECIES	REGULATORY STATUS WITHIN PROJECT AREA	TIMING RESTRICTION	BUFFER / SPATIAL USE RESTRICTION
		(nests)	
		11/15 – 4/30 ¹ (winter concentration area)	None identified
Ferruginous hawk (<i>Buteo regalis</i>)	BLM	Year-round (active nests)	NSU, 1,200 feet, no structures requiring repeated human presence ¹
		Active nests 3/1 – 7/31 ¹ 2/1 – 8/15 ^{2,3}	1,200 feet ¹ 1 mile ^{2,3}
Bald eagle (<i>Haliaeetus leucocephalus</i>)	BLM; USFS; CO-ST	Year-round (active nests) ¹	1 mile ¹ CSU, 0.5 mile no structures requiring repeated human presence ¹
		Year-round (active communal winter roost) ¹	0.5 mile ¹
		Year-round ² (all nests and roosts)	100 meter NSU ² (abandoned nests) 0.25 mile NSU ² (roosts, unoccupied nests and occupied nests)
		11/15 – 3/15 (various) ²	0.5 mile, TBD (critical night roost) ²
			0.25 mile, TBD (winter hunting perch) ²
		11/15 – 4/15 ³ (winter concentration area)	0.5 mile ³
		Active nests 2/1 – 8/15 ¹ 11/15 – 7/31 ² 12/15 – 7/15 ³	0.5 mile (sites requiring repeated human presence) 1,2,3
All Game Birds		11/15 – 4/30 ¹ (winter concentration area)	TBD ¹
		12/1 – 4/30 ³ (severe winter range)	No development, TBD ³
Columbian sharp-tailed grouse (<i>Tympanuchus phasianellus columbianus</i>)	BLM; USFS	11/5 – 3/14 ¹ (delineated concentration area)	No disruptive activities ¹
		3/1 – 7/15 ¹ (leks nesting/ brood rearing)	1 mile, No disruptive activities ¹
		2/1 – 7/31 ¹ (TBD nesting areas)	
		TBD (leks) ²	NSU ²
		12/16 – 3/15 (crucial winter habitat) ²	Area closed ²
Greater sage-grouse (<i>Centrocercus urophasianus</i>)	FC; BLM; USFS	Year-round (leks) ^{2,4} (leks inside core/ connectivity areas) ⁵	0.6 mile, NSU ^{5,2} 4 miles, TBD ⁴

SPECIES	REGULATORY STATUS WITHIN PROJECT AREA	TIMING RESTRICTION	BUFFER / SPATIAL USE RESTRICTION
		3/15 – 6/30 ⁵ (core nesting/brood rearing habitat)	No disruptive activities ⁵
		Year-round ⁵ (leks outside core/ connectivity areas)	0.25 mile, CSU ⁵
		3/15 – 6/30 ⁵ (nesting/ brood rearing habitat in connectivity areas)	4 miles, No disruptive activities ⁵
		3/1 – 7/15 ¹ (leks, nesting/ brood rearing areas)	2 miles, No disruptive activities ¹
		3/15 – 6/30 ⁵ (nesting/ brood rearing habitat outside core/ connectivity areas)	2 miles, No disruptive activities ⁵
		12/1 – 3/14 ⁵ (Late season brood and winter concentration areas)	No disruptive activities ⁵
		Activity season (active lek) ¹	0.5 mile, CSU ¹
		11/5 – 3/14 ¹ (delineated concentration area)	No disruptive activities ¹
		2/1 – 7/31 ¹ (TBD nesting areas)	
		3/1 – 6/30 ² (leks)	2 miles, TBD ¹ Up to 2 miles ¹ , 4 miles ² , TBD
		12/16 – 3/15 ² (Crucial winter habitat)	Area closed ²
		Year-round ³ (all known habitats)	CSU ³
		4/15 – 7/7 ³	2 miles ³
		Year-round ³ (leks)	0.25 mile ³
		12/16 – 3/15 ³ (winter habitat)	No development ³
Mountain plover (<i>Chondestes montanus</i>)	BLM; USFS	4/10 – 7/10 (nests) ⁴	0.25 mile ⁴
Yellow-billed cuckoo (western) (<i>Coccyzus americanus</i>)	FC; BLM	6/1 – 8/1 ² 4/15 – 8/15 ¹ (identified habitat)	Area closed ² 0.5 mile ¹
		3/15 – 10/15 ⁴ (suitable habitat)	
		Year-round ²	NSU, 0.25 mile ²
Mexican spotted owl (<i>Strix occidentalis lucida</i>)	FT; BLM; CO-ST	3/1 – 7/31 ¹ 3/1 – 8/31 ² Year-round (Protected Activity Centers)	0.75 mile ¹ NSU ²

SPECIES	REGULATORY STATUS WITHIN PROJECT AREA	TIMING RESTRICTION	BUFFER / SPATIAL USE RESTRICTION
Northern harrier (<i>Circus cyaneus</i>)		4/1 – 7/31 ¹ 2/1 – 8/15 ³	0.75 mile ¹ 0.25 mile ³
Sharp-shinned hawk (<i>Accipter striatus</i>)		4/1 – 7/31 ¹ 2/1 – 8/15 ^{2,3}	0.75 mile ¹ 0.25 mile ^{2,3}
Cooper's hawk (<i>Accipiter cooperii</i>)		4/1 – 7/31 ¹ 2/1 – 8/15 ^{2,3}	0.75 mile ¹ 0.25 mile ^{2,3}
Northern goshawk (<i>Accipiter gentilis</i>)	BLM; USFS	4/1 – 8/31 ¹ 2/1 – 8/15 ³	0.75 mile ¹ 0.5 mile ³
Swainson's hawk (<i>Buteo swainsoni</i>)	BLM	4/1 – 7/31 ¹ 2/1 – 8/15 ³	0.75 mile ¹ 0.5 mile ³
Red-tailed hawk (<i>Buteo jamaicensis</i>)		2/1 – 7/15 ¹ 2/1 – 8/15 ³	0.75 mile ¹ 0.25 mile ³
Golden eagle (<i>Aquila chrysaetos</i>)	BLM	2/1 – 7/15 ¹ 2/1 – 8/15 ³	1 mile ¹ 0.5 mile ³
Osprey (<i>Pandion haliaetus</i>)		4/1 – 7/31 ¹ 4/1 – 8/31 ² 2/1 – 8/15 ³	0.75 mile ¹ 0.5 mile ² 0.25 mile ³
Merlin (<i>Falco columbarius</i>)		4/1 – 7/31 ¹ 2/1 – 8/15 ^{2,3}	0.75 mile ¹ 0.25 mile ^{2,3}
American kestrel (<i>Falco sparverius</i>)		4/1- 7/31 ¹ 2/1 – 8/15 ³	0.75 mile ¹ 0.25 mile ³
Prairie falcon (<i>Falco mexicanus</i>)	BLM	4/1 – 7/31 ¹ 2/1 – 8/15 ³	0.75 mile ¹ 0.5 mile ³
Peregrine falcon (<i>Falco peregrinus</i>)	BLM; USFS	3/1 – 7/31 ¹ 3/16 – 7/31 ² 2/1 – 8/15 ³	0.75 mile ¹ 0.5 mile ^{2,3}
Greater sandhill crane (<i>Grus canadensis</i>)		3/1 – 10/16 ²	None specified ²
Barn owl (<i>Tyto alba</i>)		2/1 – 7/15 ¹	0.75 mile ¹
Long-eared owl (<i>Asio otus</i>)	BLM	3/1 – 7/31 ¹ 2/1 – 8/15 ³	0.75 mile ¹ 0.5 mile ³
Short-eared owl (<i>Asio flammeus</i>)	BLM; UT-SS	3/1 – 7/31 ¹ 2/1 – 8/15 ³	0.75 mile ¹ 0.5 mile ³
Great horned owl (<i>Bubo virginianus</i>)		2/1 – 7/15 ¹ 2/1 – 8/15 ³	0.75 mile ¹ 0.25 mile ³
Burrowing owl (<i>Athene cunicularia</i>)	BLM; CO-ST; UT-SS	4/15 – 9/15 ¹ 2/1 – 8/15 ²	0.75 mile ¹ 0.5 mile ²
Western screech owl (<i>Megascops kennicottii</i>)		3/1 – 7/31 ¹ 2/1 – 8/15 ²	0.75 mile ¹ 0.25 mile ²
Fish			
Colorado River cutthroat trout (<i>Oncorhynchus clarkii pleuriticus</i>)	BLM; USFS; UT-CAS	Approx. April – May ⁴	No water withdrawals or habitat disturbance ⁴
Colorado pikeminnow (<i>Ptychocheilus lucius</i>)	FE; BLM		NSU (critical / occupied habitat) ^{2, 4}
Game Fish Species	BLM	Spring or fall spawning	
Plants			
Ute ladies'-tresses orchid (<i>Spiranthes diluvialis</i>)	FT	Year-round	0.25 mile (known orchid habitat) ^{1, 2} 300 feet ⁴

¹ BLM Rawlins Field Office; ² BLM Little Snake Field Office; ³ BLM White River Field Office;
⁴ Draft EIS Additional Mitigation Measures; ⁵ State of Wyoming
 NSU = No Surface Use; CSU = Controlled Surface Use; BLM = BLM sensitive; USFS = U.S. Forest Service sensitive;
 FE = Federally Endangered; FT = Federally Threatened; FC = Federal Candidate; CO-E = Colorado Endangered Species;
 UT-CAS = Utah Conservation Agreement Species; UT-SS = Utah Special Status species; WY-N = Wyoming Native; HMA = Herd
 Management Area; CO-ST = Colorado State Threatened

X2.2 Region II

Region II spans from southern Moffat County near Massadona, Colorado to central Utah near Delta. A final decision on the selected route has yet to be made. The Applicant Proposed and Agency Preferred Alternatives are both considered in this Plan. As these routes cross different BLM Field Offices and National Forests, some requirements included below may not all be relevant to the selected Agency Preferred Alternative. The Applicant Proposed route crosses: White River, Vernal, Salt Lake, Richfield, and Fillmore BLM Field Offices and Uinta and Manti-La Sal National Forests. The Agency Preferred route crosses: White River, Vernal, Salt Lake, Richfield, and Fillmore BLM Field Offices and Uinta and Manti-La Sal National Forests. Potential access roads may enter the Ashley National Forest. This region is dominated by pinyon-juniper woodlands as well as sagebrush and saltbush shrublands.

TABLE X2 SPECIAL STATUS SPECIES AND TEMPORAL/ SPATIAL RESTRICTIONS FOR REGION II

SPECIES	REGULATORY STATUS WITHIN PROJECT AREA	TIMING RESTRICTION	BUFFER / SPATIAL USE RESTRICTION
Mammals			
Utah prairie dog (<i>Cynomys parvidens</i>)	FT; BLM; UT-SS Tier I	Year-round ⁵ (Historic and occupied colonies) 4/1 – 9/30 ⁵ Year-round ⁵ (Historic and occupied habitat)	350 feet, CSU ⁵ Conduct activities ⁵ 0.5 mile, CSU ⁵
White-tailed prairie dog (<i>Cynomys leucurus</i>)	BLM	Year-round ^{1,2} (colonies)	660 feet, NSU ^{1,2}
Pygmy rabbit (<i>Brachylagus idahoensis</i>)	BLM; USFS; UT-SS Tier II		0.5 mile ⁹
Canada lynx (<i>Lynx canadensis</i>)	FT; BLM; CO-SE; UT-SS Tier I	Year-round ^{2,3} (occupied denning habitat) 4/15 – 6/30 ² (potential denning habitat)	CSU ^{2,3} No construction, maintenance during daylight ²
Black-footed ferret (<i>Mustela nigripes</i>)	EXP/NE; BLM; CO-SE; UT-SS	Year-round (known or potential habitat) 5/1 – 7/15 ² (known home ranges)	CSU ^{1,3} 0.125 mile (known home ranges) ²
All Big Game		12/1 – 4/30 ³ (severe winter range) Winter range ⁸ 12/15 – 4/15 ⁵ (crucial winter range) 5/15 – 8/15 ³ (summer range)	No development, TBD ³ No activities that disturb wintering game ⁸ No surface disturbing activities ⁵ Conditional, TBD ³

SPECIES	REGULATORY STATUS WITHIN PROJECT AREA	TIMING RESTRICTION	BUFFER / SPATIAL USE RESTRICTION
		5/1 – 6/30 ³ 5/1 – 6/30 ³ (parturition areas)	No surface disturbing activities ³
Elk (<i>Cervus canadensis</i>)	Big game	5/15 – 6/30 ² 5/1 – 6/30 ⁴ (Parturition/calving areas)	No development ² No disturbing activities ⁴
		12/4 – 4/30 ² 12/1 – 4/15 ^{1,3} 12/1 – 4/30 ⁴ 12/1 – 3/30 ⁷ (crucial winter range)	Area closed ^{1,3} No disturbing activities ^{4,7}
		5/15 – 7/5 ^{1,3} (fawning/calving areas)	Area closed ^{1,3}
Mule deer (<i>Odocoileus hemionus</i>)	Big game	5/15 – 6/30 ² 4/15 – 7/31 ⁴ (Parturition/calving areas)	No development ² No disturbing activities ⁴
		12/1 – 4/15 ^{1,3} 12/4 – 4/30 ² 12/1 – 4/15 ⁴	Area closed ^{1,3} No disturbing activities ⁴
		Year-round ² (crucial winter range)	CSU ²
		5/15 – 7/5 (fawning/calving areas) ³	Area closed ³
Moose (<i>Alces alces</i>)	Big game	12/1 – 4/15 ^{1,3} (crucial winter range)	Area closed ^{1,3}
Pronghorn (<i>Antilocapra americana</i>)	Big game	5/1 – 6/30 ² 4/15 – 7/1 ⁴ (parturition areas)	No disturbing activities ⁴
Bighorn sheep (<i>Ovis canadensis</i>), all varieties	BLM; USFS; Big game	4/15 – 6/15 ^{1,3} (spring/lambing range)	Area closed ^{1,3}
		TBD ⁴	CSU ⁴
Wild Horses		Foaling areas: 3/1 – 6/15 ⁴	Limited activity TBD ⁴
Birds			
All Migratory Birds		4/15 – 8/15 ¹ (TBD high-value breeding habitat)	Area closed ¹
California condor (<i>Gymnogyps californianus</i>)	FE; BLM; EXP/NE-UT; UT-SS Tier I	Year-round ⁵ 8/1 – 11/31 ^{5,10} (roosts)	0.5 mile, NSU ⁵ 0.5 mile, restricted activity ^{5,10}
		Breeding season undefined ^{2,5,6} 1/1 – 8/31 ¹⁰ (nests)	1 mile ^{2,5,6,7,10}
Bald eagle (<i>Haliaeetus leucocephalus</i>)	BLM; USFS; CO-ST; UT-SS Tier I	11/15 – 4/15 ³ (winter concentration)	0.5 mile ³

SPECIES	REGULATORY STATUS WITHIN PROJECT AREA	TIMING RESTRICTION	BUFFER / SPATIAL USE RESTRICTION
		area)	
		Year-round ⁵ 11/1 – 3/31 ^{5,10} 11/15 – 3/15 ⁴ (roost/ concentration area)	NSU ^{3,5} , CSU ^{3,4,5} 0.5 mile ^{4,5,10}
		12/15 – 7/15 ³ (nests)	0.5 mile (sites requiring repeated human presence) ³
		1/1 – 8/31 ^{1,3,5,6,7} (nests)	1 mile ^{1,2,5,6,7}
Greater sage-grouse (<i>Centrocercus urophasianus</i>)	FC; BLM; USFS; UT-SS Tier II	Year-round ³ (all known habitats)	CSU ³
		TBD	4 miles ⁹
		3/1 – 6/15 ^{2,7}	2 miles ^{1,2,3,5}
		4/15 – 7/7 ³	0.5 mile or line of sight (Strawberry pop'n.) ⁷
		3/15 – 7/15 ^{1,5}	No disruptive activities ⁵ ,
		3/1 – 7/31 ⁶ (leks)	No surface disturbing activities ² CSU ⁶
		2/15 – 6/15 ^{0,4} (leks and nesting habitat)	0.5 mile, No disturbing activities ⁴
		Year-round ^{1,2,3,4,5,7} (leks)	0.25 mile ^{2,3} NSU 0.5 ² and 2 mile ² CSU 0.5 mile, NSU ^{1,4,5} 300 yards ⁷ CSU
		12/1 – 3/14 ¹	No development ³
		12/16 – 3/15 ³	No disruptive activities ^{1,5}
		12/16 – 3/15 ⁵ (winter habitat)	
		12/1 – 3/1 ⁴ (winter crucial habitat)	No disturbing activities ⁴
Mountain plover (<i>Chardrius montanus</i>)	BLM; USFS; UT-SS;	4/10 – 7/10 (nests) ⁹	0.25 mile ⁹
Yellow-billed cuckoo (western) (<i>Coccyzus americanus</i>)	FC; BLM; UT-SS Tier I	3/15 – 10/15 ⁹ (suitable habitat)	Suitable habitat ⁹
Mexican spotted owl (<i>Strix occidentalis lucida</i>)	FT; BLM; CO-ST; UT-SS	Year-round ^{1,2} (Protected Activity Center or designated habitat)	0.5 mile ² , NSU ² , CSU ¹
		2/1 – 8/15 ³ 3/1 – 8/31 ^{1,2,5,6,7}	0.25 mile ^{1,2,3,5,7}
Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	FE; BLM; CO-SE; UT-SS Tier I	Year-round ⁵ (suitable habitat)	300 feet NSU ⁵ 0.25 mile NSU ⁵ 0.5 mile CSU ⁵
		3/15 – 10/15 ⁹ (suitable habitat)	Suitable habitat ⁹
		5/1 – 8/15 ⁵ (occupied breeding habitat)	0.25 mile, CSU ⁷ ,
Turkey vulture (<i>Cathartes aura</i>)		5/1 – 8/15 ^{1,2,5,6,7} 3/1 – 7/15 ⁴	0.5 mile ^{1,2,5,4,7}
Northern harrier		2/1 – 8/15 ³	0.25 mile ³

SPECIES	REGULATORY STATUS WITHIN PROJECT AREA	TIMING RESTRICTION	BUFFER / SPATIAL USE RESTRICTION
<i>(Circus cyaneus)</i>		4/1 – 8/15 ^{1,2,5,6,7} 3/1 – 7/15 ⁴	0.5 mile ^{1,2,4,5,6,7}
Sharp-shinned hawk <i>(Accipiter striatus)</i>		2/1 – 8/15 ³ 3/15 – 8/31 ^{1,2,5,6,7} 3/1 – 7/15 ⁴	0.25 mile ³ 0.5 mile ^{1,2,4,5,6,7}
Cooper's hawk <i>(Accipiter cooperii)</i>		2/1 – 8/15 ³ 3/15 – 8/31 ^{1,2,5,6,7} 3/1 – 7/15 ⁴	0.25 mile ³ 0.5 mile ^{1,2,4,5,6,7}
Northern goshawk <i>(Accipiter gentilis)</i>	BLM; USFS; UT-SS Tier I	2/1 – 8/15 ³ 3/1 – 8/15 ^{1,2,5,6,7} 3/1 – 7/15 ⁴	0.5 mile ^{1,2,3,4,5,6,10} 420-acre post-fledgling areas ⁷
Swainson's hawk <i>(Buteo swainsoni)</i>	BLM	2/1 – 8/15 ³ 3/1 – 8/31 ^{1,2,5,6,7} 3/1 – 7/15 ⁴	0.5 mile ^{1,2,3,4,5,6,7}
Red-tailed hawk <i>(Buteo jamaicensis)</i>		2/1 – 8/15 ³ 3/15 – 8/31 ^{1,2,5,6} 3/15 – 8/15 ⁷ 3/1 – 7/15 ⁴	0.25 mile ³ 0.5 mile ^{1,2,4,5,6,7}
Ferruginous hawk <i>(Buteo regalis)</i>	BLM; UT-SS Tier II	2/1 – 8/15 ³ 3/1-8/1 ^{1,2,5,6,7} 3/1 – 7/15 ⁴	1 mile ³ 0.5 mile ^{1,2,4,5,6,7}
Golden eagle <i>(Aquila chrysaetos)</i>	BLM	2/1 – 8/15 ³ 1/1 – 8/31 ^{1,2,5,6,7} 3/1 – 7/15 ⁴	0.5 mile ^{1,2,3,4,5,6,7}
Osprey <i>(Pandion haliaetus)</i>		2/1 – 8/15 ³ 4/1 – 8/31 ^{1,2,5,6,7} 3/1 – 7/15 ⁴	0.25 mile ³ 0.5 mile ^{1,2,4,5,6,7}
Merlin <i>(Falco columbarius)</i>		2/1 – 8/15 ³ 4/1 – 8/31 ^{1,2,5,6,7} 3/1 – 7/15 ⁴	0.25 mile ³ 0.5 mile ^{1,2,4,5,6,7}
American kestrel <i>(Falco sparverius)</i>		2/1 – 8/15 ³ 3/1 – 7/15 ⁴	0.25 mile ³ 0.5 mile ⁴
Prairie falcon <i>(Falco mexicanus)</i>	BLM	2/1 – 8/15 ³ 4/1 – 8/31 ^{1,2,5,6,7} 3/1 – 7/15 ⁴	0.5 mile ^{1,2,3,4,5,6,7}
Peregrine falcon <i>(Falco peregrinus)</i>	BLM; USFS	2/1 – 8/15 ³ 2/1 – 8/31 ^{1,2,5,6,7} 3/1 – 7/15 ⁴	0.5 mile ^{3,4} 1 mile ^{1,2,5,6,7}
Long-eared owl <i>(Asio otus)</i>	BLM	2/1 – 8/15 ^{1,2,3,5,6,7} 3/1 – 7/15 ⁴	0.5 mile ^{3,4} 0.25 mile ^{1,2,5,6,7}
Short-eared owl <i>(Asio flammeus)</i>	BLM; UT-SS Tier II	2/1 – 8/15 ³ 3/1 – 8/1 ^{1,2,5,6,7} 3/1 – 7/15 ⁴	0.5 mile ^{3,4} 0.25 mile ^{1,2,5,6,7}
Great horned owl <i>(Bubo virginianus)</i>		2/1 – 8/15 ³ 12/1 – 9/30 ^{1,2,5,6,7} 3/1 – 7/15 ⁴	0.25 mile ^{1,2,3,5,6,7} 0.5 mile ⁴
Boreal owl <i>(Aegolius funereus)</i>	USFS	2/1 – 7/31 ^{1,2,5,6,7} 3/1 – 7/15 ⁴	0.25 mile ^{1,2,5,6,7} 0.5 mile ⁴
Northern saw-whet owl <i>(Aegolius acadicus)</i>		3/1 – 8/31 ^{1,2,5,6,7} 3/1 – 7/15 ⁴	0.25 mile ^{1,2,5,6,7} 0.5 mile ⁴
Burrowing owl <i>(Athene cunicularia)</i>	BLM; CO-ST; UT-SS Tier II	2/1 – 8/15 ³ 3/1 – 8/31 ^{1,2,5,6,7} 3/1 – 7/15 ⁴	0.5 mile ^{3,4} 0.25 mile ^{1,2,5,6,7}

SPECIES	REGULATORY STATUS WITHIN PROJECT AREA	TIMING RESTRICTION	BUFFER / SPATIAL USE RESTRICTION
Flammulated owl (<i>Otus flammeolus</i>)	BLM; USFS	4/1 – 9/30 ^{1,5,6,7,10} 3/1 – 7/15 ⁴	0.25 mile ^{1,5,6,7,10} 0.5 mile ⁴
Western screech owl (<i>Megascops kennicottii</i>)		2/1 – 8/15 ³ 3/1 – 8/15 ^{1,2,5,6,7} 3/1 – 7/15 ⁴	0.25 mile ^{1,2,3,5,6,7} 0.5 mile ⁴
Northern pygmy owl (<i>Glaucidium californicum</i>)		4/1 – 8/1 ^{1,2,5,6,7} 3/1 – 7/15 ⁴	0.25 mile ^{1,2,5,6,7} 0.5 mile ⁴
Three-toed woodpecker (<i>Picoides dorsalis</i>)	BLM; USFS; UT-SS Tier II	4/15 – 9/1 ⁷	30-acre nest areas ⁷
Amphibians			
Boreal toad (<i>Bufo boreas boreas</i>)	USFS; UT-CAS; CO-E	4-5 weeks following snowmelt ⁷ Year-round ⁹	None Breeding habitat in Sowers Creek ⁹
Fish			
Humpback chub (<i>Gila cypha</i>)	FE; BLM		0.25 mile of channel centerline (Colorado, Green, Duchesne, Price, White, and San Rafael Rivers) ² NSU (within critical habitat) ⁹
Southern leatherside chub (<i>Lepidomeda aliciae</i>)	BLM; USFS; UT-CAS	Approx. April – June ⁹	Spawning areas ⁹
Bonneville cutthroat trout (<i>Oncorhynchus clarki utah</i>)	BLM; USFS; UT-SC; UT-CAS		No water withdrawals ⁹
Colorado River cutthroat trout (<i>Oncorhynchus clarkii pleuriticus</i>)	BLM; USFS; UT-CAS		CSU ³ No water withdrawals ⁹
Colorado pikeminnow (<i>Ptychocheilus lucius</i>)	FE; BLM		0.25 mile of channel centerline (Colorado, Green, Duchesne, Price, White, and San Rafael Rivers) ² NSU (within critical habitat) ⁹
Razorback sucker (<i>Xyrauchen texanus</i>)	FE; BLM		0.25 mile of channel centerline (Colorado, Green, Duchesne, Price, White, and San Rafael Rivers) ² NSU (within critical habitat) ⁹
Colorado River Fishes	BLM	None	CSU (floodplains, current populations) ¹
Invertebrates			
California floater (<i>Anodonta californiensis</i>)	BLM		Currant Creek (surveys required if instream construction) ⁹
Southern Bonneville pyrg (<i>Pyrgulopsis transversa</i>)	UT-SC		300 feet (Thistle Creek) ⁹
Plants			
Deseret milkvetch (<i>Astragalus desereticus</i>)	FT		Known plants / populations / suitable habitat ⁹

SPECIES	REGULATORY STATUS WITHIN PROJECT AREA	TIMING RESTRICTION	BUFFER / SPATIAL USE RESTRICTION
Maguire daisy (<i>Erigeron maguirei</i>)	BLM; USFS	5/1 – 6/30 ⁵	300 feet (from plants and avoidance areas) ⁵
San Rafael cactus (<i>Pediocactus despainii</i>)	FE		100 feet (from plants) ⁵
Winkler cactus (<i>Pediocactus winkleri</i>)	FT	3/1 – 6/1	300 feet (from plants and avoidance areas) ⁵
Clay phacelia (<i>Phacelia argillacea</i>)	FE		Known plants/populations ⁹
Clay reed-mustard (<i>Schoenocrambe argillacea</i>)	FT	5/1 – 6/5	300 feet (occupied habitat) ²
Shrubby reed-mustard (<i>Schoenocrambe suffrutescens</i>)	FE	4/15 – 5/30	300 feet (from plants) ²
Uinta Basin hookless cactus (<i>Sclerocactus wetlandicus</i>)	FT		Level 1 and 2 core areas ⁹
Wright fishhook cactus (<i>Sclerocactus wrightiae</i>)	FE	4/15 – 6/15	300 feet (from plants and avoidance areas) ⁵
Ute ladies'-tresses orchid (<i>Spiranthes diluvialis</i>)	FT	None	300 feet (occupied habitat) ^{2,5} 300 feet (riparian habitat conservation areas) ⁷ 300 feet ⁹
Thompson talinum (<i>Talinum thompsonii</i>)	BLM	None	0.25 mile (known orchid habitat) ²
Last Chance townsendia (<i>Townsendia aprica</i>)	FT	4/15 – 6/30	Access roads will be graveled within occupied habitat ⁵

¹ BLM Price Field Office; ² BLM Vernal Field Office; ³ BLM White River Field Office; ⁴ BLM Salt Lake Field Office; ⁵ BLM Richfield Field Office; ⁶ BLM Fillmore Field Office; ⁷ USFS Uinta National Forest; ⁸ USFS Manti-La Sal National Forest; ⁹ Draft EIS Additional Mitigation Measures; ¹⁰ State of Utah

NSU = No Surface Use; FE = Federally Endangered; FC = Federal Candidate; BLM = BLM sensitive species; USFS = U.S. Forest Service special status species; CO-E = Colorado Endangered Species; UT-SS = Utah Special Status; UT-SC = Utah Special Concern; UT-CAS = Utah Conservation Agreement Species; CO-SE = Colorado – State Engendered; EXP/NE = Experimental/Non-essential

X2.3 Region III

Region III spans from central Utah near Delta to Apex, Nevada north of Las Vegas. The Agency Preferred Alternative was considered in this Plan for Region III. The Agency Preferred route crosses: Fillmore and Cedar City Field Offices in Utah, and Ely, and Las Vegas Field Offices in Nevada. This region is dominated by desert shrub, pinyon-juniper woodlands, and sagebrush shrubland.

TABLE X3 SPECIAL STATUS SPECIES AND TEMPORAL/ SPATIAL RESTRICTIONS FOR REGION III

SPECIES	REGULATORY STATUS WITHIN PROJECT AREA	TIMING RESTRICTION	BUFFER / SPATIAL USE RESTRICTION
Mammals			
Utah prairie dog (<i>Cynomys parvidens</i>)	FT; BLM; UT-SS Tier I	Year-round ²	CSU ²
All Big Game	Big game	4/15 – 6/30 ⁴ (Parturition areas) 11/1 – 3/31 ⁴ (Crucial)	

SPECIES	REGULATORY STATUS WITHIN PROJECT AREA	TIMING RESTRICTION	BUFFER / SPATIAL USE RESTRICTION
		winter habitat)	
Elk (<i>Cervus canadensis</i>)	Big game	5/1 – 7/30 ³ (Parturition areas)	No activity ³
Mule deer (<i>Odocoileus hemionus</i>)	Big game	5/1 – 7/30 ³ (Parturition areas)	No activity ³
		11/1 – 4/15 ³ (crucial winter range)	No activity ³
Rocky Mountain bighorn sheep (<i>Ovis canadensis</i>)	USFS	3/1 – 5/31 ⁴ 7/1 – 8/31 ⁴ (Occupied habitat)	
Desert bighorn sheep (<i>Ovis canadensis nelsoni</i>)	BLM; USFS	3/1 – 5/31 ⁴ 7/1 – 8/31 ⁴ (Occupied habitat)	
		1/1 – 5/1 ⁵ (lambing areas in Sloan Canyon conservation area)	
Birds			
California condor (<i>Gymnogyps californianus</i>)	FE; BLM; EXP/NE-UT; UT-SS Tier I	8/1 – 11/31 ⁷ (roosts) Breeding season undefined ¹ 1/1 – 8/31 ⁷	0.5 mile, TBD ⁷ 1 mile ^{1,7}
Golden eagle (<i>Aquila chrysaetos</i>)	BLM	2/15 – 6/30 ² (roost sites Paragonah to St. George) 1/1 – 8/31 ¹ (nests)	No activity ² 0.5 mile ¹ 600 feet ²
Bald eagle (<i>Haliaeetus leucocephalus</i>)	BLM; USFS; UT-SS Tier I; NV-P	2/15 – 6/30 ² (roost sites Paragonah to St. George) 11/1 – 3/31 ⁷ (roosts) 1/1 – 8/31 ¹ (nests)	No activity ² 0.5 mile, TBD ⁷ 1 mile ¹ 600 feet ²
Greater sage-grouse (<i>Centrocercus urophasianus</i>)	FC; BLM; USFS; UT-SS Tier II;	Year-round ^{1,4,6} (occupied habitat) 3/1 – 7/31 ¹ 3/1 – 5/15 ^{2,4} (leks) 11/1 – 3/31 ⁴ (winter range) 2/28 – 5/16 ² (Pinyon Planning Unit) 3/15 – 5/1 ² (Sigurd to Paragonah)	2 miles, CSU ^{1,4} , NSU ⁴ 4 miles ⁶ Reduced activity ² , 2 miles TBD ⁴ TBD ⁴ No activity ² No activity ²
Yellow-billed cuckoo (western) (<i>Coccyzus americanus</i>)	FC; BLM; UT-SS Tier I; NV-P	3/15 – 10/15 ⁶ (suitable habitat)	
Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	FE; BLM; UT-SS Tier I; NV-P	3/15 – 10/15 ⁶ (suitable habitat)	
Turkey vulture		5/1 – 8/15 ¹	0.5 mile ¹

SPECIES	REGULATORY STATUS WITHIN PROJECT AREA	TIMING RESTRICTION	BUFFER / SPATIAL USE RESTRICTION
<i>(Cathartes aura)</i> Northern harrier		4/1 – 8/15 ¹	0.5 mile ¹
<i>(Circus cyaneus)</i> Sharp-shinned hawk		3/15 – 8/31 ¹	0.5 mile ¹
<i>(Accipter striatus)</i> Cooper's hawk		3/15 – 8/31 ¹	0.5 mile ¹
<i>(Accipiter cooperii)</i> Northern goshawk		3/1 – 8/15 ¹	0.5 mile ¹
<i>(Accipiter gentilis)</i> Swainson's hawk	BLM	3/1 – 8/31 ¹	0.5 mile ¹
<i>(Buteo swainsoni)</i> Red-tailed hawk		3/15 – 8/15 ¹	0.5 mile ¹
<i>(Buteo jamaicensis)</i> Ferruginous hawk	BLM; UT-SS Tier II; NV-P	3/1-8/1 ¹	0.5 mile ¹
<i>(Buteo regalis)</i> Osprey		4/1 – 8/31 ¹	0.5 mile ¹
<i>(Pandion haliaetus)</i> Merlin		4/1 – 8/31 ¹	0.5 mile ¹
<i>(Falco columbarius)</i> Prairie falcon	BLM	4/1 – 8/31 ¹	0.25 mile ¹
<i>(Falco mexicanus)</i> Peregrine falcon	BLM; USFS; NV-P	2/1 – 8/31 ¹	1 mile ¹
<i>(Falco peregrinus)</i> Long-eared owl	BLM	2/1 – 8/15 ¹	0.25 mile ¹
<i>(Asio otus)</i> Short-eared owl	BLM; UT-SS Tier II	3/1 – 8/1 ¹	0.25 mile ¹
<i>(Asio flammeus)</i> Great horned owl		12/1 – 9/30 ¹	0.25 mile ¹
<i>(Bubo virginianus)</i> Mexican spotted owl	FT; BLM; UT-SS	3/1 – 8/31 ¹	0.5 mile (no temporary disturbance) ¹
<i>(Strix occidentalis)</i>			0.5 mile (no surface occupancy) ¹
			No actions within 0.5 mile of identified nest site in Utah ⁶
Boreal owl	USFS	2/1 – 7/31 ¹	0.25 mile ¹
<i>(Aegolius funereus)</i> Northern saw-whet owl		3/1 – 8/31 ¹	0.25 mile ¹
<i>(Aegolius acadicus)</i> Burrowing owl	BLM; UT-SS Tier II	3/1 – 8/31 ¹	0.25 mile ¹
<i>(Athene cunicularia)</i> Flammulated owl	USFS	4/1 – 9/30 ¹	0.25 mile ¹
<i>(Otus flammeolus)</i> Western screech owl		3/1 – 8/15 ¹	0.25 mile ¹
<i>(Megascops kennicottii)</i> Northern pygmy owl		4/1 – 8/1 ¹	0.25 mile ¹
<i>(Glaucidium californicum)</i>			
Reptiles			
Desert tortoise	FT; BLM; UT-SS Tier I; NV-P	Year-round ⁶	
<i>(Gopherus agassizii)</i>			

SPECIES	REGULATORY STATUS WITHIN PROJECT AREA	TIMING RESTRICTION	BUFFER / SPATIAL USE RESTRICTION
Fish			
Meadow Valley Wash desert sucker (<i>Catostomus clarkii</i> spp.)	BLM; NV-P		No vehicle crossings in Muddy River ⁶
Moapa White River springfish (<i>Crenichthys baileyi moapae</i>)	NV-P		No vehicle crossings in Muddy River ⁶
Virgin River chub (<i>Gila robusta seminuda</i>)	FE; BLM		NSU (within critical habitat) ⁶
			No vehicle crossings in Muddy River ⁶
Moapa speckled dace (<i>Rhinichthys osculus moapae</i>)	NV-P		No vehicle crossings in Muddy River ⁶
Meadow Valley Wash speckled dace (<i>Rhinichthys osculus subspecies</i>)	BLM		No vehicle crossings in Muddy River ⁶
Plants			
Ute ladies'-tresses orchid (<i>Spiranthes diluvialis</i>)	FT; BLM; NV – CE	None	300 feet ⁶

¹BLM Fillmore Field Office; ²BLM Cedar City Field Office; ³BLM Saint George Field Office; ⁴BLM Ely Field Office; ⁵BLM Las Vegas Field Office; ⁶Draft EIS Additional Mitigation Measures; ⁷State of Utah
 BLM = BLM sensitive species; NV-P = Nevada Protected; UT-SC = Utah Special Concern; FE = Federally Endangered;
 FT = Federally Threatened; FC = Federal Candidate; USFS = U.S. Forest Service sensitive species;
 NV – CE = Nevada critically endangered; NV – PCE = Nevada proposed critically endangered;
 NV – CY = Nevada protected cactus / yucca

X2.4 Region IV

Region IV spans from Apex, Nevada to the Eldorado Valley near Boulder City, Nevada. As the Applicant Proposed and Agency Preferred Alternatives are the same, this is the only route considered in the Plan. The route is entirely within the Las Vegas Field Office of the Southern Nevada BLM District. The region is dominated by desert shrub and disturbed/developed lands.

TABLE X4 SPECIAL STATUS SPECIES AND TEMPORAL/ SPATIAL RESTRICTIONS FOR REGION IV

SPECIES	REGULATORY STATUS WITHIN PROJECT AREA	TIMING RESTRICTION	BUFFER / SPATIAL USE RESTRICTION
Mammals			
Desert bighorn sheep (<i>Ovis canadensis nelsoni</i>)	BLM; USFS	1/1 – 5/1 ¹	Lambing areas in Sloan Canyon conservation area ¹
Birds			
Yellow-billed cuckoo (western) (<i>Coccyzus americanus</i>)	FC; BLM; NV-P	3/15 – 10/15 ² (suitable habitat)	Suitable habitat ²
Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	FE; BLM; NV-P	3/15 – 10/15 ² (suitable habitat)	Suitable habitat ²
Fish			
Razorback sucker (<i>Xyrauchen texanus</i>)	FE; BLM		NSU (within critical habitat) ²

¹BLM Las Vegas Field Office; ²Draft EIS Additional Mitigation Measures

BLM = BLM sensitive species; FE = Federally Endangered; FT = Federally Threatened; FC = Federal Candidate;
USFS = U.S. Forest Service sensitive species; NV – CE = Nevada critically endangered;
NV – PCE = Nevada proposed critically endangered; NV – CY = Nevada protected cactus / yucca

X3.0 WILDLIFE AND PLANT PROTECTION MEASURES

Through a process of scoping, public review, and development of the DEIS, wildlife species of concern have been identified for the TWE Project. Appropriate protection measures to avoid and minimize impacts to sensitive species will be implemented as provided for in the BA/BO, BE, and ROD. To reduce anticipated impacts, the DEIS included protection measures that will be refined through development of the FEIS and through agency consultation.

X3.1 Protection Measures

Measures to protect wildlife are being developed through the NEPA process and in subsequent consultations with state and federal agencies. The measures presented in the DEIS are outlined below. This iteration of the Plan is intended to be used as a framework to incorporate future minimization and mitigation measures and should not be considered as complete. Minimization and mitigation measures will be updated based on information provided in the FEIS, BA/BO, BE, and continued agency consultation in the ROD POD and NTP POD versions of this Plan. The Plan should be used to guide the Construction Contractor(s) in the construction of the TWE Project.

X3.1.1 West-wide Energy Corridor Programmatic EIS Best Management Practices

TransWest has incorporated BMPs into the proposed mitigation measures for the TWE Project. The TWE Project is located within portions of the West-wide Energy Corridor (WWEC). This being the case, BMPs developed as part of the Programmatic EIS will be implemented on all projects located within the West-wide Energy Corridor.

- **RC-3:** The appropriate agency, assisted by the project applicant, must consult with the U.S. Fish and Wildlife Services (USFWS) and the National Marine Fisheries Service (NMFS) as required by Section 7 of ESA. The specific consultation requirements, as set forth in regulations at 50 CFR Part 402, would be applied on a project-by-project basis. Applicants shall identify known occupied sites, such as nest sites, for threatened and endangered species and special status species.
- **WAT-10:** The applicant shall minimize stream crossings by access roads to the extent practicable. All structures crossing intermittent and perennial streams should be located and constructed so that they do not decrease channel stability, increase water velocity, or impede fish passage.
- **ECO-1:** Applicants shall identify important, sensitive, or unique habitats and BLM sensitive, FS Sensitive, and state-listed species in the vicinity of proposed projects and, to the extent feasible, design the project to avoid, minimize, or mitigate impacts to these habitats and species.
- **ECO-4:** Areas that are known to support ESA-listed species, BLM-sensitive, FS-sensitive, and state-listed species or their habitats must be identified and marked with flagging or other appropriate means to avoid direct impacts during construction activities. Construction

activities upslope of these areas should be avoided to prevent indirect impacts of surface water and sediment runoff.

- **ECO-6:** Applicants shall review existing information regarding plant and animal impacts to the applicable agencies.
- **ECO-7:** Project staff shall avoid harassment or disturbance of wildlife, especially during reproductive courtship, migratory, and nesting seasons.
- **ECO-8:** Observations by project staff of potential wildlife problems, including wildlife mortality, will be immediately reported to the applicable agency authorized officer.

X3.1.2 TWE Applicant Proposed Measures

The following Applicant Proposed Measures were identified in the DEIS as applicant-committed environmental protection measures or design features proposed by TransWest that are being taken into account to further reduce impacts to plant and wildlife resources. The following measures will be applied to all portions of the TWE Project. Note that the Construction, Operation and Maintenance Plan (COM Plan) will be a part of the NTP POD.

- **TWE-2:** The Applicant will comply with all applicable environmental laws and regulations. Applicable laws and regulations may include, but are not limited to, the Clean Water Act (CWA) Section 303(d) and Section 404; the Wildlife and Scenic River Act, Section 3(a) or 2(a) ii; the ESA, Section 7; the National Historic Preservation Act, Section 106; and the Native American Graves protection and Repatriation Act (NAGPRA). Compliance with all applicable laws and regulations will be documented in the Final Plan of Development (POD)/Construction, Operation, and Maintenance (COM) Plan.
- **TWE-29:** The COM Plan will include a Biological Protection Plan, which will identify important, sensitive, or unique habitats and BLM-sensitive, USFS-sensitive, and state-listed species in the vicinity of the TWE Project. The COM Plan will identify measures to be taken to avoid, minimize, or mitigate impacts to these habitats and species.
- **TWE-31:** Mitigation measures that will be developed during the consultation period with the BLM and under Section 7 of the ESA will be adhered to, along with mitigation developed in conjunction with state authorities.
- **TWE-32:** Seasonal restrictions may be implemented in certain areas to mitigate impacts on wildlife. With the exception of emergency repair situations, ROW construction, restoration, maintenance, and termination activities in designated areas will be modified or discontinued during sensitive periods (e.g., nesting and breeding periods) for candidate, proposed or listed threatened and endangered, or other sensitive animal species, as required by permitting agencies. Potential seasonal restrictions and avoidance buffers for nesting raptors will be identified in the DEIS. The Biological Protection Plan will incorporate the seasonal restrictions and stipulations contained in the federal agency Records of Decision (RODs).
- **TWE-33:** Prior to the start of construction, the Applicant will provide training to all Contractor and Subcontractor personnel and others involved in construction activities where/if there is a known occurrence of protected species or habitat in the construction area. Sensitive areas will be considered avoidance areas. Prior to any construction activity, avoidance areas will be marked on the ground and maintained through the duration of the

Contract. The Applicant will remove markings during and following final inspection of the TWE Project.

- **TWE-34:** If evidence of a protected species not previously identified or known is found in the TWE Project area, the Contractor will immediately notify the appropriate land management agencies and provide the location and nature of the findings.

X3.1.3 Additional Mitigation Measures

The following additional mitigation measures were identified in the DEIS as mitigation measures to minimize impacts to plant and wildlife resources. The measures presented in Table X5 have not been finalized at this time and may be refined, changed, or eliminated based on information provided in the FEIS, BA/BO, BE, and continued agency consultation in the ROD POD and NTP POD versions of this Plan.

TABLE X5 ADDITIONAL MITIGATION MEASURES

DRAFT EIS MITIGATION MEASURE NUMBER	MITIGATION MEASURES
SS-1	(Species-specific Surveys for Federally-listed Species) – Site- and species-specific surveys for federally listed plant species would be conducted prior to the Biological Assessment (BA) to identify the precise location of known individuals and populations and ground-truth modeled habitats. Surveys would be conducted in areas identified as potential habitat through models developed for the EIS, or from agency provided models for specific species. Surveys would be conducted as described in the TWE Project Special Status Species Survey Plan, and subsequent Survey Plan Memos. Species not requiring surveys prior to the BA would be identified by the USFWS and BLM. For these species, pre-construction surveys would still be required. If individuals or populations are identified during surveys in potential habitat areas, species-specific avoidance through structure and ROW design modifications would be developed and implemented. For species that cannot be avoided, species specific mitigation would need to be developed in consultation with the USFWS and BLM. Species specific mitigation may include compensatory mitigation, and transplanting of individuals.
SS-2	(Species-specific Surveys for Forest Sensitive) – Site- and species-specific surveys for USFS sensitive plant species would be conducted prior to the Biological Evaluation (BE) to identify the precise location of known individuals and populations and ground-truth modeled habitats. Surveys would be conducted in areas identified as potential habitat through models developed for the EIS, or from agency provided models for specific species. Surveys for USFS sensitive species would be conducted only in the national forests crossed by the proposed project. Surveys would be conducted as described in the TWE Project Special Status Species Survey Plan, and subsequent Survey Plan Memos. Species not requiring surveys prior to the BE would be identified by the USFS and BLM. For these species, pre-construction surveys would still be required. If individuals or populations are identified, species-specific avoidance through structure and ROW design modifications would be developed and implemented. If individuals or populations are identified during surveys in potential habitat areas, species-specific avoidance through structure and ROW design modifications would be developed and implemented. For species that cannot be avoided, species specific mitigation would need to be developed in consultation with the USFS and BLM. Species specific mitigation may include compensatory mitigation, and transplanting of individuals.
SS-3	(Species-specific Surveys for BLM Sensitive, NPS Sensitive, and Nevada State Protected Species) – Site- and species-specific surveys for BLM sensitive, NPS sensitive, and Nevada state-protected plant species would be conducted prior to construction it identify the precise location of known individuals and populations and ground-truth modeled habitats. Surveys would be described in the TWE Project Special Status Species Survey Plan and subsequent Survey Plan Memos. If individuals or populations are identified, species-specific avoidance through structure and ROW design modifications would be developed and implemented.

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SS-4	(Avoidance of Ute Ladies'-tresses Orchid Species and Habitat) – Known individuals and populations and areas identified as potential habitat through consultation with the USFWS would be spanned by the transmission line. Surface disturbance associated with facilities, access roads, and other project related construction activities would not occur within the areas identified potential habitat or as having known occurrences. Presence of species in modeled habitat would be assumed for USFWS mitigation purposes. If potential habitat cannot be avoided, 2 years of surveys in potential habitat would be required, and USFWS formal consultation may be necessary.
SS-5	Construction will occur down slope of special status plants and populations where feasible; if surface disturbance must be sited upslope, a 300 ft minimum buffer between surface disturbances and plants and populations will be incorporated. Erosion control would be implemented at the direction of the BLM, USFS, or USFWS, as appropriate, to prevent sedimentation and erosion from upslope surface disturbance.
SS-6	A minimum 300-foot buffer distance would be incorporated between federally listed individuals and populations and surface disturbance. Avoidance areas will be visible during construction through fencing, signing, rebar, etc. during construction. Construction and operation traffic will stay on designed routes, and other cleared or approved areas.
SS-7	The Dust Control and Air Quality plan will include dust abatement measures to minimize impacts to special status plant species; including slower speed limits on unpaved roads, using gravel for roads in occupied habitat and avoidance areas, and the application of water for dust abatement.
SS-8	(Avoidance of Deseret Milk vetch Species and Habitat) – Known individuals and populations and areas identified as ground-truthed suitable habitat would be spanned by the transmission line. Surface disturbance associated with facilities, access roads, and other project related construction activities would not occur within the areas identified as having known occurrences or suitable habitat. Presence of species would be assumed for development of USFWS conservation measures as appropriate.
SS-9	(Avoidance of Clay Phacelia and Minimization of Indirect Impacts) – Known individuals and populations would be spanned by the transmission line. Surface disturbance associated with facilities, access roads, and other project-related construction activities would not occur within the areas identified as having known occurrences or suitable habitat. Additional site specific erosion control measures would be developed with the USFWS and implemented during construction to minimize erosion in areas near known clay phacelia populations.
SS-10	(Avoidance of High Quality Habitats) - In instances where complete habitat avoidance is not possible (due to, for example, topographical, biological, or engineering constraints), all "high quality" habitats as determined during site- and species-specific surveys would be avoided by all direct disturbances during construction and operational activities. High quality habitat are defined as areas that are within the geographic range of the species, have been field verified as having the majority of required habitat characteristics; and/or the species has been observed in the area or near vicinity.
SS-11	(Uinta Basin Hookless Cactus Core Conservation Area Mitigation Measures) - Construction within Uinta Basin Hookless Cactus Level 1 and Level 2 Core Conservation areas will follow the Draft Energy Development Management Guidelines for <i>Sclerocactus wetlandicus</i> and <i>Sclerocactus brevispinus</i> Core Conservation Areas as appropriate. These include limited to no surface disturbance in core conservation areas; and having an on-site botanist during construction activities. If these measures are not implemented, mitigation measures will need to be developed in consultation with the BLM and USFWS.
Wildlife	
WLF-1	For the protection of breeding migratory birds, WLF-1 requires TransWest to avoid migratory bird habitat removal on currently undisturbed lands, to the extent possible, between approximately February 1 and July 31 (depends on state) or, alternately, to conduct breeding migratory bird surveys and implemented appropriate mitigation in coordination with the BLM, U.S. Bureau of Reclamation, CPW, Nevada Department of Wildlife (NDOW), UDWR, USFWS, Western Area

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	Power Administration (Western), and WGFD. In addition, in order to avoid impacts to raptors during the breeding season (January 1 to August 31 for most eagles, hawks, falcons, and owls and April 15 to September 15 for burrowing owls), TransWest would be required to conduct a breeding raptor survey and implement appropriate mitigation measures, such as buffer zones around active nests, as needed.
Special Status Wildlife Species	
SSWS-1	In order to protect nesting mountain plovers, Trans West would follow the USFWS 2002 Mountain Plover Survey Guidelines and would conduct mountain plover nest surveys if construction were to occur during the mountain plover breeding seasons (April 10 to July 10). If a nest is located, a 0.25 mile protection buffer would be implemented around the active nest until the birds fledged from the nest.
SSWS-2	Prior to construction activities in suitable pygmy rabbit habitat, TransWest would conduct presence/absence surveys following appropriate protocols. Areas within 0.5 mile of proposed disturbance that show characteristics of pygmy rabbits occur, the "Habitat Preservation and Restoration" conservation measures would apply (Keinath and McGee 2004).
SSWS-3	Prior to construction activities in suitable Wyoming pocket gopher habitat, TransWest would conduct presence/absence surveys following appropriate protocols. If active pocket gopher mounds are identified, the proposed surface disturbing activities would avoid the active pocket gopher mounds by 75 meters (BLM 2009). If avoidance of the active pocket gopher mounds by 75 m is not possible, classification surveys (via live capture) must be completed to identify the pocket gopher responsible for the mounds to the species level. If the results conclude that the Wyoming pocket gopher is responsible for the mounds, the "Occupies Wyoming Pocket Gopher Habitat Protection Measures" would apply (BLM 2009). If the results conclude that the associated species is a northern pocket gopher, then the proposed surface disturbance may proceed without mitigation. If the classification survey fails to conclusively identify the associated pocket gopher to the species level, then it will be assumed that the species is a Wyoming pocket gopher and the "Occupied Wyoming Pocket Gopher Habitat Protection Measures" will apply (BLM 2009).
SSWS-4	To avoid and minimize impacts to the desert tortoise and its habitat, TransWest would conduct field surveys in identified desert tortoise habitat following approved USFWS protocols. TransWest would coordinate with the BLM, Western, Boulder City, Clark County, Nevada, Bureau of Reclamation, and USFWS to implement appropriate mitigation measures during construction, including but limited to, fencing, pre-construction surveys, and relocating desert tortoises.
SSWS-5	To reduce impacts to greater sage-grouse from operation of the proposed Project, several design features specific to sage-grouse would be implemented. To limit raptor and corvid predation on greater sage-grouse, TransWest would be required to construct anti-perching devices on segments of the proposed Project near high quality greater sage-grouse habitat (e.g., within 4 miles of occupied/active leks, within core areas, and within PPH) in consultation with the BLM, Western, and applicable state wildlife agencies. To limit the potential for greater sage-grouse collisions with guy wires, TransWest would be required to outfit guy wires with agency approved bird diverters within high quality greater sage-grouse habitat, or alternatively, to construct alternative structures such as self-supporting steel lattice structures or self-supporting tubular H-frame structures instead of guyed lattice structures within greater sage-grouse habitat.
SSWS-5A*	Within 4 miles of leks located within occupied habitat, stipulations would be applied to ROWs. Within 4 miles of a lek in occupied habitat, ROWs would be excluded. Within 4 miles of a lek, but outside occupied habitat, ROWs would be avoided (noise/tall structures); <ul style="list-style-type: none"> • The activity meets noise restriction (noise at occupied leks does not exceed 10 decibels above ambient sound levels at sunrise during breeding season); • The activity meets permanent (structure persists through subsequent breeding season) tall structure restrictions (e.g., the structure is not visible from the lek); and • Environmental compliance documents associated with the activity consider how to limit habitat

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	<p>fragmentation (regardless of the GRSG seasonal habitat). Exceptions to the seasonal restriction and use restrictions could be granted under the following conditions:</p> <ul style="list-style-type: none"> • If surveys determine that the lek is not active that year, and the proposed activity will not take place beyond the season being excepted; • If surveys determine that the lek is no longer occupied, and the proposed activity will not take place beyond the season being excepted; • Is the project plan and NEPA document demonstrate that impacts from the proposed action can be adequately mitigated.
SSWS-6	<p>To prevent impacts to the western yellow-billed cuckoo during the breeding season, TransWest would avoid construction within potentially suitable habitat from March 15 to October 15, or, alternatively, would conduct breeding western yellow-billed cuckoo surveys and implement appropriate mitigation in coordination with the BLM, Western, USFWS, and applicable state wildlife agencies.</p>
SSWS-7	<p>To reduce impacts to Utah prairie dogs, TransWest would be required to conduct a preliminary habitat assessment along portions of the proposed Project that is within historic Utah prairie dog habitat. Based on the results of the habitat survey, additional surveys may be required by the USFWS to determine whether occupied habitat occurs within the disturbance footprint of the proposed Project. If occupied habitat is found, appropriate mitigation measures such as reroutes, reducing the width of the ROW, and constructing alternative structure types (e.g. H-frame tubular) with anti-perching devices on transmission line segments within occupied habitat, would be implemented in coordination with the BLM, Western, UDWR, and USFWS.</p>
SSWS-8	<p>To prevent impacts to southwestern willow flycatchers during the breeding season, TransWest would avoid construction within suitable habitat from March 15 to October 15, or, alternatively, conduct breeding southwestern willow flycatcher surveys and implement appropriate mitigation in coordination with the BLM, Western, USFWS, and applicable state wildlife agencies.</p>
SSWS-9	<p>To reduce impacts to black-footed ferret from operation of the proposed Project, several design features specific to black-footed ferret would be implemented. To limit raptor predation on black-footed ferret, TransWest would be required to construct anti-perching devices and alternative structure types on segments of the proposed Project near high quality black-footed ferret habitat (e.g., within areas of active white-tailed prairie dog colonies) in consultation with the BLM, Western, and applicable state wildlife agencies.</p>
SSWS-10*	<p>To reduce impacts to Mexican spotted owl in Utah, TransWest will ensure that:</p> <ul style="list-style-type: none"> • No action will occur within 0.5 mile of an identified nest site; • If nest site activity status is unknown, no activity will occur within the designated Protect Activity Center (PAC); • Avoid placing permanent structures within 0.5 mil of suitable habitat unless surveyed and not occupied; • Reduce noise emissions (e.g., use hospital-grade mufflers) to 45 dBA at 0.5 mile from suitable habitat, including canyon rims (Delaney et. Al. 1997). Placement of permanent noise-generating facilities should be determined by a noise analysis to ensure noise does not encroach upon a 0.5 mile buffer for suitable habitat, including canyon rims; • Limit disturbances to and within suitable owl habitat by staying on designated routes; and • Limit new access routes created by the project. A permanent action continues for more than one breeding season and/or causes a loss of owl habitat or displaces owls through disturbances, i.e., creation of a permanent structure. <p>For all temporary actions that may impact owls or suitable habitat:</p> <ul style="list-style-type: none"> • If action occurs entirely outside of the owl breeding season, and leaves no permanent structure or permanent habitat disturbance, action can proceed without an occupancy survey; • If action will occur during a breeding season, survey for owls prior to commencing activity. If owls are found, activity should be delayed until outside of the breeding season; and

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	<ul style="list-style-type: none"> Eliminate access routes created by a project through such means as raking out scars, re-vegetation, gating access points, etc. <p>(Temporary activities are defined as those that are completed prior to the start of the following raptor breeding season, leaving no permanent structures and resulting in no permanent habitat loss)</p>
SSWS-11	<p>To reduce impacts to Canada lynx, TransWest would:</p> <ul style="list-style-type: none"> Limit disturbance to and within suitable habitat by staying on approved access routes. Limit new access routes created by the project. Dirt and gravel roads traversing lynx habitat (particularly those that could become highways) should not be paved or otherwise upgraded (e.g. straightening of curves, widening of roadway, etc.) in a manner that is likely to lead to significant increase in traffic volume, traffic speed, increased width of the cleared ROW, or would foreseeable contribute to development or increases in human activity in lynx habitat. When these types of upgrades are proposed, a thorough analysis of potential direct and indirect impacts to lynx and lynx habitat should be conducted. Minimize impacts to habitats that support lynx prey.
Aquatic Biological Resources	
AB-1	<p>(Fish Passage): When avoidance of perennial streams with fish populations is not feasible and a culvert is required during construction, flow would be maintained in a portion of the stream to allow unrestricted fish passage. Any plan for dewatering the stream at the culvert site must be approved by the appropriate federal and state agencies. Culvert size and type would be selected to facilitate the continued and long-term connectivity and movement of target aquatic species. If the culvert is proposed to be in place during project operation, approval must be obtained from the federal or state agency management authority. An alternative crossing method may be required.</p>
AB-2	<p>(Avoid Game Fish Spawning Periods): If spawning areas for game fish species are known to occur at streams proposed for vehicle crossing or culvert construction, instream disturbance would be scheduled to avoid the spawning period. The exact dates for avoidance would be determined through discussions with WGFD, CPWD, or UDWR. All disturbed areas would be restored to pre-construction conditions prior to the next spawning season.</p>
AB-3	<p>(Invasive Aquatic Species Protection): It is assumed that any waterbody could contain aquatic invasive weed species. If work occurs in or near a waterbody, all equipment would be decontaminated. Decontamination would occur before arrival at a project site to avoid the transfer of aquatic invasive species from a previous work site in or near water. Decontamination would consist of either of these actions: 1) Drain all water from equipment and compartments; clean equipment of all mud, plants, debris, and aquatic organisms; and dry equipment for specified time by season (5 days in June through August, 18 days in March through May, and 3 days in December through February when temperatures are at or below freezing); or 2) Use a high pressure (2,500 psi) hot water (140°F) pressure washer to thoroughly clean equipment and flush all compartments that may hold water. A field monitor would be present to ensure that the cleaning was completed prior to vehicle and equipment moving to other streams and drainages.</p>
AB-4	<p>(Herbicide Use Plan): As part of vegetation management, the applicant would prepare an Herbicide Use Plan. The Plan would identify a list of approved herbicides that may be used as well as locations of areas that may be treated. Licensed herbicide applicators would be used in the treatment process. All herbicides would be used in accordance with label instructions for the chemical. The Plan also would discuss compliance with applicable federal, state, and local agencies.</p>
Special Status Aquatic Species	
SSS-1	<p>(Water Use): No new surface water or groundwater withdrawals that are hydrologically connected to streams containing Colorado River cutthroat trout and Bonneville cutthroat trout would be allowed. Any water necessary for construction, operation, or maintenance (including dust</p>

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	abatement) would not be acquired from existing water sources.
SSS-2	(No Permanent Structures or New Roads in Critical Habitat for Federally Listed Fish Species): No permanent structures or new roads would be constructed in critical habitat for federally endangered fish species. Any temporary disturbance to soils in the 100-year floodplain within critical habitat would be minimized to the extent possible and restoration would be completed to maintain existing conditions.
SSS-3	(Avoid Spawning Habitat Disturbance for Special Status Trout Species): If spawning areas for Colorado River cutthroat trout are known to occur at streams proposed for vehicle crossing or culvert construction, instream disturbance would be scheduled to avoid the spawning period from April through May. The exact dates for avoidance would be determined through discussions with WGFD, CPW, or UDWR. All disturbed areas would be restored to pre-construction conditions prior to the next spawning season. The state agencies also would determine if a habitat survey would be required prior to any project disturbance, which would assist in defining habitat conditions for restoration.
SSS-4	(Avoid Spawning Habitat Disturbance for Southern Leatherside Chub): If spawning areas for southern leatherside chub are known to occur at streams proposed for vehicle crossing or culvert construction, instream disturbance would be scheduled to avoid the spawning period from April through June. The exact dates for avoidance would be determined through discussions with UDWR. All disturbed areas would be restored to pre-construction conditions prior to the next spawning season.
SSS-5	(Avoid Direct Disturbance to Habitat for Southern Bonneville Pyrg): No vehicle or equipment disturbance from ROW work or access road construction would be allowed within 300 feet of the unnamed spring located near Thistle Creek that contains southern Bonneville pyrg.
SSS-6	(Survey to Avoid Direct Disturbance to California Floater Habitat): If instream construction is proposed for Currant Creek, a survey would be conducted to determine if California floater is present. If the species is absent, construction would be allowed after meeting UDWR requirements for restoration. If the species is present, relocation would be considered to avoid impacts to it.
SSS-7	(Reduce Crossings of Sowers Creek to Protect Boreal Toad Breeding Habitat): The ROW alignment would be evaluated so that the number of Sowers Creek crossings can be reduced. The portion of the creek crossed by the ROW also would be evaluated as breeding habitat for boreal toad to identify any priority areas that should be avoided if possible.
SSS-8	(No Vehicle Crossings or New Roads in the Muddy River): No vehicle crossings or new roads would be construction for the Muddy River. This measure would protect habitat for special status fish species (Virgin River chub, Moapa speckled dace, Moapa White River springfish, Meadow Valley Wash desert sucker, and Meadow Valley Wash speckled dace) in the Muddy River.
SSS-9	(Avoid Direct Disturbance to Abe and Hiway Springs Used by Arizona Toad): No vehicle or equipment disturbance from ROW work or access road construction would be allowed in Abe and Hiway Springs to protect Arizona toad breeding habitat.

X3.1.4 Surveys

A survey plan identifying survey requirements for special-status species affected by the Project will be developed post-ROD. Survey information will be incorporated into the NTP POD and used in the final Project design to avoid and minimize impacts to special status species to the extent practicable. These surveys will inform the Construction Contractor(s) of locations for exclusion, avoidance, timing restrictions, or areas where construction may continue with no restriction.

X3.1.5 Monitoring and Reporting

Wildlife and plant monitoring may be required during construction along portions of the TWE Project area within designated habitat for special status species. Monitoring needs will be determined by presence or absence of special status species and/or viable habitat as determined by pre-construction surveys. The precise requirements for monitoring will be determined as part of the FEIS, BO, and through consultation with BLM, USFS, Reclamation, and state agencies and will be described in future versions of this Plan.

Monitors will likely be responsible for flagging or otherwise marking buffers around special status species areas. Exact methods of marking these areas will be determined through coordination with the Construction Contractor(s) to ensure all personnel know what the markings mean.

Biological Monitors may be required to document and spatially record all activities involving special status wildlife and plants. Their observations may be recorded in the Construction Data Management System. A report may be developed and prepared for TransWest and agencies on a regular basis. Exact frequency will be developed through future agency coordination. At a minimum, reports may include dates of activity, which species' habitats were impacted, which species were encountered, details of encounters (date, location, what occurred in the encounter), and what areas were avoided and by what means.