

APPENDIX 11—OIL AND GAS LEASING STIPULATIONS AND LEASE NOTICES

This appendix lists, by alternative, the stipulations on oil and gas leasing referenced in Chapter 2 of this Proposed Resource Management Plan/Final Environmental Impact Statement. Oil and gas lease notices regarding listed plant and animal species have also been included in this document. These notices will be made a part of any oil and gas leases issued by the Field Office. Applicable stipulations would be appended to permits and leases issued for oil and gas resources on the public lands.

DESCRIPTION OF SURFACE STIPULATIONS

Three types of surface stipulations can be applied to oil and gas leases: (1) no surface occupancy (NSO), (2) timing limitations (TL), and (3) controlled surface use (CSU).

- **No Surface Occupancy:** Areas closed to placement of surface facilities such as roads, oil and gas wells, and other facilities.
- **Timing Limitations:** Areas closed to construction and developmental activities during identified time frames. Timing limitation areas may be open to maintenance activities, including associated vehicle travel, during the closed period unless otherwise specified in the stipulation.
- **Controlled Surface Use:** Areas where surface uses are subject to specified controls or constraints to protect identified resource values.

Table A11-1 shows resources of concern, stipulations for addressing those concerns, and criteria for considering exceptions, modifications, and waivers.

Exceptions, Modifications, and Waivers

An operator submitting a plan of operations to the Bureau of Land Management (BLM) may request an exception, modification, or waiver of a stipulation included in a lease.

- **Exception:** A one-time exemption to a lease stipulation determined on a case-by-case basis.
- **Modification:** A change to the provisions of a lease stipulation, either temporarily or for the term of the lease.
- **Waiver:** A permanent exemption to a lease stipulation.

The resource management plan (RMP) serves as the vehicle for explaining to industry and the public the conditions under which waivers, exceptions, or modifications of lease stipulations may be granted. All circumstances for granting a waiver, exception, or modification must be documented in the RMP.

The person requesting the exception, modification, or waiver is encouraged to submit information that might assist the authorized official in making a decision. The authorized officer reviews information submitted in support of the request and other pertinent information. The authorized officer may modify, waive, or grant an exception to a stipulation if:

- The action is consistent with federal laws.
- The action is consistent with the RMP.
- The management objectives that led the BLM to require the lease stipulation can be met without restricting operations in the manner provided for by the stipulation given changes in the condition

of the surface resources involved, or given the nature, location, timing, or design of the proposed operations.

- The action is acceptable to the authorized officer based on a review of the environmental consequences.

Table A11-1 includes criteria for considering requests for exceptions, modifications or waivers. Where there are overlapping stipulations on the same land, the more stringent stipulation applies.

Table A11-1. Oil and Gas Lease Stipulations—Richfield Field Office

Resource of Concern	Applicable Area	Stipulation	Alternative				Stipulation Description	
			N	A	Proposed RMP	C		D
Light and Sound	Sensitive Areas	CSU				X	X	Minimize noise and light pollution in sensitive areas (e.g., special status species habitat, developed campgrounds, and river corridors) using best available technology such as installing multi-cylinder pumps, installing hospital sound-reducing mufflers, and placing exhaust systems to direct noise away from the protection area/resource. In addition, reduce light pollution by using methods such as limiting height of light poles, timing of lighting operations (limiting lighting to times of darkness associated with drilling and work or maintenance operations), limiting wattage intensity, and constructing light shields. Exception: Consider exceptions if natural barriers or viewsheds would mitigate light and noise impacts. Modification: None Waiver: None
Light and Sound	Areas adjacent to Capitol Reef National Park	NSO				X	X	Allow NSO in areas adjacent to Capitol Reef National Park to minimize noise and light pollution. Exception: An exception may be granted if it is determined that technology such as installation of multi-cylinder pumps, hospital sound reducing mufflers, and placement of exhaust systems to direct noise away from the national park would meet mitigation objectives. Additionally, there would be a requirement to reduce light pollution by using methods such as limiting height of light poles, timing of lighting operations (limiting lighting to times of darkness associated with drilling and work or maintenance operations), limiting wattage

Resource of Concern	Applicable Area	Stipulation	Alternative				Stipulation Description
			N	A	Proposed RMP	C	
Light and Sound	Areas adjacent to Capitol Reef National Park, Canyonlands National Park, and Glen Canyon National Recreation Area (NRA)	CSU				X	<p>intensity, and constructing light shields. Modification: None Waiver: None</p> <p>Minimize noise and light pollution adjacent to national park units using best available technology such as installation of multi-cylinder pumps, hospital sound reducing mufflers, and placement of exhaust systems to direct noise away from the national park. Additionally, there would be a requirement to reduce light pollution by using methods such as limiting height of light poles, timing of lighting operations (limiting lighting to times of darkness associated with drilling and work or maintenance operations), limiting wattage intensity, and constructing light shields. Movement of operations to mitigate sound and light impacts would be required to be at least 200 meters from the national park boundary for Visual Resource Management (VRM) Classes II, III, and IV. Exception: Exceptions may be granted if a determination is made that natural barriers or viewsheds would meet these mitigation objectives. Modification: None Waiver: None</p>
Soil and Water	Slopes 30% or greater	CSU	X	X	X	X	<p>Surface disturbing proposed projects involving construction on slopes greater than 30% would be avoided. If the action cannot be avoided, rerouted, or relocated than a proposed project would include an erosion control strategy, reclamation and a site plan with a detailed survey and design completed by a certified engineer. This proposed project must be approved by the BLM prior to construction and maintenance.</p>

Resource of Concern	Applicable Area	Stipulation	Alternative				Stipulation Description
			N	A	Proposed RMP	C	
Soil and Water	Slopes greater than 50%	NSO	X				<p>Exception: None Modification: None Waiver: None</p> <p>Allow NSO on slopes greater than 50%. Exception: Consider exceptions to NSO if the project would not cause undue or unnecessary degradation to surface resources. In addition, require the operator to submit a plan prior to commencing operations that addresses:</p> <ul style="list-style-type: none"> Erosion control strategies GIS modeling Proper survey and design by a certified engineer. <p>Modification: Modifications may be granted if a more detailed analysis finds that surface disturbance activities could be allowed on slopes greater than 50% without accelerating erosion. Waiver: None</p>
Soil and Water	Slopes greater than 40%	NSO		X		X	<p>Allow NSO on slopes greater than 40%. Exception: Consider exceptions to NSO if the project would not cause undue or unnecessary degradation to surface resources. In addition, require the operator to submit a plan prior to commencing operations that addresses:</p> <ul style="list-style-type: none"> Erosion control strategies GIS modeling Proper survey and design by a certified engineer. <p>Modification: Modifications may be granted if a more detailed analysis finds that surface disturbance activities could be allowed on slopes greater than 40% without accelerating erosion. Waiver: None</p>

Resource of Concern	Applicable Area	Stipulation	Alternative				Stipulation Description
			N	A	Proposed RMP	C	
Soil and Water	Soils identified by National Resources Conservation Service (NRCS) as having high potential for wind erosion through research studies or monitoring	CSU	X	X	X	X	<p>accelerating erosion. Waiver: None</p> <p>If surface disturbing activities cannot be avoided on areas identified as having high potential for wind erosion, require a plan of operation that addresses erosion control strategies or mitigation measures, such as signing along roadways. Exception: None Modification: Consider modification if site-specific environmental analysis shows that alternatives would cause undue or unnecessary degradation to surface resources and impacts from wind erosion would not affect long-term soil productivity, would not impact air quality in nearby Class I airsheds, nor pose safety hazards to recreationists or motorists. Waiver: None</p>
Soil and Water	Riparian and wetland areas	CSU	X				<p>Prohibit oil and gas exploration and development activities within 500 feet of live water. Exception: Consider exceptions if (1) there are no practical alternatives, (2) impacts can be fully mitigated, and (3) the action is designed to enhance the riparian resources. Modification: None Waiver: None</p>
Soil and Water	Riparian and wetland areas	NSO		X	X		<p>Maintain buffer zones of no surface disturbance and/or occupancy around natural springs. Base the size of the buffer on hydrological, riparian, and other factors necessary to protect the water quality of the springs. If these factors cannot be determined, maintain a 330-foot buffer zone from outer edge.</p>

Resource of Concern	Applicable Area	Stipulation	Alternative				Stipulation Description
			N	A	Proposed RMP	C	
Soil and Water	Riparian and wetland areas	NSO				X	<p>Exception: Consider exceptions if it can be shown that (1) there are no practical alternatives to the disturbance, (2) all long-term impacts can be fully mitigated, and (3) the activity will benefit and enhance the riparian area. Consider compensatory mitigation where surface disturbance cannot be avoided within riparian wetland habitats on a site-specific basis.</p> <p>Modification: None Waiver: None</p> <p>Maintain buffer zones of no surface disturbance and/or occupancy around natural springs. Base the size of the buffer on hydrological, riparian, and other factors necessary to protect the water quality of the springs. If these factors cannot be determined, maintain a 660-foot buffer zone from outer edge.</p> <p>Exception: Consider exceptions if it can be shown that (1) there are no practical alternatives to the disturbance, (2) all long-term impacts can be fully mitigated, and (3) the activity will benefit and enhance the riparian area. Consider compensatory mitigation where surface disturbance cannot be avoided within riparian wetland habitats on a site-specific basis.</p> <p>Modification: None Waiver: None</p>
Soil and Water	Wetland soils or soils identified as having hydric soil properties	NSO	X	X	X	X	<p>Allow NSO on wetland soils or soils identified as having hydric soil properties.</p> <p>Exception: Consider exceptions to NSO if a site-specific environmental analysis determines that other placement alternatives would cause undue or unnecessary degradation to resources. In addition, require</p>

Resource of Concern	Applicable Area	Stipulation	Alternative				Stipulation Description
			N	A	Proposed RMP	C	
							the operator to submit a plan prior to commencing operations that addresses: <ul style="list-style-type: none"> Erosion control strategies Mitigation to protect surface from rutting, compaction, and displacement, and disruption of surface and subsurface hydrologic function Mitigation or restoration measures to restore hydrologic function to site Proper survey and design by a certified engineer. Modification: None Waiver: None
Special Status Species	Bald Eagle Nesting and Winter Roosting Habitat	Timing and CSU Notices	X	X	X	X	Implement measures outlined in Attachment A, Lease Notice for Bald Eagles. Exception: None Modification: None Waiver: None
Special Status Species	Mexican Spotted Owl Designated Critical Habitat	Timing and CSU Notices	X	X	X	X	Implement measures outlined in Attachment B, Lease Notice for Mexican Spotted Owls. Exception: None Modification: None Waiver: None
Special Status Species	Southwestern Willow Flycatcher Habitat	Timing and CSU Notices	X	X	X	X	Implement measures outlined in Attachment C, Lease Notice Southwestern Willow Flycatcher Conservation Measures. Exception: None Modification: None Waiver: None
Special Status Species	Colorado River Fish Critical Habitat	Timing and CSU Notices	X	X	X	X	Implement measures outlined in Attachment D, Lease Notice for Colorado River Fish. Exception: None Modification: None

Resource of Concern	Applicable Area	Stipulation	Alternative				Stipulation Description
			N	A	Proposed RMP	C	
Special Status Species	Historic or Occupied Utah Prairie Dog Habitat	CSU Notices	X	X	X	X	Waiver: None Implement measures outlined in Attachment E, Lease Notice for Utah Prairie Dog. Exception: None Modification: None Waiver: None
Special Status Species	Suitable Habitat for Federally-listed plant species	CSU Notices	X	X	X	X	Implement measures outlined in Attachment F, Lease Notice for Listed Plant Species. Exception: None Modification: None Waiver: None
Special Status Species	Known or Suspected California Condor Habitat	Timing and CSU	X	X	X	X	Implement measures outlined in Attachment G, Lease Notice for California Condor. Exception: None Modification: None Waiver: None
Special Status Species	Suitable or Occupied Habitat for the Barneby Reed Mustard.	Timing and CSU	X	X	X	X	Implement measures outlined in Attachment H, Lease Notice for Barneby Reed Mustard. Exception: None Modification: None Waiver: None
Special Status Species	Suitable or Occupied Habitat for the Last Chance Townsendia	Timing and CSU	X	X	X	X	Implement measures outlined in Attachment I, Lease Notice for Last Chance Townsendia. Exception: None Modification: None Waiver: None
Special Status Species	Suitable or Occupied Habitat for the Wright Fishhook Cactus	Timing and CSU	X	X	X	X	Implement measures outlined in Attachment J, Lease Notice for Wright Fishhook Cactus. Exception: None Modification: None

Resource of Concern	Applicable Area	Stipulation	Alternative				Stipulation Description
			N	A	Proposed RMP	C	
Special Status Species	Suitable or Occupied Habitat for the Winkler Pincushion Cactus	Timing and CSU	X	X	X	X	Waiver: None Implement measures outlined in Attachment K, Lease Notice for Winkler Pincushion Cactus. Exception: None Modification: None Waiver: None
Special Status Species	Suitable or Occupied Habitat for the San Rafael Cactus	Timing and CSU	X	X	X	X	Implement measures outlined in Attachment L, Lease Notice for San Rafael Cactus. Exception: None Modification: None Waiver: None
Special Status Species	Suitable or Occupied Habitat for the Ute Ladies' Tresses	Timing and CSU	X	X	X	X	Implement measures outlined in Attachment M, Lease Notice for Ute Ladies' Tresses. Exception: None Modification: None Waiver: None
Special Status Species	Suitable or Occupied Habitat for the Maguire Daisy	Timing and CSU	X	X	X	X	Implement measures outlined in Attachment N, Lease Notice for Maguire Daisy. Exception: None Modification: None Waiver: None
Special Status Species	Sage Grouse Leaks	Timing and CSU	X				Prohibit surface disturbing activities near sage grouse leks from March 1 through July 15, to protect species sensitivity during lekking activities. Exception: Consider exceptions if the proposed activity would not impair the function or utility of the site for current or subsequent reproductive display, including daytime loafing/staging activities. Modification: Consider modifying the CSU stipulation or substituting with a timing

Resource of Concern	Applicable Area	Stipulation	Alternative				Stipulation Description
			N	A	Proposed RMP	C	
Special Status Species	Sage Grouse Leaks	Timing and CSU		X			<p>limitation if the CSU area is nonessential to site utility or function, or if the proposed action could be conditioned to not impair the function or utility of the site for current or subsequent reproductive display, including daytime loafing/staging activities.</p> <p>Waiver: Consider waiving the stipulation if, in cooperation with the State of Utah Division of Wildlife Resources (UDWR), it is determined that the site has been permanently abandoned or unoccupied for a minimum of 5 years; or site conditions have changed and there is no reasonable likelihood of site occupation for a subsequent minimum period of 10 years.</p> <p>Prohibit surface disturbing activities within one-quarter mile of sage grouse leks from March 15 through June 1 to protect species sensitivity during lekking activities. Any surface disturbing activity conducted outside this time frame may not result in an above-ground structure within one-quarter mile of sage grouse leks that are in place from March 15 through June 1.</p> <p>Exception: Consider exceptions if the proposed activity would not impair the function or utility of the site for current or subsequent reproductive display, including daytime loafing/staging activities.</p> <p>Modification: Consider modifying the CSU use stipulation or substituting with a timing limitation if the CSU area is nonessential to site utility or function, or if the proposed action could be conditioned to not impair the function or utility of the site for current or subsequent reproductive display, including daytime loafing/staging activities.</p> <p>Waiver: Consider waiving the stipulation if, in cooperation with UDWR, it is determined</p>

Resource of Concern	Applicable Area	Stipulation	Alternative				Stipulation Description	
			N	A	Proposed RMP	C		D
Special Status Species	Sage Grouse Leks	Timing and CSU				X	X	<p>that the site has been permanently abandoned or unoccupied for a minimum of 5 years; or site conditions have changed and there is no reasonable likelihood of site occupation for a subsequent minimum period of 10 years.</p> <p>Prohibit surface disturbing activities within 2 miles of sage grouse leks from March 15 through June 1 to protect species sensitivity during lekking activities. Any surface disturbing activity conducted outside this time frame may not result in an above-ground structure within 2 miles of sage grouse leks that is in place from March 15 through June 1.</p> <p>Exception: Consider exceptions if the proposed activity would not impair the function or utility of the site for current or subsequent reproductive display, including daytime loafing/staging activities.</p> <p>Modification: Consider modifying the CSU stipulation or substituting with a timing limitation if the CSU area is nonessential to site utility or function, or if the proposed action could be conditioned to not impair the function or utility of the site for current or subsequent reproductive display, including daytime loafing/staging activities.</p> <p>Waiver: Consider waiving the stipulation if, in cooperation with UDWR, it is determined that the site has been permanently abandoned or unoccupied for a minimum of 5 years; or site conditions have changed and there is no reasonable likelihood of site occupation for subsequent minimum period of 10 years.</p>
Special Status Species	Sage Grouse Leks	NSO			X			<p>Manage oil and gas leasing as open subject to major constraints (NSO) within 1/2 mile of</p>

Resource of Concern	Applicable Area	Stipulation	Alternative				Stipulation Description
			N	A	Proposed RMP	C	
Special Status Species	Sage Grouse Brooding Habitat	TL	X				<p>greater sage-grouse leks.</p> <p>Exception: An exception may be granted by the Field Manager if the operator submits a plan that demonstrates that impacts from the proposed action can be adequately mitigated.</p> <p>Modification: The Field Manager may modify the boundaries of the stipulation area if (1) portions of the area do not include lek sites, (2) the lek site(s) have been completely abandoned or destroyed, or (3) occupied lek site(s) occur outside the current defined area, as determined by the BLM.</p> <p>Waiver: A waiver may be granted if there are no active lek site(s) in the leasehold and it is determined the site(s) have been completely abandoned or destroyed or occur outside current defined area, as determined by the BLM.</p>
							<p>Prohibit surface disturbing activities within sage grouse brooding habitat from April 1 through June 15 to protect brooding and nesting activities.</p> <p>Exception: Consider exceptions if consultation with UDWR indicates that the proposed action can be conditioned to not affect nest attendance, egg, or chick survival, nor affect nesting success. Actions designed to enhance the long-term utility or availability of suitable sage grouse habitat may be exempted from this timing limitation.</p> <p>Modification: Consider modifying the size and shape of the timing limitation area if consultation with UDWR indicates that the actual habitat suitability for nesting is greater or less than the identified area. Consider modifying timing limitations based on studies documenting actual use.</p>

Resource of Concern	Applicable Area	Stipulation	Alternative				Stipulation Description
			N	A	Proposed RMP	C	
Special Status Species	Sage Grouse Brooding Habitat	TL			X		<p>Waiver: Consider waiving the stipulation if UDWR determines that the described lands are incapable of serving the long-term requirements of sage grouse nesting habitat and that these ranges no longer warrant consideration as components of sage grouse habitat.</p> <p>Allow no surface disturbing or otherwise disruptive activities within 2 miles of a greater sage-grouse lek from March 15 to July 15 to protect sage grouse breeding and brood-rearing habitat.</p> <p>Exception: An exception could be granted if surveys determine that the Greater sage-grouse lek in nesting and brood-rearing habitat is not occupied. An exception may also be granted by the Field Manager if the operator submits a plan that demonstrates that impacts from the proposed action can be adequately mitigated or it is determined the lek sites are not active.</p> <p>Modification: The Field Manager may modify the boundaries of the stipulation area if portions of the area do not include habitat or are outside the current defined area, as determined by the BLM.</p> <p>Waiver: A waiver may be granted if it is determined the habitat no longer exists or has been destroyed.</p>
Special Status Species	Sage Grouse Brooding Habitat	TL				X	<p>Prohibit long-term surface disturbing activities within sage grouse brooding/nesting habitat from April 1 through July 15 to protect brooding and nesting activities.</p> <p>Exception: Consider exceptions if an environmental analysis and consultation with UDWR indicates that the proposed action can be conditioned so as not to affect nest</p>

Resource of Concern	Applicable Area	Stipulation	Alternative				Stipulation Description
			N	A	Proposed RMP	C	
Special Status Species	Sage Grouse Brooding Habitat	TL			X		<p>attendance, egg or chick survival, or nesting success. Actions designed to enhance the long-term utility or availability of suitable sage grouse habitat may be exempted from this timing limitation.</p> <p>Modification: Consider modifying the size and shape of the timing limitation area if consultation with UDWR indicates that the actual habitat suitability for nesting is greater or less than the identified area. Consider modifying timing limitations based on studies documenting actual use.</p> <p>Waiver: Consider waiving the stipulation if UDWR determines that the described lands are incapable of serving the long-term requirements of sage grouse nesting habitat and that these ranges no longer warrant consideration as components of sage grouse habitat.</p> <p>Allow no surface disturbing or otherwise disruptive activities in greater sage-grouse winter habitat from December 15 through March 14.</p> <p>Exception: An exception could be granted if surveys determine that the Greater sage-grouse lek in winter habitat is not occupied, and that snow depths in the area allow continued sage-grouse use. An exception may also be granted by the Field Manager if the operator submits a plan that demonstrates that impacts from the proposed action can be avoided, sufficiently minimized, or adequately mitigated.</p> <p>Modification: The Field Manager may modify the boundaries of the stipulation area if portions of the area do not include habitat or are outside the current defined area, as determined by the BLM.</p>

Resource of Concern	Applicable Area	Stipulation	Alternative				Stipulation Description
			N	A	Proposed RMP	C	
Fish and Wildlife	Crucial Bison Habitat	TL	X				<p>Waiver: A waiver may be granted if it is determined the habitat no longer exists or has been destroyed.</p> <p>Restrict oil and gas exploration and development activities in crucial bison habitat from December 1 through April 15.</p> <p>Exception: Consider exception if bison are not present or the lessee/operator can demonstrate that adverse impacts can be mitigated.</p> <p>Modification: None Waiver: None</p>
Fish and Wildlife	Crucial Bison Habitat	TL			X	X	<p>Restrict oil and gas exploration and development activities in crucial bison habitat from November 1 through May 15.</p> <p>Exception: This stipulation does not apply to the maintenance and operation of existing and ongoing facilities. An exception may be granted by the Field Manager if the operator submits a plan that demonstrates that impacts from the proposed action can be adequately mitigated or it is determined the habitat is not being used during the winter period for any given year.</p> <p>Modification: The Field Manager may modify the boundaries of the stipulation area if (1) a portion of the area is not being used as crucial range by bison, (2) habitat outside of stipulation boundaries is being used as crucial range and needs to be protected, or (3) the migration patterns have changed causing a difference in the season of use.</p> <p>Waiver: A waiver may be granted if the crucial range habitat is unsuitable or unoccupied during winter months by bison and there is no reasonable likelihood of future winter range use.</p>

Resource of Concern	Applicable Area	Stipulation	Alternative				Stipulation Description
			N	A	Proposed RMP	C	
Fish and Wildlife	Crucial and High Value Mule Deer and Elk Habitat	TL	X				<p>Restrict oil and gas exploration and development in crucial and high-value mule deer and elk habitats from December 15 through May 15 to protect winter habitats and species sensitivity during fawning season.</p> <p>Exception: Consider exception if deer and/or elk are not present or if the lessee/operator can demonstrate that adverse impacts can be mitigated.</p> <p>Modification: None</p> <p>Waiver: None</p>
Fish and Wildlife	Crucial and High Value Mule Deer and Elk Habitat	TL				X	<p>Restrict surface disturbing activities in crucial and high-value mule deer and elk habitats from December 15 through April 15 to protect winter habitats.</p> <p>Exception: This stipulation does not apply to the maintenance and operation of existing and ongoing facilities. An exception may be granted by the Field Manager if the operator submits a plan that demonstrates that impacts from the proposed action can be adequately mitigated or it is determined the habitat is not being used during the winter period for any given year.</p> <p>Modification: The Field Manager may modify the boundaries of the stipulation area if (1) a portion of the area is not being used as crucial winter range by deer/elk, (2) habitat outside of stipulation boundaries is being used as crucial winter range and needs to be protected, or (3) the migration patterns have changed causing a difference in the season of use.</p> <p>Waiver: A waiver may be granted if the winter range habitat is unsuitable or unoccupied during winter months by deer/elk and there is no reasonable likelihood of</p>

Resource of Concern	Applicable Area	Stipulation	Alternative				Stipulation Description
			N	A	Proposed RMP	C	
Fish and Wildlife	Crucial Mule Deer and Elk Habitat	TL			X		<p>future winter range use.</p> <p>Restrict surface disturbing activities in crucial mule deer and elk habitats from December 15 through April 15 to protect winter habitats.</p> <p>Exception: This stipulation does not apply to the maintenance and operation of existing and ongoing facilities. An exception may be granted by the Field Manager if the operator submits a plan that demonstrates that impacts from the proposed action can be adequately mitigated or it is determined the habitat is not being used during the winter period for any given year.</p> <p>Modification: The Field Manager may modify the boundaries of the stipulation area if (1) a portion of the area is not being used as crucial winter range by deer/elk, (2) habitat outside of stipulation boundaries is being used as crucial winter range and needs to be protected, or (3) the migration patterns have changed causing a difference in the season of use.</p> <p>Waiver: A waiver may be granted if the winter range habitat is unsuitable or unoccupied during winter months by deer/elk and there is no reasonable likelihood of future winter range use.</p>
Fish and Wildlife	Crucial Pronghorn Habitat	TL	X				<p>Restrict oil and gas exploration and development activities in crucial pronghorn habitat from December 1 through April 30 to protect species sensitivity during kidding season.</p> <p>Exception: Consider exception if pronghorn are not present or the lessee/operator demonstrates that adverse impacts can be mitigated.</p> <p>Modification: None</p>

Resource of Concern	Applicable Area	Stipulation	Alternative					Stipulation Description
			N	A	Proposed RMP	C	D	
Fish and Wildlife	Crucial Pronghorn Habitat	TL			X	X	X	<p>Waiver: None</p> <p>Restrict surface disturbing activities in crucial pronghorn antelope habitat from May 15 through June 15 to protect species sensitivity during fawning season.</p> <p>Exception: The Field Manager may grant an exception if the operator submits a plan that demonstrates that impacts from the proposed action can be adequately mitigated.</p> <p>Modification: The Field Manager may modify the boundaries of the stipulation area (1) if a portion of the area is not being used as crucial pronghorn habitat during kidding season or (2) if habitat outside of stipulation boundaries is being used for crucial pronghorn habitat and needs to be protected.</p> <p>Waiver: A waiver may be granted if the habitat is determined as unsuitable for crucial pronghorn habitat and there is no reasonable likelihood of future use as crucial pronghorn habitat.</p>
Fish and Wildlife	Crucial Desert Bighorn Sheep Habitat	TL			X	X	X	<p>Prohibit surface disturbing activities in crucial desert bighorn sheep habitat from April 15 through June 15 to protect species sensitivity during lambing season.</p> <p>Exception: The Field Manager may grant an exception if the operator submits a plan that demonstrates that impacts from the proposed action can be adequately mitigated.</p> <p>Modification: The Field Manager may modify the boundaries of the stipulation area (1) if a portion of the area is not being used as crucial Desert bighorn sheep habitat during lambing season or (2) if habitat outside of stipulation boundaries is being</p>

Resource of Concern	Applicable Area	Stipulation	Alternative				Stipulation Description
			N	A	Proposed RMP	C	
							used for crucial Desert bighorn sheep habitat and needs to be protected. Waiver: A waiver may be granted if the habitat is determined to be unsuitable for crucial Desert bighorn sheep habitat and there is no reasonable likelihood of future use as crucial Desert bighorn sheep habitat.
Cultural Resources	Bull Creek National Historic District	NSO	X	X	X	X	Allow NSO within the Bull Creek National Historic District. Exception: None Modification: None Waiver: None
Cultural Resources	Fish Creek Cove	NSO	X				Lease with NSO within the Fish Creek Cove cultural resource area. Exception: None Modification: None Waiver: None
Special status species	Sage grouse leks	NSO			X		Prohibit surface disturbing activities within 1/2 mile of sage grouse leks to protect species sensitivity around leks. Exception: None Modification: None Waiver: None
Scenic and Recreational Resources	Dirty Devil SRMA	NSO			X	X	Lease with NSO VRM Class II areas and canyon rims within viewshed of canyons (approximately one-quarter mile) to protect scenic values and opportunities for primitive and semi-primitive recreation. Exception: Consider exceptions if oil and gas exploration and development would not impair identified scenic and primitive or semi-primitive recreational resources. Modification: None Waiver: None.

Resource of Concern	Applicable Area	Stipulation	Alternative				Stipulation Description
			N	A	Proposed RMP	C	
Scenic and Recreational Resources	Lands Adjacent to Capitol Reef National Park	NSO				X	<p>Lease with NSO-identified lands east of Capitol Reef National Park to protect scenic values and opportunities for primitive and semi-primitive recreation.</p> <p>Exception: Consider exceptions if oil and gas exploration and development would not impair identified scenic and primitive or semi-primitive recreational resources.</p> <p>Modification: None Waiver: None.</p>
Visual Resources	VRM Class II Areas	CSU	X		X	X	<p>Surface disturbing activities must meet the objectives of Visual Resource Management (VRM) Class II.</p> <p>Exception: The level of change to the landscape should be low; management activities may be seen, but should not attract the attention of the casual observer. Any change to the landscape must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape. Surface disturbing activities that are determined to be compatible and consistent with the protection or enhancement of the resource values are exempted. Also, recognized utility corridors are exempted only for utility projects, which would be managed according to VRM Class III objectives.</p> <p>Modification: None Waiver: None.</p>
Lands	Cemeteries Culinary water sources Landfills—existing and closed Lands managed	NSO	X	X	X	X	<p>Lease with NSO.</p> <p>Exception: None Modification: None Waiver: None</p>

Resource of Concern	Applicable Area	Stipulation	Alternative				Stipulation Description
			N	A	Proposed RMP	C	
	<p>under Recreation and Public Purpose Act leases</p> <p>Sites listed on the National Register of Historic Places</p> <p>Incorporated municipalities</p> <p>Developed recreation sites</p> <p>BLM administrative sites</p>						
Non-WSA lands with wilderness characteristics	Lands managed as non-WSA lands with wilderness characteristics (78,600 acres)	NSO			X		<p>Lease with NSO the lands managed as non-WSA lands with wilderness characteristics (78,600 acres) to protect, preserve, and maintain their wilderness characteristics.</p> <p>Exception: None</p> <p>Modification: None</p> <p>Waiver: None</p>
Special Designations (Relict Vegetation)	North Caineville Mesa Area of Critical Environmental Concern (ACEC) (part of Badlands ACEC in Alternative C)	NSO	X		X		<p>Allow NSO within North Caineville Mesa ACEC to protect relict vegetation.</p> <p>Exception: None</p> <p>Modification: None</p> <p>Waiver: None</p>
Special Designations (Relict Vegetation)	South Caineville Mesa ACEC (part of Badlands ACEC in Alternative C)	NSO	X				<p>Allow NSO within South Caineville Mesa ACEC to protect relict vegetation.</p> <p>Exception: None</p> <p>Modification: None</p> <p>Waiver: None</p>
Special Designations (Natural Systems/	Gilbert Badlands ACEC (part of Badlands ACEC in Alternative C)	NSO	X				<p>Allow NSO within Gilbert Badlands ACEC to protect relict vegetation.</p> <p>Exception: None</p>

Resource of Concern	Applicable Area	Stipulation	Alternative				Stipulation Description
			N	A	Proposed RMP	C	
Processes)							Modification: None Waiver: None
Special Designations (Scenic Resources)	Dirty Devil/North Wash ACEC	NSO				X	Lease VRM Class II areas within the ACEC with NSO stipulation to protect scenic values. Exception: Consider exceptions on a case-by-case basis if oil and gas exploration and development would not impair identified scenic values. Modification: None Waiver: None.
Special Designations (Scenic Resources)	Fremont Gorge/Cockscomb ACEC	NSO				X	Lease VRM Class II areas within the ACEC with NSO stipulation to protect scenic values. Exception: Consider exceptions on a case-by-case basis if oil and gas exploration and development would not impair identified scenic values. Modification: None Waiver: None.
Special Designations (Scenic Resources)	Horseshoe Canyon ACEC	NSO				X	Lease VRM Class II areas within the ACEC with NSO stipulation to protect scenic values. Exception: Consider exceptions if oil and gas exploration and development would not impair identified scenic values. Modification: None Waiver: None.
Special Designations (Scenic Resources)	Little Rockies ACEC	NSO				X	Lease VRM Class II areas within the ACEC with NSO stipulation to protect scenic values. Exception: Consider exceptions if oil and gas exploration and development would not impair identified scenic values.

Resource of Concern	Applicable Area	Stipulation	Alternative				Stipulation Description	
			N	A	Proposed RMP	C		D
Special Designations (Natural Systems and Special Status Species)	Rainbow Hills ACEC	NSO				X	X	Modification: None Waiver: None. Lease ACEC with NSO stipulation to protect special status and endemic plants and the naturally functioning system from major human disturbances. Exception: None Modification: None Waiver: None

Attachment A—Lease Notice for Bald Eagle

Utah's Threatened and Endangered Species Notices

Lease Notice – Bald Eagle

The Lessee/Operator is given notice that the lands in this parcel contains nesting/winter roost habitat for the bald eagle, a federally listed species. Avoidance or use restrictions may be placed on portions of the lease. Application of appropriate measures will depend on whether the action is temporary or permanent, and whether it occurs within or outside the bald eagle breeding or roosting season. A temporary action is completed prior to the following breeding or roosting season, leaving no permanent structures and resulting in no permanent habitat loss. A permanent action continues for more than one breeding or roosting season and/or causes a loss of eagle habitat or displaces eagles through disturbances (e.g., creation of a permanent structure). The following avoidance and minimization measures have been designed to ensure activities carried out on the lease are in compliance with the Endangered Species Act (ESA). Integration of, and adherence to, these measures will facilitate review and analysis of any submitted permits under the authority of this lease. Following these measures could reduce the scope of ESA Section 7 consultation at the permit stage.

Current avoidance and minimization measures include the following:

1. Surveys will be required prior to operations, unless species occupancy and distribution information is complete and available. All surveys must be conducted by qualified individual(s), and be conducted according to protocol.
2. Lease activities will require monitoring throughout the duration of the project. To ensure desired results are being achieved, minimization measures will be evaluated and, if necessary, Section 7 consultation reinitiated.
3. Water production will be managed to ensure maintenance or enhancement of riparian habitat.
4. Temporary activities within 1.0 mile of nest sites will not occur during the breeding season of January 1 to August 31, unless the area has been surveyed according to protocol and determined to be unoccupied.
5. Temporary activities within 0.5 miles of winter roost areas, e.g., cottonwood galleries, will not occur during the winter roost season of November 1 to March 31, unless the area has been surveyed according to protocol and determined to be unoccupied.
6. No permanent infrastructure will be placed within 1.0 mile of nest sites.
7. No permanent infrastructure will be placed within 0.5 miles of winter roost areas.
8. Remove big game carrion to 100 feet from on lease roadways occurring within bald eagle foraging range.
9. Avoid loss or disturbance to large cottonwood gallery riparian habitats.
10. Where technically and economically feasible, use directional drilling or multiple wells from the same pad to reduce surface disturbance and eliminate drilling in suitable habitat. Utilize directional drilling to avoid direct impacts to large cottonwood gallery riparian habitats. Ensure that such directional drilling does not intercept or degrade alluvial aquifers.
11. All areas of surface disturbance within riparian areas and/or adjacent uplands should be re-vegetated with native species.

Additional measures may also be employed to avoid or minimize effects to the species between the lease sale stage and lease development stage. These additional measures will be developed and implemented in consultation with the U.S. Fish and Wildlife Service to ensure continued compliance with the ESA.

Attachment B—Lease Notice for Mexican Spotted Owl

Utah's Threatened and Endangered Species Notices

Lease Notice – Mexican Spotted Owl

The Lessee/Operator is given notice that the lands in this lease contain suitable habitat for Mexican spotted owl, a federally listed species. **Insert the following if lease contains Designated Critical Habitat:** *[The Lessee/Operator is given notice that the lands in this lease contain Designated Critical Habitat for the Mexican spotted owl, a Federally listed species. Critical habitat was designated for the Mexican spotted owl on August 31, 2004 (69 FR 53181-53298).]* Avoidance or use restrictions may be placed on portions of the lease. Application of appropriate measures will depend on whether the action is temporary or permanent, and whether it occurs within or outside the owl nesting season. A temporary action is completed prior to the following breeding season, leaving no permanent structures and resulting in no permanent habitat loss. A permanent action continues for more than one breeding season and/or causes a loss of owl habitat or displaces owls through disturbances (e.g., creation of a permanent structure). The following avoidance and minimization measures have been designed to ensure activities carried out on the lease are in compliance with the Endangered Species Act (ESA). Integration of, and adherence to, these measures, will facilitate review and analysis of any submitted permits under the authority of this lease. Following these measures could reduce the scope of ESA Section 7 consultation at the permit stage.

Current avoidance and minimization measures include the following:

1. Surveys will be required prior to operations, unless species occupancy and distribution information is complete and available. All surveys must be conducted by qualified individual(s).
2. Assess habitat suitability for both nesting and foraging using accepted habitat models in conjunction with field reviews. Apply the conservation measures below if project activities occur within 0.5 mile of suitable owl habitat. Determine potential effects of actions to owls and their habitat.
 - a. Document type of activity, acreage and location of direct habitat impacts, type and extent of indirect impacts relative to location of suitable owl habitat.
 - b. Document if the action is temporary or permanent.
3. Lease activities will require monitoring throughout the duration of the project. To ensure desired results are being achieved, minimization measures will be evaluated and, if necessary, Section 7 consultation reinitiated.
4. Water production will be managed to ensure maintenance or enhancement of riparian habitat.
5. Where technically and economically feasible, use directional drilling or multiple wells from the same pad to reduce surface disturbance and eliminate drilling in canyon habitat suitable for Mexican spotted owl nesting.
6. For all temporary actions that may impact owls or suitable habitat:
 - a. If the action occurs entirely outside of the owl breeding season (March 1 to August 31) and leaves no permanent structure or permanent habitat disturbance, action can proceed without an occupancy survey.
 - b. If the action will occur during a breeding season, survey for owls prior to commencing activity. If owls are found, activity must be delayed until outside of the breeding season.
 - c. Rehabilitate access routes created by the project through such means as raking out scars, revegetation, gating access points, etc.
7. For all permanent actions that may impact owls or suitable habitat:
 - a. Survey two consecutive years for owls according to accepted protocol prior to commencing activities.
 - b. If owls are found, no actions will occur within 0.5 mile of identified nest site. If nest site is unknown, no activity will occur within the designated Protected Activity Center (PAC).
 - c. Avoid drilling and permanent structures within 0.5 mile of suitable habitat unless surveyed and not occupied.
 - d. Reduce noise emissions (e.g., use hospital-grade mufflers) to 45 dBA at 0.5 mile from suitable habitat, including canyon rims. 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.
 - e. Limit disturbances to and within suitable habitat by staying on approved routes.
 - f. Limit new access routes created by the project.

Additional measures to avoid or minimize effects to the species may be developed and implemented in consultation with the U.S. Fish and Wildlife Service between the lease sale stage and lease development stage to ensure continued compliance with the ESA.

Attachment C—Lease Notice for Southwestern Willow Flycatcher

Utah's Threatened and Endangered Species Notices

Lease Notice – Southwestern Willow Flycatcher

The Lessee/Operator is given notice that the lands in this parcel contain riparian habitat that falls within the range for southwestern willow flycatcher, a federally listed species. Avoidance or use restrictions may be placed on portions of the lease. Application of appropriate measures will depend on whether the action is temporary or permanent, and whether it occurs within or outside the nesting season. A temporary action is completed prior to the following breeding season leaving no permanent structures and resulting in no permanent habitat loss. A permanent action continues for more than one breeding season and/or causes a loss of habitat or displaces flycatchers through disturbances (e.g., creation of a permanent structure). The following avoidance and minimization measures have been designed to ensure activities carried out on the lease are in compliance with the Endangered Species Act (ESA). Integration of, and adherence to, these measures, will facilitate review and analysis of any submitted permits under the authority of this lease. Following these measures could reduce the scope of ESA Section 7 consultation at the permit stage.

Current avoidance and minimization measures include the following:

1. Surveys will be required prior to operations, unless species occupancy and distribution information is complete and available. All surveys must be conducted by qualified individual(s), and be conducted according to protocol.
2. Lease activities will require monitoring throughout the duration of the project. To ensure desired results are being achieved, minimization measures will be evaluated and, if necessary, Section 7 consultation reinitiated.
3. Water production will be managed to ensure maintenance or enhancement of riparian habitat.
4. Where technically and economically feasible, use directional drilling or multiple wells from the same pad to reduce surface disturbance and eliminate drilling in suitable riparian habitat. Ensure that such directional drilling does not intercept or degrade alluvial aquifers.
5. Drilling activities will maintain a 300 ft. buffer from suitable riparian habitat year long.
6. Drilling activities within 0.25 mile of occupied breeding habitat will not occur during the breeding season of May 1 to August 15.
7. Ensure that water extraction or disposal practices do not result in change of hydrologic regime that would result in loss or degradation of riparian habitat.
8. Revegetate with native species all areas of surface disturbance within riparian areas and/or adjacent uplands.

Additional measures to avoid or minimize effects to the species may be developed and implemented in consultation with the U.S. Fish and Wildlife Service between the lease sale stage and lease development stage to ensure continued compliance with the ESA.

Attachment D—Lease Notice for Colorado River Fish

Utah's Threatened and Endangered Species Notices

Lease Notice – Endangered Fish of the Upper Colorado River Drainage Basin

The Lessee/Operator is given notice that the lands in this parcel contain Critical Habitat for the Colorado River fish (bonytail chub, humpback chub, Colorado pike minnow, and razorback sucker, listed as endangered under the Endangered Species Act (ESA), or these parcels have watersheds that are tributary to designated habitat. Critical habitat was designated for the four endangered Colorado River fishes on March 21, 1994 (59 FR 13374-13400). Designated critical habitat for all the endangered fishes includes those portions of the 100-year floodplain that contain primary constituent elements necessary for survival of the species. Avoidance or use restrictions may be placed on portions of the lease. The following avoidance and minimization measures have been designed to ensure activities carried out on the lease comply with the ESA. Integration of, and adherence to, these measures will facilitate review and analysis of any submitted permits under the authority of this lease. Following these measures could reduce the scope of ESA Section 7 consultation at the permit stage.

Current avoidance and minimization measures include the following:

1. Surveys will be required prior to operations, unless species occupancy and distribution information is complete and available. All surveys must be conducted by qualified individual(s).
2. Lease activities will require monitoring throughout the duration of the project. To ensure desired results are being achieved, minimization measures will be evaluated and, if necessary, Section 7 consultation reinitiated.
3. Water production will be managed to ensure maintenance or enhancement of riparian habitat.
4. Avoid loss or disturbance of riparian habitats.
5. Where technically and economically feasible, use directional drilling or multiple wells from the same pad to reduce surface disturbance and eliminate drilling in suitable riparian habitat. Ensure that such directional drilling does not intercept or degrade alluvial aquifers.
6. Conduct watershed analysis for leases in designated critical habitat and overlapping major tributaries in order to determine toxicity risk from permanent facilities.
7. Implement the Utah Oil and Gas Pipeline Crossing Guidance (from BLM National Science and Technology Center).
8. Drilling will not occur within 100-year floodplains of rivers or tributaries to rivers that contain listed fish species or critical habitat.
9. In areas adjacent to 100-year flood plains, particularly in systems prone to flash floods, analyze the risk for flash floods to impact facilities, and use closed loop drilling, and pipeline burial or suspension according to the Utah Oil and Gas Pipeline Crossing Guidance, to minimize the potential for equipment damage and resulting leaks or spills.

Water depletions from any portion of the Upper Colorado River drainage basin above Lake Powell are considered to adversely affect or adversely modify the critical habitat of the four resident endangered fish species, and must be evaluated with regard to the criteria described in the Upper Colorado River Endangered Fish Recovery Program. Formal consultation with U.S. Fish and Wildlife Service (USFWS) is required for all depletions. All depletion amounts must be reported to BLM.

Additional measures to avoid or minimize effects to the species may be developed and implemented in consultation with the USFWS between the lease sale stage and lease development stage to ensure continued compliance with the ESA.

Attachment E—Lease Notice for Utah Prairie Dog

Utah's Threatened and Endangered Species Notices

Lease Notice – Utah Prairie Dog

The Lessee/Operator is given notice that lands in this lease may contain historic and/or occupied Utah prairie dog habitat, a threatened species under the Endangered Species Act (ESA). Avoidance or use restrictions may be placed on portions of the lease. Application of appropriate measures will depend on whether the action is temporary or permanent, and whether it occurs when prairie dogs are active or hibernating. A temporary action is completed prior to the following active season leaving no permanent structures and resulting in no permanent habitat loss. A permanent action continues for more than one activity/hibernation season and/or causes a loss of Utah prairie dog habitat or displaces prairie dogs through disturbances (e.g., creation of a permanent structure). The following avoidance and minimization measures have been designed to ensure activities carried out on the lease are in compliance with the ESA. Integration of, and adherence to, these measures will facilitate review and analysis of any submitted permits under the authority of this lease. Following these measures could reduce the scope of ESA Section 7 consultation at the permit stage.

Current avoidance and minimization measures include the following:

1. Surveys will be required prior to operations unless species occupancy and distribution information is complete and available. All surveys must be conducted by qualified individual(s).
2. Lease activities will require monitoring throughout the duration of the project. To ensure desired results are being achieved, minimization measures will be evaluated and, if necessary, Section 7 consultation reinitiated.
3. Where technically and economically feasible, use directional drilling or multiple wells from the same pad to reduce surface disturbance and eliminate drilling in prairie dog habitat.
4. Surface occupancy or other surface disturbing activity will be avoided within 0.5 mile of active prairie dog colonies.
5. Permanent surface disturbance or facilities will be avoided within 0.5 mile of potentially suitable, unoccupied prairie dog habitat, identified and mapped by Utah Division of Wildlife Resources since 1976.
6. The lessee/operator should consider if fencing infrastructure on well pad, e.g., drill pads, tank batteries, and compressors, would be needed to protect equipment from burrowing activities. In addition, the operator should consider if future surface disturbing activities would be required at the site.
7. Within occupied habitat, set a 25 mph speed limit on operator-created and maintained roads.
8. Limit disturbances to and within suitable habitat by staying on designated routes.
9. Limit new access routes created by the project.

Additional measures to avoid or minimize effects to the species may be developed and implemented in consultation with the U.S. Fish and Wildlife Service between the lease sale stage and lease development stage to ensure continued compliance with the ESA.

Attachment F—Lease Notice for Listed Plant Species

Utah's Threatened and Endangered Species Notices

Lease Notice – Listed Plant Species

The Lessee/Operator is given notice that the lands in this parcel contain suitable habitat for federally listed plant species under the Endangered Species Act (ESA). The following avoidance and minimization measures have been developed to facilitate review and analysis of any submitted permits under the authority of this lease

1. Site inventories:
 - a. Must be conducted to determine habitat suitability
 - b. Are required in known or potential habitat for all areas proposed for surface disturbance before initiating project activities, at a time when the plant can be detected, and during appropriate flowering periods
 - c. Should include documentation on individual plant locations and suitable habitat distributions
 - d. Must have qualified individuals conduct all surveys.
2. Lease activities will require monitoring throughout the duration of the project. To ensure desired results are being achieved, minimization measures will be evaluated and, if necessary, Section 7 consultation reinitiated.
3. Project activities must be designed to avoid direct disturbance to populations and to individual plants:
 - a. Designs will avoid concentrating water flows or sediments into plant occupied habitat.
 - b. Construction will occur downslope of plants and populations where feasible; if well pads and roads must be sited upslope, buffers of 100 feet minimum between surface disturbances and plants and populations will be incorporated.
 - c. Where populations occur within 200 feet of well pads, a buffer or fence will be established between the individuals or groups of individuals and the well pads during and post-construction.
 - d. Areas for avoidance will be visually identifiable in the field, e.g., flagging, temporary fencing, rebar.
 - e. For surface pipelines, a 10-foot buffer will be used from any plant locations:
 - i. If on a slope, stabilizing construction techniques will be used to ensure the pipelines do not move toward the population.
4. For riparian/wetland-associated species, e.g. Ute ladies'-tresses, avoid loss or disturbance of riparian habitats:
 - a. Water extraction or disposal practices will not result in change of hydrologic regime.
5. Disturbances to and within suitable habitat will be limited by staying on designated routes.
6. New access routes created by the project will be limited.
7. To limit OHV travel in sensitive areas, signing will be placed appropriately.
8. Dust abatement practices will be implemented near occupied plant habitat.
9. All disturbed areas will be revegetated with native species composed of species indigenous to the area.
10. Post-construction monitoring for invasive species will be required.
11. Where technically and economically feasible, directional drilling or multiple wells will be used from the same pad to reduce surface disturbance and eliminate drilling in plant habitat. Ensure that such directional drilling does not intercept or degrade alluvial aquifers.
12. Lease activities will require monitoring throughout the duration of the project. To ensure desired results are being achieved, minimization measures will be evaluated and, if necessary, Section 7 consultation reinitiated.

Additional measures to avoid or minimize effects to the species may be developed and implemented in consultation with the U.S. Fish and Wildlife Service between the lease sale stage and lease development stage to ensure continued compliance with the ESA.

Attachment G—Lease Notice for California Condor

Utah's Threatened and Endangered Species Notices

Lease Notice – California Condor

The Lessee/Operator is given notice that the lands located in this parcel contain potential habitat for the California Condor, a federally listed species. Avoidance or use restrictions may be placed on portions of the lease if the area is known or suspected to be used by condors. Application of appropriate measures will depend on whether the action is temporary or permanent, and whether it occurs within or outside potential habitat. A temporary action is completed prior to the following important season of use, leaving no permanent structures and resulting in no permanent habitat loss. This would include consideration for habitat functionality. A permanent action continues for more than one season of habitat use, and/or causes a loss of condor habitat function or displaces condors through continued disturbance (i.e. creation of a permanent structure requiring repetitious maintenance, or emits disruptive levels of noise).

The following avoidance and minimization measures have been designed to ensure activities carried out on the lease are in compliance with the Endangered Species Act (ESA). Integration of, and adherence to these measures will facilitate review and analysis of any submitted permits under the authority of this lease. Following these measures could reduce the scope of ESA, Section 7 consultation at the permit stage.

Current avoidance and minimization measures include the following:

1. Surveys will be required prior to operations unless species occupancy and distribution information is complete and available. All Surveys must be conducted by qualified individual(s) approved by the BLM, and must be conducted according to approved protocol.
2. If surveys result in positive identification of condor use, all lease activities will require monitoring throughout the duration of the project to ensure desired results of applied mitigation and protection. Minimization measures will be evaluated during development and, if necessary, Section 7 consultation may be reinitiated.
3. Temporary activities within 1.0 mile of nest sites will not occur during the breeding season.
4. Temporary activities within 0.5 miles of established roosting sites or areas will not occur during the season of use, August 1 to November 31, unless the area has been surveyed according to protocol and determined to be unoccupied.
5. No permanent infrastructure will be placed within 1.0 mile of nest sites.
6. No permanent infrastructure will be placed within 0.5 miles of established roosting sites or areas.
7. Remove big game carrion to 100 feet from on lease roadways occurring within foraging range.
8. Where technically and economically feasible, use directional drilling or multiple wells from the same pad to reduce surface disturbance and eliminate drilling in suitable habitat. Utilize directional drilling to avoid direct impacts to large cottonwood gallery riparian habitats. Ensure that such directional drilling does not intercept or degrade alluvial aquifers.
9. Reinitiation of section 7 consultation with the Service will be sought immediately if mortality or disturbance to California condors is anticipated as a result of project activities. Additional site-specific measures may also be employed to avoid or minimize effects to the species. These additional measures will be developed and implemented in consultation with the U.S. Fish and Wildlife Service to ensure continued compliance with the ESA.

Additional measures may also be employed to avoid or minimize effects to the species between the lease sale and lease development stages. These additional measures will be developed and implemented in consultation with the U.S. Fish and Wildlife Service to ensure continued compliance with the ESA.

Attachment H—Lease Notice for Barneby Reed Mustard

Utah's Threatened and Endangered Species Notices

Lease Notice – Barneby Reed-Mustard

In order to minimize effects to the federally threatened Barneby reed-mustard, the Bureau of Land Management (BLM), in coordination with the U.S. Fish and Wildlife Service (Service), has developed the following avoidance and minimization measures. Implementation of these measures will help ensure the activities carried out during oil and gas development (including but not limited to drilling, production, and maintenance operations) are in compliance with the Endangered Species Act (ESA). For the purposes of this document, the follow terms are so defined:

- *Potential habitat* is defined as areas which satisfy the broad criteria of the species habitat description; usually determined by preliminary, in-house assessment.
- *Suitable habitat* is defined as areas which contain or exhibit the specific components or constituents necessary for plant persistence; determined by field inspection and/or surveys; may or may not contain clay reed-mustard; habitat descriptions can be found in Federal Register Notice and species recovery plan links at <<http://www.fws.gov/angered/wildlife.html>>.
- *Occupied habitat* is defined as areas currently or historically known to support clay reed-mustard; synonymous with "known habitat."

The following avoidance and minimization measures should be included in the Plan of Development:

1. Pre-project habitat assessments will be completed across 100% of the project disturbance area within potential habitat¹ prior to any ground disturbing activities (including ATV use) to determine if suitable Barneby reed-mustard habitat is present.
2. Site inventories will be conducted within suitable habitat to determine occupancy. Where standard surveys are technically infeasible and otherwise hazardous due to topography, slope, etc., suitable habitat will be assessed and mapped for avoidance (hereafter, "avoidance areas"); in such cases, in general, 300' buffers will be maintained between surface disturbance and avoidance areas. However, site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat. Where conditions allow, inventories:
 - a. Must be conducted by qualified individual(s) and according to BLM and Service accepted survey protocols,
 - b. Will be conducted in suitable and occupied habitat for all areas proposed for surface disturbance prior to initiation of project activities and within the same growing season, at a time when the plant can be detected (usually April 15th to June 5th, however, surveyors should verify that the plant is flowering by contacting a BLM or FWS botanist or demonstrating that the nearest known population is in flower),
 - c. Will occur within 300' from the centerline of the proposed right-of-way for surface pipelines or roads; and within 300' from the perimeter of disturbance for the proposed well pad including the well pad,
 - d. Will include, but not be limited to, plant species lists and habitat characteristics, and
 - e. Will be valid until April 15th the following year.
3. Design project infrastructure to minimize impacts within suitable habitat:
 - a. Where standard surveys are technically infeasible, infrastructure and activities will avoid all suitable habitat (avoidance areas) and incorporate 300' buffers, in general; however, site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat,
 - b. Reduce well pad size to the minimum needed, without compromising safety,
 - c. Where technically and economically feasible, use directional drilling or multiple wells from the same pad,
 - d. Limit new access routes created by the project,
 - e. Roads and utilities should share common right-of-ways where possible,
 - f. Reduce the width of right-of-ways and minimize the depth of excavation needed for the road bed; where feasible, use the natural ground surface for the road within habitat,
 - g. Place signing to limit off-road travel in sensitive areas, and
 - h. Stay on designated routes and other cleared/approved areas.
 - i. All disturbed areas will be revegetated with native species comprised of species indigenous to the area and non-native species that are not likely to invade other areas.

Utah's Threatened and Endangered Species Notices

4. Within occupied habitat, project infrastructure will be designed to avoid direct disturbance and minimize indirect impacts to populations and to individual plants:
 - a. Follow the above recommendations (#3) for project design within suitable habitats,
 - b. To avoid water flow and/or sedimentation into occupied habitat and avoidance areas, silt fences, hay bales, and similar structures or practices will be incorporated into the project design; appropriate placement of fill is encouraged,
 - d. Construction of roads will occur such that the edge of the right of way is at least 300' from any plant and 300' from avoidance areas,
 - e. Roads will be graveled within occupied habitat; the operator is encouraged to apply water for dust abatement to such areas from April 15th to June 5th (flowering period); dust abatement applications will be comprised of water only,
 - f. The edge of the well pad should be located at least 300' away from plants and avoidance areas, in general; however, site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat,
 - g. Surface pipelines will be laid such that a 300' buffer exists between the edge of the right of way and plants and 300' between the edge of right of way and avoidance areas; use stabilizing and anchoring techniques when the pipeline crosses suitable habitat to ensure pipelines don't move towards the population; site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat,
 - h. Construction activities will not occur from April 15th through June 5th within occupied habitat,
 - i. Before and during construction, areas for avoidance should be visually identifiable in the field, e.g., flagging, temporary fencing, rebar, etc.,
 - j. Place produced oil, water, or condensate tanks in centralized locations, away from occupied habitat, and
 - k. Minimize the disturbed area of producing well locations through interim and final reclamation. Reclaim well pads following drilling to the smallest area possible.
5. Occupied Barneby reed-mustard habitats within 300' of the edge of the surface pipelines' right of ways, 300' of the edge of the roads' right of ways, and 300' from the edge of the well pad shall be monitored for a period of three years after ground disturbing activities. Monitoring will include annual plant surveys to determine plant and habitat impacts relative to project facilities. Annual reports shall be provided to the BLM and the Service. To ensure desired results are being achieved, minimization measures will be evaluated and may be changed after a thorough review of the monitoring results and annual reports during annual meetings between the BLM and the Service.
6. Reinitiation of section 7 consultation with the Service will be sought immediately if any loss of plants or occupied habitat for the Barneby reed-mustard is anticipated as a result of project activities. Additional site-specific measures may also be employed to avoid or minimize effects to the species. These additional measures will be developed and implemented in consultation with the U.S. Fish and Wildlife Service to ensure continued compliance with the ESA.

Attachment I—Lease Notice for Last Chance Townsendia

Utah's Threatened and Endangered Species Notices

Lease Notice – Last Chance Townsendia (*Townsendia aprica*)

In order to minimize effects to the federally threatened Last Chance townsendia, the Bureau of Land Management (BLM), in coordination with the U.S. Fish and Wildlife Service (Service), has developed the following avoidance and minimization measures. Implementation of these measures will help ensure the activities carried out during oil and gas development (including but not limited to drilling, production, and maintenance operations) are in compliance with the Endangered Species Act (ESA). For the purposes of this document, the follow terms are so defined:

- *Potential habitat* is defined as areas which satisfy the broad criteria of the species habitat description; usually determined by preliminary, in-house assessment.
- *Suitable habitat* is defined as areas which contain or exhibit the specific components or constituents necessary for plant persistence; determined by field inspection and/or surveys; may or may not contain clay reed-mustard; habitat descriptions can be found in Federal Register Notice and species recovery plan links at <<http://www.fws.gov/endangered/wildlife.html>>.
- *Occupied habitat* is defined as areas currently or historically known to support clay reed-mustard; synonymous with “known habitat.”

The following avoidance and minimization measures should be included in the Plan of Development:

1. Pre-project habitat assessments will be completed across 100% of the project disturbance area within potential habitat prior to any ground disturbing activities to determine if suitable Last Chance townsendia habitat is present.
2. Site inventories will be conducted within suitable habitat to determine occupancy. Where standard surveys are technically infeasible and otherwise hazardous due to topography, slope, etc., suitable habitat will be assessed and mapped for avoidance (hereafter, “avoidance areas”); in such cases, in general, 300’ buffers will be maintained between surface disturbance and avoidance areas. However, site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat. Where conditions allow, inventories:
 - a. Must be conducted by qualified individual(s) and according to BLM and Service accepted survey protocols,
 - b. Will be conducted in suitable and occupied habitat for all areas proposed for surface disturbance prior to initiation of project activities and within the same growing season, at a time when the plant can be detected (usually April 1st to May 30th, however, surveyors should verify that the plant is flowering by contacting a BLM or FWS botanist or demonstrating that the nearest known population is in flower),
 - c. Will occur within 300’ from the centerline of the proposed right-of-way for surface pipelines or roads; and within 300’ from the perimeter of disturbance for the proposed well pad including the well pad,
 - d. Will include, but not be limited to, plant species lists and habitat characteristics, and
 - e. Will be valid until April 1st the following year.
3. Design project infrastructure to minimize impacts within suitable habitat:
 - a. Where standard surveys are technically infeasible, infrastructure and activities will avoid all suitable habitat (avoidance areas) and incorporate 300’ buffers, in general; however, site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat,
 - b. Reduce well pad size to the minimum needed, without compromising safety,
 - c. Where technically and economically feasible, use directional drilling or multiple wells from the same pad,
 - d. Limit new access routes created by the project,
 - e. Roads and utilities should share common right-of-ways where possible,
 - f. Reduce the width of right-of-ways and minimize the depth of excavation needed for the road bed; where feasible, use the natural ground surface for the road within habitat,
 - g. Place signing to limit off-road travel in sensitive areas, and
 - h. Stay on designated routes and other cleared/approved areas.
 - i. All disturbed areas will be revegetated with native species comprised of species indigenous to the area and non-native species that are not likely to invade other areas.

Utah's Threatened and Endangered Species Notices

4. Within occupied habitat, project infrastructure will be designed to avoid direct disturbance and minimize indirect impacts to populations and to individual plants:
 - a. Follow the above recommendations (#3) for project design within suitable habitats,
 - b. To avoid water flow and/or sedimentation into occupied habitat and avoidance areas, silt fences, hay bales, and similar structures or practices will be incorporated into the project design; appropriate placement of fill is encouraged,
 - d. Construction of roads will occur such that the edge of the right of way is at least 300' from any plant and 300' from avoidance areas,
 - e. Roads will be graveled within occupied habitat; the operator is encouraged to apply water for dust abatement to such areas from April 15st to June 30th (flowering period); dust abatement applications will be comprised of water only,
 - f. The edge of the well pad should be located at least 300' away from plants and avoidance areas, in general; however, site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat,
 - g. Surface pipelines will be laid such that a 300' buffer exists between the edge of the right of way and plants and 300' between the edge of right of way and avoidance areas; use stabilizing and anchoring techniques when the pipeline crosses suitable habitat to ensure pipelines don't move towards the population; site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat,
 - h. Construction activities will not occur from April 15th through June 30th within occupied habitat,
 - i. Before and during construction, areas for avoidance should be visually identifiable in the field, e.g., flagging, temporary fencing, rebar, etc.,
 - j. Place produced oil, water, or condensate tanks in centralized locations, away from occupied habitat, and
 - k. Minimize the disturbed area of producing well locations through interim and final reclamation. Reclaim well pads following drilling to the smallest area possible.
5. Occupied Last Chance townsendia habitats within 300' of the edge of the surface pipelines' right of ways, 300' of the edge of the roads' right of ways, and 300' from the edge of the well pad shall be monitored for a period of three years after ground disturbing activities. Monitoring will include annual plant surveys to determine plant and habitat impacts relative to project facilities. Annual reports shall be provided to the BLM and the Service. To ensure desired results are being achieved, minimization measures will be evaluated and may be changed after a thorough review of the monitoring results and annual reports during annual meetings between the BLM and the Service.
6. Reinitiation of section 7 consultation with the Service will be sought immediately if any loss of plants or occupied habitat for the Last Chance Townsendia is anticipated as a result of project activities. Additional site-specific measures may also be employed to avoid or minimize effects to the species. These additional measures will be developed and implemented in consultation with the U.S. Fish and Wildlife Service to ensure continued compliance with the ESA.

Attachment J—Lease Notice for Wright Fishhook Cactus

Utah's Threatened and Endangered Species Notices

Lease Notice – Wright Fishhook Cactus (*Sclerocactus wrightii*)

In order to minimize effects to the federally endangered Wright fishhook cactus, the Bureau of Land Management (BLM), in coordination with the U.S. Fish and Wildlife Service (Service), has developed the following avoidance and minimization measures. Implementation of these measures will help ensure the activities carried out during oil and gas development (including but not limited to drilling, production, and maintenance operations) are in compliance with the Endangered Species Act (ESA). For the purposes of this document, the follow terms are so defined:

- *Potential habitat* is defined as areas which satisfy the broad criteria of the species habitat description; usually determined by preliminary, in-house assessment.
- *Suitable habitat* is defined as areas which contain or exhibit the specific components or constituents necessary for plant persistence; determined by field inspection and/or surveys; may or may not contain clay reed-mustard; habitat descriptions can be found in Federal Register Notice and species recovery plan links at <<http://www.fws.gov/endangered/wildlife.html>>.
- *Occupied habitat* is defined as areas currently or historically known to support clay reed-mustard; synonymous with “known habitat.”

The following avoidance and minimization measures should be included in the Plan of Development:

1. Pre-project habitat assessments will be completed across 100% of the project disturbance area within potential habitat prior to any ground disturbing activities to determine if suitable Wright fishhook cactus habitat is present.
2. Within suitable habitat, site inventories will be conducted to determine occupancy. Where standard surveys are technically infeasible and otherwise hazardous due to topography, slope, etc., suitable habitat will be assessed and mapped for avoidance (hereafter, “avoidance areas”); in such cases, in general, 300’ buffers will be maintained between surface disturbance and avoidance areas. However, site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat. Inventories:
 - a. Must be conducted by qualified individual(s) approved by BLM using accepted survey protocols,
 - i. Will be conducted in suitable and occupied habitat for all areas proposed for surface disturbance prior to initiation of project activities and within the same growing season, at a time when the plant can be detected and during appropriate flowering periods. Inventories should be conducted between April 1st to June 15th, however, surveyors should verify that the plant is flowering by contacting a BLM or FWS botanist or demonstrating that the nearest known population is in flower,
 - b. Will occur within 300’ from the centerline of the proposed right-of-way for surface pipelines or roads;
 - c. Will include, but not be limited to, plant species lists and habitat characteristics, and
 - d. Will be valid until April 1st the following year.
3. Design project infrastructure to minimize impacts within suitable habitat:
 - a. Where standard surveys are technically infeasible, infrastructure and activities will avoid all suitable habitat (avoidance areas) and incorporate 300’ buffers, in general; however, site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat,
 - b. Reduce well pad size to the minimum needed, without compromising safety,
 - c. Where technically and economically feasible, use directional drilling or multiple wells from the same pad,
 - d. Limit new access routes created by the project,
 - e. Roads and utilities should share common right-of-ways where possible,
 - f. Reduce the width of right-of-ways and minimize the depth of excavation needed for the road bed; where feasible, use the natural ground surface for the road within habitat,
 - g. Place signing to limit off-road travel in sensitive areas, and
 - h. Stay on designated routes and other cleared/approved areas.
 - i. All disturbed areas will be revegetated with native species comprised of species indigenous to the area and non-native species that are not likely to invade other areas.

Utah's Threatened and Endangered Species Notices

4. Within occupied habitat, project infrastructure will be designed to avoid direct disturbance and minimize indirect impacts to populations and to individual plants:
 - a. Follow the above recommendations (#3) for project design within suitable habitats,
 - b. To avoid water flow and/or sedimentation into occupied habitat and avoidance areas, silt fences, hay bales, and similar structures or practices will be incorporated into the project design; appropriate placement of fill is encouraged,
 - d. Construction of roads will occur such that the edge of the right of way is at least 300' from any plant and 300' from avoidance areas,
 - e. Roads will be graveled within occupied habitat; the operator is encouraged to apply water for dust abatement to such areas from April 1st to June 15th (flowering period); dust abatement applications will be comprised of water only,
 - f. The edge of the well pad should be located at least 300' away from plants and avoidance areas, in general; however, site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat,
 - g. Surface pipelines will be laid such that a 300' buffer exists between the edge of the right of way and plants and 300' between the edge of right of way and avoidance areas; use stabilizing and anchoring techniques when the pipeline crosses suitable habitat to ensure pipelines don't move towards the population; site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat,
 - h. Construction activities will not occur from April 1st through June 15th within occupied habitat,
 - i. Before and during construction, areas for avoidance should be visually identifiable in the field, e.g., flagging, temporary fencing, rebar, etc.,
 - j. Place produced oil, water, or condensate tanks in centralized locations, away from occupied habitat, and
 - k. Minimize the disturbed area of producing well locations through interim and final reclamation. Reclaim well pads following drilling to the smallest area possible.
5. Occupied Wright fishhook cactus habitats within 300' of the edge of the surface pipelines' right-of-ways, 300' of the edge of the roads' right-of-ways, and 300' from the edge of the well pad shall be monitored for a period of three years after ground disturbing activities. Monitoring will include annual plant surveys to determine plant and habitat impacts relative to project facilities. Annual reports shall be provided to the BLM and the Service. To ensure desired results are being achieved, minimization measures will be evaluated and may be changed after a thorough review of the monitoring results and annual reports during annual meetings between the BLM and the Service.
6. Reinitiation of section 7 consultation with the Service will be sought immediately if any loss of plants or occupied habitat for the Wright fishhook cactus is anticipated as a result of project activities.

Additional site-specific measures may also be employed to avoid or minimize effects to the species. These additional measures will be developed and implemented in consultation.

Attachment K—Lease Notice for Winkler Pincushion Cactus

Utah's Threatened and Endangered Species Notices

Lease Notice – Winkler Pincushion Cactus (*Pediocactus winkleri*)

In order to minimize effects to the federally threatened Winkler pincushion cactus, the Bureau of Land Management (BLM), in coordination with the U.S. Fish and Wildlife Service (Service), has developed the following avoidance and minimization measures. Implementation of these measures will help ensure the activities carried out during oil and gas development (including but not limited to drilling, production, and maintenance operations) are in compliance with the Endangered Species Act (ESA). For the purposes of this document, the follow terms are so defined:

- *Potential habitat* is defined as areas that satisfy the broad criteria of the species habitat description; usually determined by preliminary, in-house assessment.
- *Suitable habitat* is defined as areas which contain or exhibit the specific components or constituents necessary for plant persistence; determined by field inspection and/or surveys; may or may not contain clay reed-mustard; habitat descriptions can be found in Federal Register Notice and species recovery plan links at <<http://www.fws.gov/endangered/wildlife.html>>.
- *Occupied habitat* is defined as areas currently or historically known to support clay reed-mustard; synonymous with “known habitat.”

The following avoidance and minimization measures should be included in the Plan of Development:

1. Pre-project habitat assessments will be completed across 100% of the project disturbance area within potential habitat prior to any ground disturbing activities to determine if suitable Winkler pincushion cactus habitat is present.
2. Within suitable habitat, site inventories will be conducted to determine occupancy. Where standard surveys are technically infeasible and otherwise hazardous due to topography, slope, etc., suitable habitat will be assessed and mapped for avoidance (hereafter, “avoidance areas”); in such cases, in general, 300’ buffers will be maintained between surface disturbance and avoidance areas. However, site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat. Inventories:
 - a. Must be conducted by qualified individual(s) approved by BLM using accepted survey protocols,
 - b. Will be conducted in suitable and occupied¹ habitat for all areas proposed for surface disturbance prior to initiation of project activities and within the same growing season, at a time when the plant can be detected, and during appropriate flowering periods. Inventories should be conducted between March 15th to June 1st, however, surveyors should verify that the plant is flowering by contacting a BLM or FWS botanist or demonstrating that the nearest known population is in flower,
 - c. Will occur within 300’ from the centerline of the proposed right-of-way for surface pipelines or roads; and within 300’ from the perimeter of disturbance for the proposed well pad including the well pad,
 - d. Will include, but not be limited to, plant species lists and habitat characteristics, and
 - e. Will be valid until March 15th the following year.
3. Design project infrastructure to minimize impacts within suitable habitat:
 - a. Where standard surveys are technically infeasible, infrastructure and activities will avoid all suitable habitat (avoidance areas) and incorporate 300’ buffers, in general; however, site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat,
 - b. Reduce well pad size to the minimum needed, without compromising safety,
 - c. Where technically and economically feasible, use directional drilling or multiple wells from the same pad,
 - d. Limit new access routes created by the project,
 - e. Roads and utilities should share common right-of-ways where possible,
 - f. Reduce the width of right-of-ways and minimize the depth of excavation needed for the road bed; where feasible, use the natural ground surface for the road within habitat,
 - g. Place signing to limit off-road travel in sensitive areas, and
 - h. Stay on designated routes and other cleared/approved areas.
 - i. All disturbed areas will be revegetated with native species comprised of species indigenous to the

¹ Occupied habitat is defined as areas currently or historically known to support Winkler pincushion cactus; synonymous with “known habitat.”

Utah's Threatened and Endangered Species Notices

area and non-native species that are not likely to invade other areas.

4. Within occupied habitat, project infrastructure will be designed to avoid direct disturbance and minimize indirect impacts to populations and to individual plants:
 - a. Follow the above recommendations (#3) for project design within suitable habitats,
 - b. To avoid water flow and/or sedimentation into occupied habitat and avoidance areas, silt fences, hay bales, and similar structures or practices will be incorporated into the project design; appropriate placement of fill is encouraged,
 - d. Construction of roads will occur such that the edge of the right of way is at least 300' from any plant and 300' from avoidance areas,
 - e. Roads will be graveled within occupied habitat; the operator is encouraged to apply water for dust abatement to such areas from March 15th to June 1st (flowering period); dust abatement applications will be comprised of water only,
 - f. The edge of the well pad should be located at least 300' away from plants and avoidance areas, in general; however, site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat,
 - g. Surface pipelines will be laid such that a 300' buffer exists between the edge of the right of way and plants and 300' between the edge of right of way and avoidance areas; use stabilizing and anchoring techniques when the pipeline crosses suitable habitat to ensure pipelines don't move towards the population; site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat,
 - h. Construction activities will not occur from March 15th through June 1st within occupied habitat,
 - i. Before and during construction, areas for avoidance should be visually identifiable in the field, e.g., flagging, temporary fencing, rebar, etc.,
 - j. Place produced oil, water, or condensate tanks in centralized locations, away from occupied habitat, and
 - k. Minimize the disturbed area of producing well locations through interim and final reclamation. Reclaim well pads following drilling to the smallest area possible.

5. Occupied Winkler pincushion cactus habitats within 300' of the edge of the surface pipelines' right-of-ways, 300' of the edge of the roads' right-of-ways, and 300' from the edge of the well pad shall be monitored for a period of three years after ground disturbing activities. Monitoring will include annual plant surveys to determine plant and habitat impacts relative to project facilities. Annual reports shall be provided to the BLM and the Service. To ensure desired results are being achieved, minimization measures will be evaluated and may be changed after a thorough review of the monitoring results and annual reports during annual meetings between the BLM and the Service.

6. Reinitiation of section 7 consultation with the Service will be sought immediately if any loss of plants or occupied habitat for the Winkler pincushion cactus is anticipated as a result of project activities.

Additional site-specific measures may also be employed to avoid or minimize effects to the species. These additional measures will be developed and implemented in consultation with the U.S. Fish and Wildlife Service to ensure continued compliance with the ESA.

Attachment L—Lease Notice for the San Rafael Cactus

Utah's Threatened and Endangered Species Notices

Lease Notice – San Rafael Cactus (*Pediocactus despainii*)

In order to minimize effects to the federally endangered San Rafael cactus, the Bureau of Land Management (BLM) in coordination with the U.S. Fish and Wildlife Service (Service), have developed the following avoidance and minimization measures. Integration of and adherence to these measures will help ensure the activities carried out during oil and gas development (including but not limited to drilling, production, and maintenance) are in compliance with the Endangered Species Act (ESA). The following avoidance and minimization measures should be included in the Plan of Development:

1. Pre-project habitat assessments will be completed across 100% of the project disturbance area within potential habitat² prior to any ground disturbing activities to determine if suitable San Rafael cactus habitat is present.
2. Within suitable habitat³, site inventories will be conducted to determine occupancy. Inventories:
 - a. Must be conducted by qualified individual(s) approved by BLM using accepted survey protocols,
 - i. Will be conducted in suitable and occupied⁴ habitat for all areas proposed for surface disturbance prior to initiation of project activities and within the same growing season, at a time when the plant can be detected, and during appropriate flowering periods. Inventories should be conducted between March 15th to June 1st, unless extended by the BLM
 - b. Will occur within 300' from the centerline of the proposed right-of-way for surface pipelines or roads; and within 100' from the perimeter of disturbance for the proposed well pad including the well pad,
 - c. Will include, but not be limited to, plant species lists and habitat characteristics, and
 - d. Will be valid until March 15th the following year.
3. Design project infrastructure to minimize impacts within suitable habitat²:
 - a. Reduce well pad size to the minimum needed, without compromising safety,
 - b. Where technically and economically feasible, use directional drilling or multiple wells from the same pad,
 - c. Limit new access routes created by the project,
 - d. Roads and utilities should share common right-of-ways where possible,
 - e. Reduce width of right-of-ways and minimize the depth of excavation needed for the road bed; where feasible, use the natural ground surface for the road within habitat,
 - f. Place signing to limit off-road travel in sensitive areas,
 - g. Stay on designated routes and other cleared/approved areas, and
 - h. All disturbed areas will be re-vegetated with native species comprised of species indigenous to the area and non-native species that are not likely to invade other areas.
4. Within occupied habitat³, project infrastructure will be designed to avoid direct disturbance and minimize indirect impacts to populations and to individual plants:
 - a. Follow the above (#3) recommendations for project design within suitable habitats,
 - b. Buffers of 100 feet minimum between the edge of the right of way (roads and surface pipelines) or surface disturbance (well pads) and plants and populations will be incorporated,
 - c. Surface pipelines will be laid such that a 100 foot buffer exists between the edge of the right of way and the plants, use stabilizing and anchoring techniques when the pipeline crosses the habitat to ensure the pipelines don't move towards the population,
 - d. Before and during construction, areas for avoidance should be visually identifiable in the field,

² Potential habitat is defined as areas which satisfy the broad criteria of the species habitat description; usually determined by preliminary, in-house assessment.

³ Suitable habitat is defined as areas which contain or exhibit the specific components or constituents necessary for plant persistence; determined by field inspection and/or surveys; may or may not contain San Rafael cactus. Habitat descriptions can be found on the U.S. Fish and Wildlife Service's web site (<http://www.fws.gov/endangered/wildlife.html>) or the Utah Division of Wildlife Resources website (<http://wildlife.utah.gov/index.php>).

⁴ Occupied habitat is defined as areas currently or historically known to support San Rafael cactus; synonymous with "known habitat."

Utah's Threatened and Endangered Species Notices

- e.g., flagging, temporary fencing, rebar, etc.,
 - e. Where technically and economically feasible, use directional drilling or multiple wells from the same pad,
 - f. Designs will avoid concentrating water flows or sediments into occupied habitat,
 - g. Place produced oil, water, or condensate tanks in centralized locations, away from occupied habitat, and
 - h. Minimize the disturbed area of producing well locations through interim and final reclamation. Reclaim well pads following drilling to the smallest area possible.
5. Occupied San Rafael cactus habitats within 100' of the edge of the surface pipelines' right-of-ways, 100' of the edge of the roads' right-of-ways, and 100' from the edge of the well pad shall be monitored for a period of three years after ground disturbing activities. Monitoring will include annual plant surveys to determine plant and habitat impacts relative to project facilities. Annual reports shall be provided to the BLM and the Service. To ensure desired results are being achieved, minimization measures will be evaluated and may be changed after a thorough review of the monitoring results and annual reports during annual meetings between the BLM and the Service.
6. Reinitiation of section 7 consultation with the Service will be sought immediately if any loss of plants or occupied habitat for the San Rafael cactus is anticipated as a result of project activities.

Additional site-specific measures may also be employed to avoid or minimize effects to the species. These additional measures will be developed and implemented in consultation with the U.S. Fish and Wildlife Service to ensure continued compliance with the ESA.

Attachment M—Lease Notice for the Ute Ladies' Tresses

Utah's Threatened and Endangered Species Notices

Lease Notice – Ute Ladies' Tresses (*Spiranthes diluvialis*)

In order to minimize effects to the federally threatened Ute ladies'-tresses, the Bureau of Land Management (BLM) in coordination with the U.S. Fish and Wildlife Service (Service), developed the following avoidance and minimization measures. Integration of and adherence to these measures will help ensure the activities carried out during oil and gas development (including but not limited to drilling, production, and maintenance) are in compliance with the Endangered Species Act (ESA). Ute ladies'-tresses habitat is provided some protection under Executive Orders 11990 (wetland protection) and 11988 (floodplain management), as well as section 404 of the Clean Water Act. Although plants, habitat, or populations may be afforded some protection under these regulatory mechanisms, the following conservation measures should be included in the Plan of Development:

1. Pre-project habitat assessments will be completed across 100% of the project disturbance area, including areas where hydrology might be affected by project activities, within potential habitat⁵ prior to any ground disturbing activities to determine if suitable Ute ladies'-tresses habitat is present.
2. Within suitable habitat⁶, site inventories will be conducted to determine occupancy. Inventories:
 - a. Must be conducted by qualified individual(s) and according to BLM and Service accepted survey protocols,
 - b. Will be conducted in suitable and occupied⁷ habitat for all areas proposed for surface disturbance or areas that could experience direct or indirect changes in hydrology from project activities,
 - c. Will be conducted prior to initiation of project activities and within the same growing season, at a time when the plant can be detected, and during appropriate flowering periods (usually August 1st and August 31st in the Uintah Basin; however, surveyors should verify that the plant is flowering by contacting a BLM or FWS botanist or demonstrating that the nearest known population is in flower),
 - d. Will occur within 300' from the centerline of the proposed right-of-way for surface pipelines or roads; and within 300' from the perimeter of disturbance for the proposed well pad including the well pad,
 - e. Will include, but not be limited to, plant species lists, habitat characteristics, source of hydrology, and estimated hydroperiod, and
 - f. Will be valid until August 1st the following year.
3. Design project infrastructure to minimize direct or indirect impacts to suitable habitat² both within and downstream of the project area:
 - a. Alteration and disturbance of hydrology will not be permitted,
 - b. Reduce well pad size to the minimum needed, without compromising safety,
 - c. Limit new access routes created by the project,
 - d. Roads and utilities should share common right-of-ways where possible,
 - e. Reduce width of right-of-ways and minimize the depth of excavation needed for the road bed,
 - f. Construction and right-of-way management measures should avoid soil compaction that would impact Ute ladies' tresses habitat,
 - g. Off-site impacts or indirect impacts should be avoided or minimized (i.e. install berms or catchment ditches to prevent spilled materials from reaching occupied or suitable habitat through either surface or groundwater),
 - h. Place signing to limit off-road travel in sensitive areas,

⁵ Potential habitat is defined as areas which satisfy the broad criteria of the species habitat description; usually determined by preliminary, in-house assessment.

⁶ Suitable habitat is defined as areas which contain or exhibit the specific components or constituents necessary for plant persistence; determined by field inspection and/or surveys; may or may not contain Ute ladies'-tresses. Habitat descriptions can be found in Recovery Plans and Federal Register Notices for the species at <http://www.fws.gov/endangered/wildlife.html>.

⁷ Occupied habitat is defined as areas currently or historically known to support Ute ladies'-tresses; synonymous with "known habitat."

Utah's Threatened and Endangered Species Notices

- i. Stay on designated routes and other cleared/approved areas, and
 - j. All disturbed areas will be re-vegetated with species approved by FWS and BLM botanists.
4. Within occupied habitat³, project infrastructure will be designed to avoid direct disturbance and minimize indirect impacts to populations and to individual plants:
- a. Follow the above (#3) recommendations for project design within suitable habitats,
 - b. Buffers of 300 feet minimum between right of way (roads and surface pipelines) or surface disturbance (well pads) and plants and populations will be incorporated,
 - c. Surface pipelines will be laid such that a 300-foot buffer exists between the edge of the right of way and the plants, using stabilizing and anchoring techniques when the pipeline crosses habitat to ensure the pipelines don't move towards the population,
 - d. Before and during construction, areas for avoidance should be visually identifiable in the field, e.g., flagging, temporary fencing, rebar, etc.,
 - e. Where technically and economically feasible, use directional drilling or multiple wells from the same pad,
 - f. Designs will avoid altering site hydrology and concentrating water flows or sediments into occupied habitat,
 - g. Place produced oil, water, or condensate tanks in centralized locations, away from occupied habitat, with berms and catchment ditches to avoid or minimize the potential for materials to reach occupied or suitable habitat, and
 - h. Minimize the disturbed area of producing well locations through interim and final reclamation. Reclaim well pads following drilling to the smallest area possible.
5. Occupied Ute ladies'-tresses habitats within 300' of the edge of the surface pipelines' right-of-ways, 300' of the edge of the roads' right-of-ways, and 300' from the edge of the well pad shall be monitored for a period of three years after ground disturbing activities. Monitoring will include annual plant surveys to determine plant and habitat impacts relative to project facilities. Habitat impacts include monitoring any changes in hydrology due to project related activities. Annual reports shall be provided to the BLM and the Service. To ensure desired results are being achieved, minimization measures will be evaluated and may be changed after a thorough review of the monitoring results and annual reports during annual meetings between the BLM and the Service.
6. Reinitiation of section 7 consultation with the Service will be sought immediately if any loss of plants or occupied habitat for the Ute ladies'-tresses is anticipated as a result of project activities.

Additional site-specific measures may also be employed to avoid or minimize effects to the species. These additional measures will be developed and implemented in consultation with the U.S. Fish and Wildlife Service to ensure continued compliance with the ESA.

Attachment N—Lease Notice for the Maguire Daisy

Utah's Threatened and Endangered Species Notices

Lease Notice – Maguire Daisy (*Erigeron maguirei*)

In order to minimize effects to the federally threatened Maguire Daisy, the Bureau of Land Management (BLM), in coordination with the U.S. Fish and Wildlife Service (Service), has developed the following avoidance and minimization measures. Implementation of these measures will help ensure the activities carried out during oil and gas development (including but not limited to drilling, production, and maintenance operations) are in compliance with the Endangered Species Act (ESA). For the purposes of this document, the follow terms are so defined:

- *Potential habitat* is defined as areas which satisfy the broad criteria of the species habitat description; usually determined by preliminary, in-house assessment.
- *Suitable habitat* is defined as areas which contain or exhibit the specific components or constituents necessary for plant persistence; determined by field inspection and/or surveys; may or may not contain clay reed-mustard; habitat descriptions can be found in Federal Register Notice and species recovery plan links at <<http://www.fws.gov/endangered/wildlife.html>>.
- *Occupied habitat* is defined as areas currently or historically known to support clay reed-mustard; synonymous with “known habitat.”

The following avoidance and minimization measures should be included in the Plan of Development:

1. Pre-project habitat assessments will be completed across 100% of the project disturbance area within potential habitat¹ prior to any ground disturbing activities to determine if suitable Maguire Daisy habitat is present.
2. Site inventories will be conducted within suitable habitat to determine occupancy. Where standard surveys are technically infeasible and otherwise hazardous due to topography, slope, etc., suitable habitat will be assessed and mapped for avoidance (hereafter, “avoidance areas”); in such cases, in general, 300’ buffers will be maintained between surface disturbance and avoidance areas. However, site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat. Where conditions allow, inventories:
 - a. Must be conducted by qualified individual(s) and according to BLM and Service accepted survey protocols,
 - b. Will be conducted in suitable and occupied³ habitat for all areas proposed for surface disturbance prior to initiation of project activities and within the same growing season, at a time when the plant can be detected (usually May 1st to June 30th, however, surveyors should verify that the plant is flowering by contacting a BLM or FWS botanist or demonstrating that the nearest known population is in flower),
 - c. Will occur within 300’ from the centerline of the proposed right-of-way for surface pipelines or roads; and within 300’ from the perimeter of disturbance for the proposed well pad including the well pad,
 - d. Will include, but not be limited to, plant species lists and habitat characteristics, and
 - e. Will be valid until May 1st the following year.
3. Design project infrastructure to minimize impacts within suitable habitat:
 - a. Where standard surveys are technically infeasible, infrastructure and activities will avoid all suitable habitat (avoidance areas) and incorporate 300’ buffers, in general; however, site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat,
 - b. Reduce well pad size to the minimum needed, without compromising safety,
 - c. Where technically and economically feasible, use directional drilling or multiple wells from the same pad,
 - d. Limit new access routes created by the project,
 - e. Roads and utilities should share common right-of-ways where possible,
 - f. Reduce the width of right-of-ways and minimize the depth of excavation needed for the road bed; where feasible, use the natural ground surface for the road within habitat,
 - g. Place signing to limit off-road travel in sensitive areas, and
 - h. Stay on designated routes and other cleared/approved areas.
 - i. All disturbed areas will be revegetated with native species comprised of species indigenous to the area and non-native species that are not likely to invade other areas.

Utah's Threatened and Endangered Species Notices

4. Within occupied habitat, project infrastructure will be designed to avoid direct disturbance and minimize indirect impacts to populations and to individual plants:
 - a. Follow the above recommendations (#3) for project design within suitable habitats,
 - b. To avoid water flow and/or sedimentation into occupied habitat and avoidance areas, silt fences, hay bales, and similar structures or practices will be incorporated into the project design; appropriate placement of fill is encouraged,
 - d. Construction of roads will occur such that the edge of the right of way is at least 300' from any plant and 300' from avoidance areas,
 - e. Roads will be graveled within occupied habitat; the operator is encouraged to apply water for dust abatement to such areas from May 1st to June 30th (flowering period); dust abatement applications will be comprised of water only,
 - f. The edge of the well pad should be located at least 300' away from plants and avoidance areas, in general; however, site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat,
 - g. Surface pipelines will be laid such that a 300' buffer exists between the edge of the right of way and plants and 300' between the edge of right of way and avoidance areas; use stabilizing and anchoring techniques when the pipeline crosses suitable habitat to ensure pipelines don't move towards the population; site specific distances will need to be approved by FWS and BLM when disturbance will occur upslope of habitat,
 - h. Construction activities will not occur from May 1st through June 30th within occupied habitat,
 - i. Before and during construction, areas for avoidance should be visually identifiable in the field, e.g., flagging, temporary fencing, rebar, etc.,
 - j. Place produced oil, water, or condensate tanks in centralized locations, away from occupied habitat, and
 - k. Minimize the disturbed area of producing well locations through interim and final reclamation. Reclaim well pads following drilling to the smallest area possible.
5. Occupied Maguire Daisy habitats within 300' of the edge of the surface pipelines' right of ways, 300' of the edge of the roads' right of ways, and 300' from the edge of the well pad shall be monitored for a period of three years after ground disturbing activities. Monitoring will include annual plant surveys to determine plant and habitat impacts relative to project facilities. Annual reports shall be provided to the BLM and the Service. To ensure desired results are being achieved, minimization measures will be evaluated and may be changed after a thorough review of the monitoring results and annual reports during annual meetings between the BLM and the Service.
6. Reinitiation of section 7 consultation with the Service will be sought immediately if any loss of plants or occupied habitat for the Maguire Daisy is anticipated as a result of project activities. Additional site-specific measures may also be employed to avoid or minimize effects to the species. These additional measures will be developed and implemented in consultation with the U.S. Fish and Wildlife Service to ensure continued compliance with the ESA.

This page intentionally left blank