

## APPENDIX J—SPECIAL STATUS SPECIES CONSERVATION MEASURES AND RECOMMENDATIONS

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Bureau of Land Management (BLM) has categorized the proposed actions into two groups—conservation measures, which are collaboratively developed management actions that help reduce or minimize adverse effects, and conservation recommendations, which, if implemented, could support conservation and recovery of the species. In categorizing each measure, BLM considered feasibility, available funding, available staff expertise, adaptive management needs, agency discretion, agency authority, variation in habitats, and site-specific exceptions. After a review of existing resource management plans (RMP), BLM sought to update consultation for all land use plans through programmatic statewide consultation for all listed species. The following preliminary conservation measures and recommendations (dated April 2005) resulted from that process. Little Snake Field Office (LSFO) intends to adopt any final guidance regarding issues of statewide programmatic RMP project design criteria. In addition, any changes made to project design criteria will also be implemented at that time by the LSFO.

### SPECIAL STATUS SPECIES CONSERVATION MEASURES

The goal of these measures is to provide common expectations regarding how to reduce or minimize adverse effects to endangered, threatened, and proposed species resulting from BLM actions. These measures include actions BLM is currently implementing or can implement as part of individual project design. BLM assumes implementation of these measures at the project planning phase will help ensure a project is not likely to adversely affect listed species. Site-specific consultation is still required before authorizing actions. Modifications or exceptions to these measures resulting from vegetation or topographic features, habitat conditions, or management alternatives may be developed cooperatively with the U.S. Fish and Wildlife Service (USFWS) during that site-specific consultation and National Environmental Policy Act (NEPA) analysis.

#### Colorado River Fishes

No surface occupancy (NSO) within critical or occupied habitat of Colorado pikeminnow (*Ptychocheilus lucius*), razorback sucker (*Xyrauchen texanus*), humpback chub (*Gila cypha*), and bonytail (*Gila elegans*). Exceptions that could adversely affect listed fish (such as bridge abutments) will require site-specific consultation with the USFWS.

All new pipelines and other controlled surface uses crossing any critical or occupied habitat of the Colorado River fishes will adhere to the following stipulations:

- ❑ Pipelines shall not be constructed in known spawning sites or backwaters.
- ❑ No work in the active river channel will take place between July 1 and September 30 to prevent adverse effects from sedimentation during spawning; also, no work will take place when larval fishes are drifting in the river channel.
- ❑ After construction, the stream bed will be returned to preconstruction contours.
- ❑ Pipelines transporting substances other than water will have automatic shut-off valves.
- ❑ Pipelines transporting substances other than water will be double-walled where they cross the river.
- ❑ A spill or leak contingency plan will be developed.
- ❑ Other than pipelines, controlled surface uses crossing any critical or occupied habitat of the Colorado River fishes will require separate Section 7 consultation.

- ❑ Avoid aerial application of chemical fire retardant or foam—except where human safety is involved—and exclude surface disturbing activities (e.g., fire lines) within 300 feet of any body of water that may intercept critical or occupied habitat of the Colorado River fishes.
- ❑ Minimize the impacts from herbicide applications by complying with label instructions when controlling tamarisk and/or Russian olive on critical and other occupied habitat of Colorado River fishes.
- ❑ Minimize the impacts from erosion and habitat restoration associated with tamarisk and/or Russian olive control on critical and other occupied habitat of Colorado River fishes.
- ❑ BLM should coordinate with the Recovery Implementation Program to identify potential problem areas and conservation measures to reduce the risk of bank destabilization or increased sedimentation resulting from any land use activity or natural disturbance. For sites where habitat loss is a risk, remedial actions should be implemented to ensure the suitability of the spawning habitat is maintained, or enhanced.
- ❑ Exclude suction dredging for gold from critical habitat of Colorado River fishes during the spawning and nursery period for each species, encompassing a time period of April through September.
- ❑ Where possible, implement measures to reduce selenium concentrations in the upper Colorado River basin; for example, decrease erosion in areas with selenium-rich soils (e.g., shale-derived soils), maintain adequate vegetation cover on the site, control ephemeral streamflow with water spreading structures, or apply NSO stipulations on steep slopes with selenium-rich soils.
- ❑ Do not authorize irrigation in areas with selenium-rich soils (e.g., shale-derived soils).

### **Mexican Spotted Owl**

These conservation measures were developed from the 1995 recovery plan for the Mexican spotted owl (MSO) (*Strix occidentalis lucida*). The recovery plan is currently being revised.

- ❑ NSO should be applied to all protected activity centers (PAC). Other surface disturbing activities within protected or restricted habitats, such as prescribed fires and fuels reduction, may occur in specific cases but will require separate Section 7 consultation.
- ❑ Avoid activities (such as recreation) likely to disturb MSO in PACs during the breeding season (March 1 through August 31).
- ❑ Within MSO “steep slope” and “canyon” habitats (as defined in the recovery plan), trees greater than 9 inches diameter at breast height (dbh) should not be removed. Thinning of trees less than 9 inches dbh, fuels treatments, and prescribed fires are allowed on a case-by-case basis to reduce fire hazard and improve habitat condition for owl prey. Habitat components that should be retained include snags, large logs (greater than or equal to 12 inches dbh), grasses, forbs, and shrubs. No seasonal restrictions apply in this habitat type.
- ❑ Livestock grazing in protected and restricted MSO habitats should meet BLM Colorado’s Standards for Public Land Health within key habitat areas (riparian areas, meadows, and oak types) to provide for adequate levels of plant cover and forage for owl prey species. Monitoring in such areas should occur to determine current level of use and detect any change in the relative composition of herbaceous and woody plants.
- ❑ No new recreation facilities or trails will be permitted within PACs. Maintenance and seasonal closure of existing facilities should continue.
- ❑ The presence and intensity of existing recreational activities (as described in the recovery plan) within PACs should be evaluated on a case-by-case basis. Spatial and temporal restrictions will be required for all new activities, but specific dates and distances will be developed for each individual project through site-specific consultation with USFWS.

## Yellow-billed Cuckoo

- ❑ To evaluate both long- and short-term impacts and benefits, continue to implement livestock management practices and operations according to the *Public Land Health Standards and Guidelines for Livestock Grazing* (1997) (emphasis on Standard #2). Assess land health according to established baseline data, and identify changes in Yellow-billed Cuckoo (YBC) habitat suitability.
- ❑ Manage for regeneration and multiple age classes in cottonwood/willow vegetation in YBC habitat.
- ❑ Construction of roads, pipelines, and powerlines through riparian habitat should be placed near the edge of the current YBC habitat. This construction should not occur from June 1 through August 1. Roads, new trails, and rights of way (ROW) should be combined where possible, and stream crossings should be at right angles to YBC habitat to minimize impacts.
- ❑ Prohibit permanent surface disturbing activities within 1/4 mile of any suitable YBC habitat. Exceptions should be evaluated on a case-by-case basis to avoid adverse impact.
- ❑ To avoid direct impacts on or changes in riparian habitat, do not modify stream channel morphology or annual stream flow regimes in suitable habitat.
- ❑ Prohibit non-surface disturbing activities within YBC habitat that will have adverse effects on the YBC or its habitat (e.g., boat and raft landings, outfitting camps, firewood collection) within 1/4 mile of occupied habitat.
- ❑ Do not apply chemical insecticides within 1/4 mile of YBC occupied habitat.
- ❑ Prohibit herbicide application for grasshopper control in YBC habitat within 1/4 mile of any active nests.
- ❑ In YBC habitat, use prescribed fire activities only to maintain or enhance YBC habitat. Prescribed burning should not be conducted within 1/4 mile of suitable YBC habitat during the breeding season (June 1 to September 15).

## Mountain Plover

- ❑ BLM Colorado has committed to using the Interagency Mountain Plover Project Screen.

## Canada Lynx

Conservation measures outlined in the Canada Lynx Conservation and Assessment Strategy (U.S. Forest Service 2000) will be implemented, as necessary. All of the conservation measures for the Canada lynx (*Lynx canadensis*) are included in the Lynx Conservation and Assessment Strategy (LCAS) (Ruediger 2000), which BLM has signed as a cooperating agency. USFWS has no other conservation measures to provide at this time. RMPs are permissive, in that they allow for, but generally do not authorize or implement, specific actions. The biological assessment, which documents the effects of national forest land, RMPs, and BLM land use plans on Canada lynx, states that current plan language may allow actions that adversely affect lynx. As such, specific actions conducted under some current BLM RMPs could impart a level of adverse effects to individual lynx. By incorporating the LCAS standards and guidelines, the October 2000 biological opinion for “National Forest Land and Resource Management Plans and Bureau of Land Management Land Use Plans” concludes that “in most cases [actions] would not adversely affect lynx, and therefore no take would be anticipated in *most instances*.” This statement implies that because the plans are permissive and can result in actions that adversely affect lynx, implementation of the plans could result in adverse effects on lynx.

## Native Cutthroat Trout—Colorado River

The BLM is signatory to the *Conservation Agreement and Strategy for Colorado River Cutthroat Trout in the States of Colorado, Utah, and Wyoming* (Colorado River Cutthroat Trout Task Force 2001). BLM

has agreed to implement the conservation strategies over which they have authority and to cooperate with implementation of the other conservation strategies.

- ❑ Monitor watershed conditions to detect changes every 2 years in watersheds containing core conservation populations (CCP), every 5 years in watersheds containing conservation populations (CP), and every 10 years in watersheds containing hybridized or unknown populations (HUP). Watershed monitoring will be conducted as part of BLM's Land Health Assessment process.
- ❑ Monitor lake and stream habitat to detect changes every 2 years in lakes or streams containing CCPs, every 5 years in lakes or streams containing CPs, and every 10 years in lakes or streams containing HUPs. Lake and stream monitoring will be conducted as part of BLM's Land Health Assessment process.
- ❑ Improve or maintain watershed conditions and lake and stream habitat. Watershed conditions and stream and lake habitat will be maintained or improved for locations containing CCPs and CPs, and will be maintained for locations containing HUPs. Priority will be given to improving watershed conditions and stream or lake habitat for locations containing CCPs, where possible. Habitat improvement techniques will be used, where appropriate, to provide missing habitat components or improve existing ones. These techniques can include building instream structures to improve pool-to-riffle ratios, streambank stabilization, riparian management, instream cover, pool or spawning gravel enhancement, and provision of fish passageways.
- ❑ Where possible, BLM will acquire adequate instream flows and lake levels and meet water quality standards for CCPs and CPs. BLM will use all legal avenues for maintaining adequate flows, pools, and water quality, including the purchase of private water rights and negotiations on timing, duration, and volume of flows and drawdowns.
- ❑ BLM will coordinate with the Colorado Division of Wildlife (CDOW) to determine and update the genetic purity of cutthroat trout populations on BLM lands. CDOW will determine the frequency of genetic testing.
- ❑ Land management decisions, which are likely to affect CCPs or CPs, should ensure habitat elements for cutthroat trout are protected. Timber management, road construction, mineral development, and their associated impacts on CCPs or CPs should be analyzed and mitigated before project implementation.
- ❑ Livestock grazing impacts should be evaluated every 2 years for lakes or streams containing CCPs, every 5 years for lakes or streams containing CPs, and every 10 years for lakes or streams containing HUPs. Impacts will be evaluated through the Land Health Assessment process, with a specific focus on riparian areas.

### **Federally Listed and Candidate Plants**

- ❑ Surface disturbing activities or land exchange in occupied or suitable habitat locations should be preceded by a current year survey and separate Section 7 consultation.
- ❑ All BLM-issued minerals leases should include notification of all federally listed and candidate plant species occupied and suitable for habitat. Where listed and candidate species are present, BLM may require lessee to avoid activities that will adversely affect listed species or contribute to the need to list candidate species. Additional conditions of approval beyond the 60-day notice and 200-meter limit may be required when listed or candidate species occur within the action area.
- ❑ BLM should stipulate and implement fugitive dust control methods on permitted actions and activities occurring on public lands through the NEPA process to prevent any adverse effects on federally listed or candidate plants.
- ❑ "Translocation" will not be used as a rationale to defend a "not likely to adversely affect" or a "no effect" finding for any federally listed or candidate species.
- ❑ Travel management plans should include management direction to avoid adverse impacts on Special Status Plant Species.

- ❑ Protective stipulations for federally listed and candidate plants will also include appropriate measures to protect specific, pollinating species where known and identified by USFWS.

### **Boreal Toad**

BLM should follow the management recommendations of the “*Boreal Toad Conservation Plan and Agreement*” (C. Loeffler 2001). The following conservation measures are appropriate at breeding sites or wherever toads could be found.

- ❑ Assist with the Boreal Toad Recovery Team to identify boreal toad breeding sites. Coordinate with the Boreal Toad Recovery Team to identify sites on BLM-managed land.
- ❑ Where possible, maintain standing water at boreal toad breeding sites until metamorphosis is complete.
- ❑ Do not drain or fill wetlands at boreal toad breeding sites.
- ❑ Minimize activities that might increase or cause sedimentation at boreal toad breeding sites.
- ❑ Where BLM has discretionary authority, prevent the discharge of acid mine drainage into occupied boreal toad habitat.
- ❑ Minimize the impact of acid mine drainage into suitable-unoccupied and potential toad habitat.
- ❑ Identify and eliminate barriers to allow safe movement of toads between breeding sites, as well as between breeding sites and hibernacula.
- ❑ In occupied breeding sites, minimize concentration of livestock in breeding habitat from May 15 to September 15 to minimize the risk of trampling and to maintain proper functioning condition of wetlands (see Bartelt 1998 for justification). When livestock are retained on breeding habitat, initiate monitoring studies to determine effects on toads. If monitoring studies indicate that toads or their habitat are being negatively affected, erect fencing enclosures 300 feet from the delineated wetland boundary.
- ❑ Campsites within 300 feet of occupied breeding habitat should be closed seasonally using fencing and signs, if necessary, to protect breeding adults, egg masses, tadpoles and/or toadlets as desired.
- ❑ In suitable-unoccupied habitat, campsites should be located at least 100 feet from riparian areas.
- ❑ New trails should be at least 100 feet from boreal toad breeding sites.
- ❑ Do not use fish toxins in boreal toad breeding sites until metamorphosis is complete.

### **Bald Eagle**

Currently, USFWS is developing the “*National Management Guidelines for the Bald Eagle*.” The following conservation measures have been developed in the interim.

#### **Bald Eagle Nesting Conservation Measures**

- ❑ Year-round NSO/No Ground Disturbance (NGD) within a 1/4-mile radius of both occupied and unoccupied nests. Definition of “occupied nest” (from *Northern States Bald Eagle Recovery Plan* 1983, page D4): (a) young were observed, (b) eggs were laid (eggs or eggshell fragments observed), (c) one adult observed in incubating (“sitting low”) posture on the nest during the incubation period, (d) two adults observed at an empty nest or within the breeding area, and (e) one adult and one eagle in immature plumage at or near a nest, especially if mating or reproductive behavior (display flights, copulation, nest repair) was observed.
- ❑ No human activity or other permanent surface disturbance within 1/2-mile radius of occupied nests from November 15 through July 31.
- ❑ NSO within 100 meter radius of abandoned nests (unoccupied for 5 consecutive years, but with all or part of the nest remaining).

### **Bald Eagle Winter Conservation Measures**

- ❑ Human activities within 1/4 mile of known winter hunting perches and 1/2 mile of critical night roosts on BLM land should be restricted from November 15 to March 15. Buffers can be reduced to 1/4 mile for night roosts and 1/8 mile for hunting perches if the activity is visually screened by vegetation or topography. Development may be permitted at other periods. If periodic visits (such as oil well maintenance work) are required within the buffer zone after development, activity should be restricted to the hours of 1000 and 1400 hours from November 15 to March 15 (new guidelines developed by CDOW based on current data). Exceptions will require consultation for each individual action.
- ❑ Prohibit cutting down any native tree on BLM land that is 12 inches dbh or greater and within 100 feet of a river bank or other foraging area. Exceptions will require consultation for each individual action.
- ❑ Prohibit any activity on BLM lands that has the potential to kill perch trees or impede use of foraging areas.
- ❑ Implement silvicultural practices as necessary on BLM lands to enhance perch site availability.
- ❑ BLM will work with CDOW to identify locations for all known roost sites on or within 1/4 mile of BLM lands.
- ❑ All surface disturbing activities (e.g., project construction) should be prohibited within 1/4 mile of known roosts on BLM land, unless the activity will benefit wintering bald eagles or their habitat. Exceptions will require consultation for each individual action.
- ❑ New roads and bridges on BLM lands should be located at least 1/2 mile from critical night roosts. If BLM chooses to construct a road or bridge within 1/2 mile of critical night roosts, then the road must be closed to all use from November 15 to March 15. If topography or vegetation provides a visual screen, the buffer can be reduced to 1/4 mile, but the seasonal closure would still be required.
- ❑ All new powerline construction should comply with the Avian Power Line Interaction Committee's publication, *Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 1996*, Edison Electric Institute/Raptor Research Foundation, Washington, D.C. Copies of this report may be obtained from the Raptor Research Foundation, Carpenter Nature Center, 12805 St. Croix Trail South, Hastings, Minnesota 55033.

### **SPECIAL STATUS SPECIES CONSERVATION RECOMMENDATIONS**

The following conservation recommendations were determined to support conservation and recovery of the species. It is understood that implementing these measures could benefit Special Status Species, but not implementing these recommendations may also result in "not likely to adversely affect" listed species.

#### **Colorado River Fishes**

- ❑ Proposed and existing pipelines that cross critical or occupied habitat should be evaluated for risks to the Colorado River fishes. Evaluation should include contingency or emergency plans in place and their adequacy to reduce risks to these fishes, conditions of manual shut-off valves (if any), accessibility to manual shut-off valves, and relationship of pipeline location to spawning habitat. If the opportunity exists, BLM should use its discretion to modify pipelines determined to pose a potential adverse affect.
- ❑ BLM should identify all water diversion structures on BLM lands that could pose a risk to the Colorado River fishes or their critical habitat. For diversions that could pose a risk, BLM should coordinate with the Recovery Implementation Program to identify actions to eliminate or minimize the potential risk (e.g., minimize entrainment or impingement by using screens or baffles).

## **Mexican Spotted Owl**

These conservation measures were developed from the 1995 recovery plan for the MSO (*Strix occidentalis lucida*). The recovery plan is currently being revised.

- ❑ Work with CDOW and USFWS to identify potential MSO habitat on BLM lands, as necessary. Field surveys should occur in areas where human activities might remove or modify MSO habitat or otherwise adversely affect the species. Follow current survey protocol. Existing protocols require that four surveys be conducted each season for two consecutive seasons.
- ❑ Within “restricted” habitats (as defined in the recovery plan), management priority should be placed on reducing risks to MSO habitat. Forest habitats should be managed on an uneven-aged system. The use of prescribed fire is encouraged to provide future suitable habitat.
- ❑ Spatial and temporal restrictions might also be appropriate for recreational activities (as described in the recovery plan) for protected and restricted habitat other than PACs.

## **Yellow-billed Cuckoo**

- ❑ Work with CDOW and USFWS to identify potential YBC habitat on BLM lands, as necessary.
- ❑ If technically feasible, biological control should be used in place of chemical pest control.
- ❑ Where appropriate and consistent with YBC conservation, maintain beaver populations and associated species where they occur in YBC habitat.

## **Mountain Plover**

- ❑ Survey for occupancy in suitable-unoccupied habitat during breeding season (April through July) within 1 year of project implementation.
- ❑ Establish NSO stipulations around all plover nest sites during the nesting season (mid-April through early July). Prohibit surface use from April 1 to July 15 within 1/4 mile of occupied nesting habitat for mountain plovers. This stipulation does not apply to the operation and maintenance of production facilities (see Appendix E for exception, modification, or waiver criteria).
- ❑ Implement controlled surface use and timing stipulation during breeding season. Prohibit surface occupancy and use within 1/8 mile of occupied nesting habitat for mountain plovers (see Appendix E for exception, modification, or waiver criteria).

## **Native Cutthroat Trout—Colorado River**

- ❑ BLM will coordinate with CDOW to describe existing cutthroat trout populations and their instream or riparian habitats. Riparian proper functioning condition (PFC) assessments will be conducted every 2 years for lakes or streams containing CCPs, every five years for lakes or streams containing CPs, and every 10 years for lakes or streams containing HUPs. Population distribution information will be collected by CDOW, with assistance from BLM, on a schedule to be determined by CDOW.
- ❑ BLM will coordinate with CDOW to determine and update the genetic purity of cutthroat trout populations on BLM lands. The CDOW will determine the frequency of genetic testing.

## **Federally Listed and Candidate Plants**

- ❑ All known locations of federally listed and candidate plants should be inventoried at least once every 3 years.
- ❑ Projects that remove topsoil in areas of suitable habitat for listed and candidate plants should set aside and replace the topsoil when ground work is completed to preserve the seed bank and associated mycorrhizal species.

- ❑ When possible, revegetation should be limited to native species that will not compete with the rare species at that site to avoid introducing competitive species. Revegetation projects should require a site-specific plan for areas with listed and candidate plant species, to be developed in consultation with USFWS.
- ❑ Use data collected to ensure all livestock management practices and operations (e.g., grazing intensity, distribution, confinement, location of salt, and range improvements), will be implemented to benefit federally listed and candidate plants.
- ❑ BLM will implement fire management practices and protection (plant locations will be made known to resource advisors of wildfires) to enhance the conservation of federally listed or candidate plant species (e.g., fire refueling or fire camps should not be established in listed or candidate plant habitat, to the extent this will not jeopardize firefighters or public safety).