IMPLEMENTATION OF SECRETARIAL ORDER 3362





UTAH ACTION PLAN



Introduction

In 2018, Department of Interior (DOI) Secretary Ryan Zinke signed Secretarial Order 3362 (SO 3362) at the Western Hunting and Conservation Expo in Salt Lake City (Appendix A). SO 3362 directs the bureaus within the Department of Interior (DOI) to collaborate and work closely with the respective state wildlife agency to improve migration corridors and winter ranges for mule deer, pronghorn, and elk in the western United States. The states have direct responsibility and jurisdiction for the management of big game and the Order recognizes this as well as the rights of private landowners. The purpose of this action plan is to describe habitat and research needs in Utah for the species described in SO 3362.

Utah has approximately 52,696,960 total acres, 33,275,132 or 63% of which are under the management authority of the federal government (Appendix B). The Bureau of Land Management (BLM) manages 22,882,950 acres; the US Forest Service (FS) manages 8,178,600 acres; and the National Park Service (NPS) manages 2,022,600 acres. The Department of Defense and others make up the rest of federal ownership. Also, the State of Utah owns 3,824,800 acres and private lands are weaved throughout big game habitats. This ownership structure requires cooperative partnerships to work across all the habitat categories and ownerships for big game species.

Utah is currently one of the fastest growing states in the country, and the state's population is projected to nearly double in the next 50 years. Population growth is resulting in significant changes to the landscape as roads are built and expanded, housing developments are constructed, and water is diverted to accommodate growth. Without careful planning and active mitigation efforts, these changes to Utah's landscape could have real and lasting consequences for big game and other wildlife species, some of which may not easily be undone in the future. Rapid change can result in the degradation, fragmentation, and in some cases the complete loss of wildlife habitat.

Wildlife movement data are critical to the conservation of big game populations, because the data are used to define the habitats animals use and the corridors that link seasonal habitats. Movement data, however, are often missing from planning efforts, because for most species little is known about their movement patterns.

In 2018, SO 3362 provided funding to document the movements of mule deer in three populations in Utah. That investment is already paying dividends. In this plan, data generated by these projects are used to describe migration corridors and winter range use in those populations, as well as, to create a list of needs that would improve the management and health of these populations. Additionally, three new research priorities have been identified that will further our understanding and conservation of big game in the state.

CORRIDOR & WINTER RANGE PRIORITIES

1. EAGLE MOUNTAIN



Location:

Eagle Mountain is located in central Utah on the west side of Utah Lake. In the early 1990s, the area was relatively undeveloped. Now there are approximately 30,000 residents, and the population is projected to triple by 2040. There are few businesses so most residents commute to work, which creates heavy traffic volumes, especially on SR-73. The Utah Department of Transportation (UDOT) is planning to expand SR-73 to accommodate the growth. Additionally, Facebook is building a \$750 million data center in this area. There are significant amounts of BLM, state, and private land in this area.

Prior to 2018, the DWR had a small amount of data that showed that mule deer migrated from the Oquirrh Mountains to the Lake Mountains to spend the winter. The migration crosses SR-73, which connects the City of Eagle Mountain with the Salt Lake and Provo areas. Deer-vehicle collisions have been a problem in this area for many years and currently ~100 mule deer are killed on roads in this area each year. The migration corridor is at risk due to rapid development and deer-vehicle collisions that are occurring in the area.

With financial support from SO 3362 and other partners, the DWR began a project to map deer migration corridors in this area. In December 2018, 38 mule deer were captured and fit with GPS tracking collars. Tracking data from spring 2019 indicates that there are two major migration routes in this area (Fig. 1), one eastern route and one western route. The western route crosses SR-73 at Five Mile Pass in an area with substantial recreational use but that is not at risk for development. The eastern migration route passes through The City of Eagle in an area that will likely be developed in the near future. The DWR is working the City of Eagle Mountain, UDOT, BLM, the Mule Deer Foundation, and others to preserve migration corridors in the response to the rapid changes that are occurring in the area.

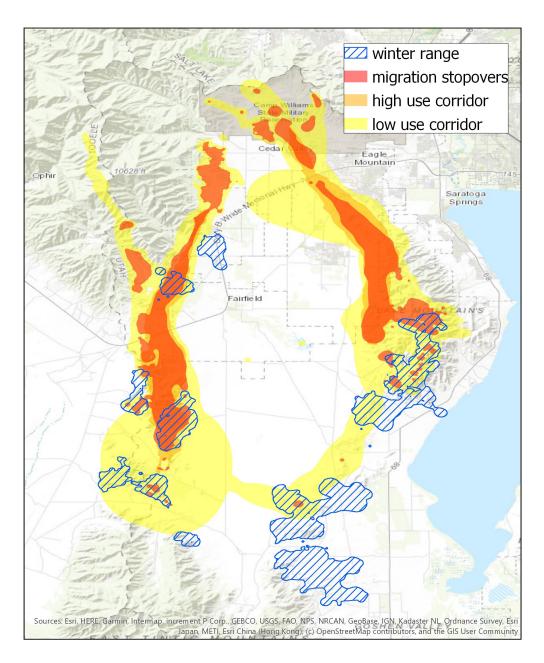


Figure 1. Mule deer migration corridors, winter ranges and stop over areas near the City of Eagle of Mountain in central Utah.

Needs:

- Wildlife Crossings- With the current and projected growth of the Eagle Mountain area, mitigation measures are necessary to offset the impacts of increasing traffic volumes and wildlife-vehicle collisions. Wildlife crossings and fencing are needed on SR-73 and possibly other roads in the City of Eagle Mountain to maintain migration corridors in this area.
- **II.** Land Easements- The UDWR and its partners are currently working with the City of Eagle Mountain and private land owners to preserve open space within migration corridors. To fully preserve the corridors, funding may be required to purchase land easements for wildlife.
- **III. Corridor Inventories-** Migration corridors need to be inventoried in this area to document current and potential barriers (roads, development, etc.). Rangeland and agricultural fencing needs to be examined to determine if it can be made more wildlife friendly.
- **IV. Habitat Improvements** Like much of the West Desert, rangelands in the Eagle Mountain area are subject to extensive conifer and cheat grass encroachment. Targeted habitat treatment projects in deer winter range and stopover areas could be used to bolster deer populations and offset some of the impacts of human development.

2. Chalk Creek/Kamas



Location:

The Chalk Creek/Kamas area is located in northern Utah to the northeast of Park City. The region is home to nearly 20,000 mule deer and over 4,000 elk. Northern Utah generally has more severe winter weather than central and southern Utah, and consequently most deer in the Chalk Creek/Kamas area are migratory. However, the amount of low-elevation winter habitat is severely limited.

The UDWR is concerned about the effects that roads, development, and vegetation change are having on mule deer in this area. Interstate 80 (I-80), the major east/west route in the state, borders the western edge of the area. In this portion of the state, I-80 has over 15,000 vehicles per day and is likely a considerable barrier to the movements of big games species. Additionally, the area has hundreds of wildlife-vehicle collisions each year and is one of most the problematic areas in the entire state (Fig. 2). To address the problem, UDOT has installed wildlife fencing along sections of the I-80 corridor to prevent deer and other species from crossing the roadway, but few wildlife crossing structures have been installed to provide connectivity. Additionally, the limited winter range that is in this region is being reduced due to housing development and conifer encroachment.



Figure 2. The locations of deer-vehicle collisions in the Chalk Creek/Kamas area for 2018.

With support from SO 3362 and other partners, the UDWR was able to capture 50 mule deer in December 2018 and fit them with GPS tracking collars. Unfortunately, due to the combination of severe drought and severe winter weather, deer survival was extremely low. Only half of the study animals survived the first winter. Tracking data for deer that survived indicates that there are several migration corridors in this area (Fig. 3). The interstate appears to have shaped migratory movements for one segment of the population, as the migration corridor follows the interstate corridor. Additionally, only one animal successfully crossed I-80 in this area.

Because the sample size for this project was reduced substantially due to low survival, the DWR is planning to capture 50 additional mule deer in December 2019. This portion of the project will be funded by the Utah Wildlife Migration Initiative and its partners.

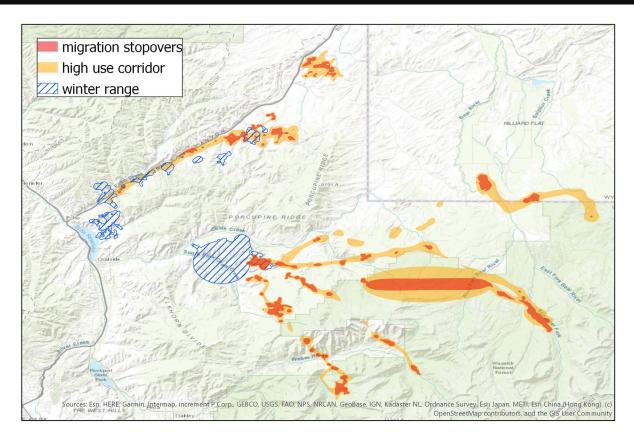


Figure 3. Mule deer migration corridors, winter ranges and stop over areas in the Chalk Creek/Kamas area.

Needs:

- Wildlife Crossings- At least one deer migration corridor in this area appears to be effected by roads. Mitigation measures are necessary to offset the impacts of wildlife-vehicle collisions and restore landscape connectivity. Wildlife crossings and fencing are needed on I-84 and I-80 mountain to improve the permeability of roads in this area.
- II. Corridor Inventories- Migration corridors need to be inventoried in this area to document current and potential barriers (roads, development, etc.). Rangeland and agricultural fencing needs to be examined to determine if it can be made more wildlife friendly. This past winter, several mule deer were observed caught in fences in this area (Fig. 4), indicating there may opportunities to work with landowners to make fencing more wildlife friendly.



Figure 4. Two mule deer caught in rangeland fencing on winter range in the Chalk Creek/Kamas area in 2018.

III. Habitat Improvements – Conifer encroach on winter range is a problem in this area and is exacerbated because the amount of winter range is relatively limited. Targeted habitat treatment projects in deer winter range and stopover areas could be used to bolster populations and offset some of the impacts of conifer encroachment in this area.

3. Zion



Location:

The Zion unit is located in southern Utah near St. George. The area has one of the larger deer herds in the state with approximately 15,000 animals. Landownership is a complex mix of BLM, Park Service, Forest Service, and private lands. The area is adjacent to the Paunsaugunt unit that has some of longest known deer migrations in Utah, with deer moving south from Utah into Arizona.

The area is experiencing rapid growth and development. St. George is the fastest growing metro area in the United States with a 4% annual growth rate. Additionally, the area is a popular vacation hot spot. For instance, Zion National Park is one the most visited parks in the United States. As a result, traffic volumes are increasing substantially. The unit is bounded by Interstate 15 (I-15) on the west and US-89 on the east. Traffic volumes on I-15 are over 20,000 vehicles per day and volumes on SR-89 are over 4,000 per day. State route (SR-9) also runs east/west through the middle of the unit and has over 2,000 vehicles per day. Wildlife-vehicle collisions are a problem on both US-89 and SR-9 but the magnitude of the problem is not well understood because information on wildlife-vehicle collisions has not been consistently reported in this area.

Funding provided through SO 3362 allowed the UDWR to begin a major project to document mule deer movements in the Zion area in December 2018. Approximately 80 deer were fitted with GPS tracking collars. Data from Spring 2019 indicate that most deer are migratory and move north/south, similar to the Paunsaugunt herd. The longest migration that was documented was 55 miles. Many of the deer crossed SR-9 while migrating. None of the GPS tracked deer crossed I-15 or US-89 during migration.

The project will be expanded in December 2019 using funding provided the Utah Wildlife Migration and its partners.

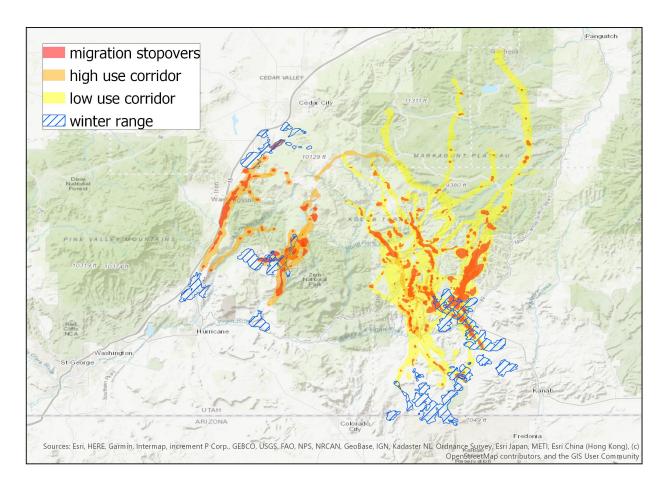


Figure 5. Mule deer migration corridors, winter ranges and stop over areas in the Zion unit.

Need:

- I. Wildlife Crossings- Most migratory movements of deer in this area are north/south. SR-9 needs to be evaluated to determine if crossings and wildlife fencing are needed. Crossing may be necessary on I-15 and US-89 to maintain connectivity between adjacent management units.
- **II. Corridor Inventories-** Migration corridors need to be inventoried in this area to document current and potential barriers (roads, development, etc.). Rangeland and agricultural fencing needs to be examined to determine if it can be made more wildlife friendly.
- **III. Habitat Improvements** Targeted habitat treatment projects in deer winter range and stopover areas could be used to bolster deer populations and offset some of the impacts of human development.

4. PAUNSAUGUNT



Location:

The Paunsaugunt unit is located in southern Utah, east of the Zion unit. The area has approximately 6,000 mule deer and is one Utah's most famous trophy hunting units. Deer in this area are migratory, with some animals moving over 70 miles. The population is interesting because a major effort has been made by UDOT, UDWR, and their partners to maintain the deer migration in that area. In the 1990s and early 2000s, SR-89 east of Kanab was infamous for having high numbers of deer-vehicles collisions, especially during the migration periods. In 2013, mitigation measures were installed along a 13-mile stretch of SR-89 that intersected a major migration corridor deer. This reduced deer-vehicle collisions and maintained the migration in that area.

Since 2017, GPS tracking has been used to document the migratory movements on mule deer in the Paunsaugunt unit. The project is a joint effort with the Arizona Game and Fish, because some deer in this area move between Arizona and Utah seasonally. The project is going into its third year and has amassed over 500,000 animal locations from over 130 deer. The study has allowed the UDWR to accurately describe migration corridors and habitat use in this area.

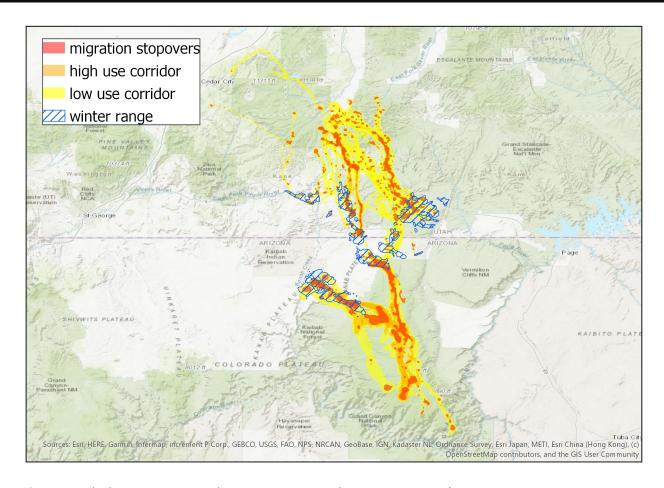


Figure 6. Mule deer migration corridors, winter ranges and stop over areas in the Paunsaugunt unit.

Need:

- I. Wildlife Crossings- There are currently seven wildlife crossings on SR-89 east of Kanab that facilitate the movements of thousands of migrating deer each year. GPS tracking data indicates there is an additional movement corridor that crosses SR-89 at Johnson Canyon. Currently, there are no wildlife fencing or wildlife crossings at that location. Mule deer may benefit from road mitigation in that area. Mule deer may also benefit from road mitigation on SR-89 north of Kanab near Mt. Carmel and between the towns of Glendale and Hatch, as many of the deer migrate across SR-89 in those locations.
- **II. Corridor Inventories-** Migration corridors need to be inventoried in this area to document current and potential barriers (roads, development, etc.). Rangeland and agricultural fencing needs to be examined to determine if it can be made more wildlife friendly.
- III. **Habitat Improvements** Targeted habitat treatment projects in deer winter ranges and stopover areas could be used to bolster deer populations.

Appendix A



THE SECRETARY OF THE INTERIOR WASHINGTON

ORDER NO. 3362

Subject: Improving Habitat Quality in Western Big-Game Winter Range and Migration Corridors

Sec. 1 **Purpose.** This Order directs appropriate bureaus within the Department of the Interior (Department) to work in close partnership with the states of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming to enhance and improve the quality of big-game winter range and migration corridor habitat on Federal lands under the management jurisdiction of this Department in a way that recognizes state authority to conserve and manage big-game species and respects private property rights. Through scientific endeavors and land management actions, wildlife such as Rocky Mountain Elk (elk), Mule Deer (deer), Pronghorn Antelope (pronghorn), and a host of other species will benefit. Additionally, this Order seeks to expand opportunities for big-game hunting by improving priority habitats to assist states in their efforts to increase and maintain sustainable big game populations across western states.

Sec. 2 **Authorities.** This Order is issued under the authority of section 2 of Reorganization Plan No. 3 of 1950 (64 Stat. 1262), as amended, as well as the Department's land and resource management authorities, including the following:

a. Federal Land Policy and Management Act of 1976, as amended, 43 U.S.C. 1701,

ET SEQ.;

- b. U.S. Geological Survey Organic Act, as amended, 43 U.S.C. 31, et seq.;
- c. National Wildlife Refuge System Improvement Act of 1997, as amended, 16 U.S.C. 668dd *et seq.*; and
- d. National Park Service Organic Act of 1916, as amended, 54 U.S.C. 100101, et seq.

Sec. 3 **Background.** The West was officially "settled" long ago, but land use changes continue to occur throughout the western landscape today. Human populations grow at increasing rates with population movements from east and west coast states into the interior West. In many areas, development to accommodate the expanding population has occurred in important winter habitat and migration corridors for elk, deer, and pronghorn. Additionally, changes have occurred across large swaths of land not impacted by residential development. The habitat quality and value of these areas crucial to western big-game populations are often degraded or declining.

The Bureau of Land Management (BLM) is the largest land manager in the United States (U.S.) with more than 245 million acres of public land under its purview, much of which is found in Western States. The U.S. Fish and Wildlife Service (FWS) and National Park Service (NPS) also manage a considerable amount of public land on behalf of the American people in the West. Beyond land management responsibilities, the Department has strong scientific capabilities in the U.S. Geological Survey (USGS) that can be deployed to assist State wildlife agencies and Federal land managers. Collectively, the appropriate bureaus within the Department have an opportunity to serve in a leadership role and take the initiative to work closely with Western States on their priorities and objectives as they relate to big-game winter range and migration corridors on lands managed by the Department.

Consistent with the American conservation ethic, ultimately it is crucial that the Department take action to harmonize State fish and game management and Federal land management of biggame winter range and corridors. On lands within these important areas, if landowners are interested and willing, conservation may occur through voluntary agreements.

Robust and sustainable elk, deer, and pronghorn populations contribute greatly to the economy and well-being of communities across the West. In fact, hunters and tourists travel to Western States from across our Nation and beyond to pursue and enjoy this wildlife. In doing so, they spend billions of dollars at large and small businesses that are crucial to State and local economies. We have a responsibility as a Department with large landholdings to be a collaborative neighbor and steward of the resources held in trust.

Accordingly, the Department will work with our State partners and others to conserve and/or improve priority western big-game winter range and migration corridors in

sagebrush ecosystems and in other ecotypes as necessary. This Order focuses on the Western States of:

Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. These States generally have expansive public lands with established sagebrush landscapes along with robust big-game herds that are highly valued by hunters and tourists throughout the Nation.

The Department has broad responsibilities to manage Federal lands, waters, and resources for public benefit, including managing habitat to support fish, wildlife, and other resources. Secretary's Order 3356, "Hunting, Fishing, Recreational Shooting, and Wildlife Conservation Opportunities and Coordination with States, Tribes, and Territories," (SO 3356) was issued on September 15, 2017. SO 3356 primarily focused on physical access to lands for recreational activities, particularly hunting and fishing. This Order is focused on providing access to big game animals by providing direction regarding land management actions to improve habitat quality for big-game populations that could help ensure robust big-game populations continue to exist. Further, SO 3356 includes a number of directives related to working With States and using the best available science to inform development of guidelines, including directing relevant bureaus to:

- a. Collaborate with State, tribal, and territorial fish and wildlife agencies to attain or sustain State, tribal, and territorial wildlife population goals during the Department's land management planning and implementation, including prioritizing active habitat management projects and funding that contributes to achieving wildlife population objectives, particularly for wildlife that is hunted or fished, and identifying additional ways to include or delegate to States habitat management work on Federal lands;
- b. Work cooperatively with State, tribal, and territorial wildlife agencies to enhance State, tribe, and territorial access to the Department's lands for wildlife management actions;
- c. Within 180 days, develop a proposed categorical exclusion for proposed projects that utilize common practices solely intended to enhance or restore habitat for species such as sage grouse and/or mule deer; and
- d. Review and use the best available science to inform development of specific guidelines for the Department's lands and waters related to planning aid developing energy, transmission, or other relevant projects to avoid or minimize potential negative impacts on wildlife.

This Order follows the intent and purpose of SO 3356 and expands and enhances the specific directives therein.

- Sec. 4 Implementation. Consistent with governing laws, regulations, and principles of responsible public stewardship, I direct the following actions:
 - a. With respect to activities at the national level, I hereby direct the BLM, FWS, and NPS to:
 - (1) Within 30 days, identify an individual to serve as the "Coordinator" for the Department. The Coordinator will work closely with appropriate States, Federal agencies, nongovernmental organizations, and/or associations to identify active programs focused on big- game winter range and/or migration corridors. The programs are to be organized and cataloged by region and other geographic features (such as watersheds and principles of wildlife management) as determined by the Deputy Secretary, including those principles identified in the Department's reorganization plan.
 - (2) Within 45 days, provide the Coordinator information regarding:
 - (i) Past and current bureau conservation/restoration efforts on winter range and migration corridors;
 - (ii) Whether consideration of winter range and corridors is included in appropriate bureau land (or site) management plans;
 - (iii) Bureau management actions used to accomplish habitat objectives in these areas:
 - (iv) The location of areas that have been identified as a priority for conservation and habitat treatments; and
 - (v) Funding sources previously used and/or currently available to the bureau for winter range and migration corridor conservation/restoration efforts.
 - (3) Within 60 days, if sufficient land use plans are already established that are consistent with this Order, work with the Coordinator and each regional Liaison (see section 4b) to discuss implementation of the plans. If land use plans are not already established, work with the Coordinator and each regional Liaison to develop an Action Plan that summarizes information collected in section 4 (a) (1) and (2), establishes a clear direction forward with each State, and includes:

- (i) Habitat management goals and associated actions as they are associated with big game winter range and migration corridors;
- (ii) Measurable outcomes; and
- (iii) Budgets necessary to complete respective action(s).
- b. With respect to activities at the State level, I hereby direct the BLM, FWS, and NPS to:
 - (1) Within 60 days, identify one person in each appropriate unified region (see section 4a) to serve as the Liaison for the Department for that unified region. The Liaison will coordinate at the State level with each State in their region, as well as with the Liaison for any other regions within the State. The Liaison will schedule a meeting with the respective State fish and wildlife agency to assess where and how the Department can work in close partnership with the State on priority winter range and migration corridor conservation.
 - (2) Within 60 days, if this focus is not already included in respective land management plans, evaluate how land under each bureau's management responsibility can contribute to State or other efforts to improve the quality and condition of priority big-game winter and migration corridor habitat.
 - (3) Provide a report on October 1, 2018, and at the end of each fiscal year thereafter, that details how respective bureau field offices, refuges, or parks cooperated and collaborated with the appropriate State wildlife agencies to further winter range and migration corridor habitat conservation.
 - (4) Assess State wildlife agency data regarding wildlife migrations early in the planning process for land use plans and significant project-level actions that bureaus develop; and
 - (5) Evaluate and appropriately apply site-specific management activities, as identified in State land use plans, site-specific plans, or the Action Plan (described above), that conserve or restore habitat necessary to sustain local and regional big-game populations through measures that may include one or more of the following:
 - (i) restoring degraded winter range and migration corridors by removing encroaching trees from sagebrush ecosystems, rehabilitating areas damaged by fire, or treating exotic/invasive vegetation to improve the quality and value of these areas to big game and other wildlife;

- (ii) revising wild horse and burro-appropriate management levels (AML) or removing horses and burros exceeding established AML from winter range or migration corridors if habitat is degraded as a result of their presence;
- (iii) working cooperatively with private landowners and State highway departments to achieve permissive fencing measures, including potentially modifying (via smooth wire), removing (info longer necessary), or seasonally adapting (seasonal lay down) fencing if proven to impede movement of big game through migration corridors;
- (iv) avoiding development in the most crucial winter range or migration corridors during sensitive seasons;
- (v) minimizing development that would fragment winter range and primary migration corridors;
- (vi) limiting disturbance of big game on winter range; and
- (vii) utilizing other proven actions necessary to conserve and/or restore the vital big-game winter range and migration corridors across the West.
- c. With respect to science, I hereby direct the USGS to:
 - (1) Proceed in close cooperation with the States, in particular the Western Association of Fish and Wildlife Agencies and its program manager for the Crucial Habitat Assessment Tool, prior to developing maps or mapping tools related to elk, deer, or pronghorn movement or land use; and
 - (2) Prioritize evaluations of the effectiveness of habitat treatments in sagebrush communities, as requested by States or land management bureaus, and identified needs related to developing a greater understanding of locations used as winter range or migration corridors.
- d. <u>I further hereby direct the responsible bureaus and offices within the Department to:</u>
 - (1) Within 180 days, to update all existing regulations, orders, guidance documents, policies, instructions, manuals, directives, notices, implementing actions, and any other similar actions to be consistent with the requirements in this Order;
 - (2) Within 30 days, provide direction at the state or other appropriate level to

revise existing Federal-State memorandums of agreement to incorporate consultation with State agencies on the location and conservation needs of winter range and migration routes; and

- (3) Consult with State wildlife agencies and bureaus to ensure land use plans are consistent and complementary to one another along the entire wildlife corridor in common instances where winter range or migration corridors span jurisdictional boundaries.
- e. <u>Heads of relevant bureaus</u> will ensure that appropriate members of the Senior Executive Service under their purview include a performance standard in their respective current or future performance plan that specifically implements the applicable actions identified in this Order.

Sec. 5 **Management.** I hereby direct the Deputy Secretary to take is responsible for taking all reasonably necessary steps to implement this Order.

Sec. 6 **Effect of Order.** This Order is intended to improve the internal management of the Department. This Order and any resulting reports or recommendations are not intended to, and do not create any right or benefit, substantive or procedural, enforceable at law or equity by a party against the United States, its departments, agencies, instrumentalities or entities, its officers or employees, or any other person. To the extent there is any inconsistency between the provision of this Order and any Federal laws or regulations, the laws or regulations will control.

Sec. 7 **Expiration Date.** This Order is effective immediately. It will remain in effect until its provisions are implemented and completed, or until it is amended, superseded, or revoked.

Secretary of the Interior

DATE: FEB 0 9 2018

Appendix B

