

**SOUTH DAKOTA WHITE-TAILED DEER AND MULE DEER
MANAGEMENT PLAN, 2017-2023**

DRAFT

(ABBREVIATED VERSION)

Complete Draft Found at <http://gfp.sd.gov/hunting/big-game/deer/deer-management-plan/DeerManagementPlan.pdf>



**SOUTH DAKOTA DEPARTMENT OF GAME, FISH AND PARKS
PIERRE, SOUTH DAKOTA**

WILDLIFE DIVISION REPORT 2017-02

MARCH 2017

ACKNOWLEDGEMENTS

This plan is a product of substantial discussion and input from many wildlife professionals. Several background and literature review portions of this plan were completed by West, Inc. under contract and reviewed by South Dakota Department of Game, Fish and Parks (SDGFP). In addition, comments and suggestions received from members of the South Dakota Deer Stakeholder Group, private landowners, hunters, and those who recognize the value of white-tailed deer and mule deer and their associated habitats were also considered.

Management Plan Coordinator – Andrew Lindbloom, South Dakota Department of Game, Fish, and Parks.

SDGFP Deer Management Plan Team that assisted with plan writing, data review and analyses, critical reviews and/or edits to the South Dakota White-tailed Deer and Mule Deer Management Plan, 2017-2023 – Andy Alban, Nathan Baker, Paul Coughlin, Shelly Deisch, Josh Delger, Jacquie Ermer, Keith Fisk, Steve Griffin, Corey Huxoll, John Kanta, Emily Kiel, Tom Kirschenmann, Jason Kool, Chad Lehman, Cynthia Longmire, Stan Michals, Mark Norton, Kevin Robling, Nick Rossman, Ron Skates, Chad Switzer, and Lauren Wiechmann.

Those who served on the South Dakota Deer Stakeholder Group during this planning process included: Bob Bucholz (Whitetails Unlimited/Brown County Sportsmen's Club); Kerry Burns (U.S. Forest Service, Black Hills National Forest); Mark DeVries (South Dakota Stockgrowers); Dave Eichstadt (Beadle County Sportsmen's Club); Steve Hemmer (East River landowner); John Hemmingstad (Southeastern SDGFP Regional Advisory Panel member); Brenda Forman (South Dakota Ag Unity); Chris Hesla (South Dakota Wildlife Federation); Cody Hodson (Black Hills Sportsmen's Club); Kyle Holt (South Dakota Department of Agriculture); Dale Johnson (South Dakota Youth Hunt Advisory Board/Mule Deer Foundation); Josh Ketwig (Sportsmen); Jamie Larson (East River landowner); Mike McKnight (South Dakota Bowhunter's, Inc.); Rebecca Newton (U.S. Bureau of Land Management); Dave Niemi (West River landowner); Russ Roberts (West River landowner/outfitter); Boyd Schultz (U.S. Fish and Wildlife Service); Jim Scull (West River landowner/South Dakota Youth Hunting Adventures); Ceci Steen (West River landowner/outfitter); Dan Svingen (U.S. Forest Service, Ft. Pierre National Grasslands); Bob Waterbury (West River landowner/outfitter); Jason West (East River landowner); Andy Vandel (High Plains Wildlife Association); Todd Wilkinson (East River landowner/South Dakota Cattlemen's Association); and Andy Wookey (East River landowner). In addition to those citizens that volunteered for the stakeholder group, the following three members of the SDGFP Commission regularly attended and participated in meetings: Russel Olson, Scott Phillips, and Jim Spies.

This document is for general, strategic guidance for SDGFP and serves to identify what we strive to accomplish related to management of both mule deer and white-tailed deer populations. This plan will be utilized by Department staffs and Commission on an annual basis and will be formally evaluated at least every 5 years. Plan updates and changes, however, may occur more frequently as needed.

All text and data contained within this document are subject to revision for corrections, updates, and data analyses. Cover art was provided by Adam Oswald.

Recommended Citation:

South Dakota Department of Game, Fish and Parks. 2017. South Dakota White-tailed Deer and Mule Deer Management Plan, 2017-2023. Completion Report 2017-02. South Dakota Department of Game, Fish and Parks, Pierre, South Dakota, USA.



EXECUTIVE SUMMARY

South Dakota's diverse landscapes of grassland, cropland, and timbered areas are home to white-tailed deer (*Odocoileus virginianus*) across the entire state and mule deer (*Odocoileus hemionus*) primarily adjacent to and west of the Missouri River breaks. Both species of deer were nearly extirpated due to unregulated harvest and market hunting by the turn of the 20th century. Legislation created in the 1900s and hunting seasons established by the South Dakota Department of Game, Fish, and Parks (SDGFP) Commission allowed deer populations to recover from historic lows. Deer hunting seasons have regularly occurred since the 1950s, with approximately 81,000 deer hunters harvesting approximately 95,000 deer during the recent record year of 2010.

Deer hunting is a popular and much awaited outdoor activity for many sportsmen and women in South Dakota. Within South Dakota, approximately 61,000 residents (7.5% of the resident population) and 6,850 non-residents hunted deer in 2015, with peak deer hunter participation occurring in 2010 when 81,478 residents and non-residents pursued deer. Hunting remains the number one tool for managing deer populations across South Dakota and harvest strategies are intended to ensure the well-being of the species and its habitat while maintaining populations at levels compatible with human activity and land use. Managing deer populations within various social tolerances, hunter desires, and expectations of the general public is a challenging task.

The SDGFP manages wildlife and associated habitats for their sustained and equitable use, and the benefit, welfare and enjoyment of the citizens of this state and its visitors. South Dakota's deer resources demand prudent and increasingly intensive management to accommodate numerous and varied public demands and growing impacts from people. This plan provides important historical background and significant biological information for the formulation of sound deer management. Current deer survey methods and management tools are presented, along with a thorough discussion of objectives and strategies to guide management of this important resource into the future. This plan is intended to guide managers and biologists over the next six years, but should be considered a working document that will be amended as new biological and social data provide opportunities to improve management of deer resources in South Dakota. Furthermore, this plan will aid in the decision-making process of SDGFP staff and SDGFP Commission, and serves to inform and educate the sportsmen and women, landowners, and other publics of South Dakota to whom it will ultimately benefit.

Current statewide models estimate 2016 preseason populations of approximately 425,000 [95% Confidence Interval (CI): 320,000 – 530,000] white-tailed deer and 115,000 (95% CI: 80,000 – 150,000) mule deer. Based on habitat and social tolerances, white-tailed deer and mule deer management units will be managed to increase, maintain, or decrease populations. Within the Black Hills data analysis unit, SDGFP will manage for 70,000 (65,000-75,000) white-tailed deer pre-season abundance. These management unit objectives will be based on annual collection and evaluation of white-tailed deer and mule deer biological data, habitat resources, private land depredation issues, and substantial input from a wide variety of publics with an interest in

deer management in South Dakota. SDGFP will adopt harvest strategies that will progressively allow the white-tailed deer and mule deer population to reach these population objectives.

The management of deer, their habitats, depredation to private property, and hunting opportunities can be complex for wildlife and habitat managers. While not an exclusive list, the following topics, in no particular order, were discussed amongst SDGFP staff and the deer stakeholder group during the plan development and include: habitat loss; antlerless deer harvest management; hunter access to public and private lands; distribution and allocation of hunting opportunity; landowner preference; deer depredation; hunting regulations; social tolerance of deer and deer hunters; and nonresident deer hunting opportunities. These challenges and opportunities serve as the foundation for the objectives and strategies outlined in the plan and will be addressed to ensure this plan is successfully implemented.

The SDGFP will manage white-tailed deer and mule deer populations and habitats by fostering partnerships and stewardship, and applying biological and social sciences. To achieve these population goals in balance with social and biological considerations, the following objectives have been identified: 1) Maintain, manage, establish and protect white-tailed deer and mule deer habitat throughout the Black Hills and prairie deer management units of South Dakota; 2) Manage white-tailed deer and mule deer populations by conducting scientifically based biological surveys within South Dakota; 3) Manage white-tailed deer and mule deer populations in the state for both maximum and quality recreational hunting opportunities, considering all social and biological inputs; 4) Cooperatively work with private landowners to resolve white-tailed deer and mule deer depredation to growing crops, stored-feed supplies, trees, and private property; 5) Monitor and evaluate risk and impact of disease in wild white-tailed deer and mule deer herds in South Dakota; 6) Provide the public with access to private and public land for quality white-tailed deer and mule deer hunting opportunities; 7) Engage the public on and evaluate white-tailed deer and mule deer research and management needs; 8) Promote public, landowner, and conservation agency awareness of white-tailed deer and mule deer management needs and challenges; and 9) Cooperatively work with municipalities and other agencies in South Dakota to manage urban deer and deer vehicle collisions. Time-specific and measurable strategies have been identified to ensure these objectives are delivered and achieved.

The *“South Dakota White-tailed Deer and Mule Deer Management Plan, 2017-2023”* will serve as the guiding document for decision making and implementation of actions to ensure deer populations and their habitats are managed appropriately, addressing both biological and social tolerances, while considering the needs of all stakeholders. SDGFP will work closely with private landowners, public land managers, and sportsmen and women to overcome the challenges and take advantage of opportunities regarding the future management of deer in South Dakota.

GOALS, OBJECTIVES & STRATEGIES

Guiding Principles

The following statements have guided the development of the white-tailed deer and mule deer management goals and objectives and reflect the collective values of South Dakota Game, Fish, and Parks (SDGFP) in relation to management of deer in South Dakota:

- that wildlife, including white-tailed deer and mule deer, contributes significantly to the quality of life in South Dakota and therefore must be sustained for future generations.
- that white-tailed deer and mule deer play an important role in forest and prairie ecosystems.
- in providing for and sustaining the diversity of our wildlife heritage for present and future generations.
- in management of white-tailed deer and mule deer in accordance with biologically sound principles while considering social tolerances.
- in providing accurate and timely information to the public concerning white-tailed deer and mule deer and associated recreational opportunities in South Dakota.
- that the future of white-tailed deer and mule deer in South Dakota depends on a public that appreciates, understands and supports deer and their habitats.
- that white-tailed deer and mule deer are an important aspect of tourism and visitor opportunities.

Population Goals

The SDGFP will manage white-tailed deer and mule deer populations and habitats by fostering partnerships and stewardship, and applying biological and social sciences.

Biological surveys provide substantial information about white-tailed deer and mule deer population demographics and vital rates across the state. From a statewide level, the accumulation of biological data is substantial and sufficient to estimate deer population abundance. Current statewide models estimate 2016 preseason populations of approximately 425,000 [95% Confidence Interval (CI): 320,000 – 530,000] white-tailed deer and 115,000 (95% CI: 80,000 – 150,000) mule deer. Statewide estimates are useful as a general measure of assessing management performance, but cannot be used to evaluate license allocation or harvest strategies at the Data Analysis Unit (DAU) or deer unit level. More useful from a license allocation perspective would be to establish quantifiable objectives at the DAU level (see Figure 22 in *Data Analysis Units* section). Abundance estimates at the DAU level, however, are currently lacking because of data limitations and current low harvest rates, resulting in insufficient estimates of harvest mortality. Recent efforts to increase radio-collaring sample sizes and increased doe harvest rates will yield valuable data in the near future; estimating white-tailed deer and mule deer abundance using population reconstruction techniques (see *Population Modeling* section) at the DAU level will soon be a viable option. In addition, further evaluation of fixed-wing aerial surveys east of the Missouri River will provide supplemental abundance estimates.

Because SDGFP currently conducts distance sampling road transects for white-tailed deer within the Black Hills, population estimates and objectives specific to white-tailed deer in this DAU are feasible. Within the Black Hills DAU (i.e., DAU 3), SDGFP will manage for 70,000 (65,000-75,000) white-tailed deer pre-season abundance. Consultation with the Black Hills USFS will occur regularly to ensure deer population densities are sustainable with current forage production and availability.

With limited current population estimates in other DAUs, numerical deer management unit objectives are impractical. As a result, individual white-tailed deer and mule deer management units will be managed to increase, maintain, or decrease deer populations (see Figures 3 and 5 in *Season Settings Process* section). Management unit objectives will be based on annual collection and evaluation of white-tailed deer and mule deer biological data, habitat resources, private land depredation issues, drought conditions, and substantial input from a wide variety of publics with an interest in deer management in South Dakota. SDGFP will adopt harvest strategies that will progressively allow the white-tailed deer and mule deer population to reach these population objectives. Management unit objectives for each white-tailed deer and mule deer unit will be evaluated biennially, and will be combined using a weighted average (based on 10-year harvest proportions) to develop DAU management objectives.

Objectives and Strategies

Objective 1: Maintain, manage, establish and protect white-tailed deer and mule deer habitat throughout the Black Hills and prairie deer management units of South Dakota.

Strategy 1A: By December 2017, conduct an inventory of existing land cover data and perform a thorough land cover analysis at the deer management unit level and quantify macro habitat types across South Dakota.

Strategy 1B: By June 2018, identify management units where deer habitat (i.e., woody cover, wetlands, and grasslands) are most limited.

Strategy 1C: By December 2018, identify top 10 habitat management focus areas for each deer species based on habitat needs, public land access, deer population densities, deer harvest densities and biological data (i.e., survival and recruitment).

1. Engage non-governmental organizations (NGOs), state and federal land management agencies to discuss ways to cooperatively fund and implement habitat Best Management Practices (BMP; see *Habitat Best Management Practices for Deer* section) for deer in identified priority areas.
2. Work with federal agencies to identify areas that are either National Environmental Policy Act (NEPA) cleared or require NEPA and would be available for cooperative habitat improvements.
3. By June 2023, strive to implement at least eight substantial (> 40 acres of habitat development or > 160 acres of habitat improvement) cooperative

habitat BMP improvement projects in focus areas for mule deer on federally managed public lands.

4. By June 2023, strive to implement at least eight substantial (> 40 acres of habitat development or > 160 acres of habitat improvement) cooperative habitat BMP improvement projects in focus areas for white-tailed deer on federally managed public lands.

Strategy 1D: Pending available funding within the SDGFP Wildlife Partners Program, establish a minimum of 900 acres of woody cover development composed of primarily low-mid growing trees and shrubs specific to each ecoregion on private lands across South Dakota by June 2023.

1. Prioritize new woody cover plantings to areas where current thermal/escape cover is lacking, or current woody cover plantings are nearing the end of their lifespan.

Strategy 1E: Continually support woody habitat development at a level that will mitigate the substantial amount of brush and woodland winter habitats lost due to inundation of Lakes Sharpe and Oahe.

Strategy 1F: By June 2018, investigate and identify forb and browse enhancement options that are specific to each ecoregion and deer species.

1. By June 2019, develop and implement a financial incentives program for deer forb establishment and enhancement practices on private lands.

Strategy 1G: Promote the SDGFP riparian fencing program for private land to improve woody vegetation regeneration and stabilize stream banks while increasing forage production.

1. Work with the South Dakota Grassland Coalition and other organizations to establish field trips promoting and demonstrating successful riparian management cooperative projects.

Strategy 1H: Periodically hold coordination meetings between SDGFP habitat staffs, private land habitat biologists, cooperatively funded habitat biologists, and others as needed to discuss current and future habitat projects.

Strategy 1I: By June 2018, evaluate and identify SDGFP Game Production Areas (GPAs) that would benefit from cross fencing and improved grazing management.

Strategy 1J: Strive for at least 1 million acres of undisturbed Conservation Reserve Program (CRP) grassland habitat on private lands in South Dakota by 2020.

1. Advocate for policy in the next Farm Bill which would allow CRP acreage to reach the long term goal of 1.5 million acres in South Dakota.
2. Annually seek and provide assistance to landowners with expiring CRP contracts by providing re-enrollment options into general and continuous CRP or other programs that are available for maintaining all or a portion of this grassland habitat.

Strategy 1K: Continue to provide financial commitment to the 80,895 acres enrolled in the James River Watershed (JRW) Conservation Reserve and Enhancement Program (CREP) and utilize funding sources as they become available to enroll the project goal of 100,000 acres in the JRW CREP.

1. Identify means to re-enroll expiring JRW CREP agreements beginning in 2019.

- Strategy 1L: Provide public awareness of mule deer and white-tailed deer habitat BMPs available for use and distribution.
1. Periodically publish deer habitat BMPs in the SDGFP Landowner's Matter newsletter, green sheet outdoor forum, and South Dakota Conservation Digest.
 2. By June 2018, create deer habitat BMP flyer and distribute to local SDGFP, Natural Resources Conservation Service (NRCS), Farm Service Agency (FSA), and other land management agency offices across the state.
- Strategy 1M: Provide review and coordination with all public land management agencies undergoing revision of resource management plans.
1. Participate and provide comments throughout the public process on the USFS Custer Gallatin Forest Plan revision. Conduct interagency discussions relevant to the habitat needs of mule deer and white-tailed deer on these public lands in South Dakota.
- Strategy 1N: Utilize land acquisition according to SDGFP Land Acquisition Priorities and Guidelines to enhance or protect existing wildlife habitat in South Dakota.
- Strategy 1O: Continue to support US Fish and Wildlife Service (USFWS) acquisition of Waterfowl Production Areas, wetland and grassland easements, and the efforts of the South Dakota Parks and Wildlife Foundation, Northern Prairie Lands Trust, and other conservation organizations in the preservation and protection of wildlife habitat.

Objective 2: Manage white-tailed deer and mule deer populations by conducting scientifically based biological surveys within South Dakota.

- Strategy 2A. Annually survey hunters to estimate white-tailed deer and mule deer harvest levels and distribution, sex, age (juvenile or adult) of harvested animals, number of hunters, hunter success, and hunter satisfaction.
- Strategy 2B. Annually conduct and assess fall white-tailed deer and mule deer herd composition surveys.
- Strategy 2C. Annually conduct and assess white-tailed deer and mule deer reproduction surveys.
- Strategy 2D. Assess and monitor white-tailed deer population levels and trends by completing fixed-wing aerial surveys using an established sightability model in DAUs 9 and 10 (see *Data Analysis Units* section, Figure 22) at least once every six years.
- Strategy 2E. Annually conduct survival studies to assess white-tailed deer and mule deer population levels and trends using population reconstruction techniques.
1. Increase white-tailed deer radio-collaring and survival monitoring efforts by adding one DAU each year (see *Survival Monitoring* section, Table 41).
 2. Increase mule deer radio-collaring and survival monitoring efforts by adding one DAU each year beginning in 2019 (see *Survival Monitoring* section, Table 42).
 3. Monitor survival in each DAU for approximately six years.

- Strategy 2F. By June 2020, complete evaluations of recruitment estimates using herd composition surveys versus reproduction and fawn survival estimates.
- Strategy 2G. Annually conduct spotlight abundance surveys for white-tailed deer in the Black Hills DAU (i.e., DAU 3).

Objective 3: Manage white-tailed deer and mule deer populations for both maximum and quality recreational hunting opportunities, considering all social and biological inputs.

- Strategy 3A. Where habitat and social tolerances allow, manage deer population levels as follows:
1. Within the Black Hills DAU, manage for a preseason abundance of approximately 70,000 (65,000-75,000) white-tailed deer.
- Strategy 3B. Biennially define management unit objectives (i.e., substantially increase, slightly increase, maintain, slightly decrease, substantially decrease) for mule deer and white-tailed deer for each firearm management unit.
1. Annually gather public input on white-tailed deer and mule deer management unit objectives as described in the *Seasons Setting Process* section.
 2. Utilize necessary antlerless harvest management tools to ensure management objectives are met as outlined in the *Antlerless Harvest Strategies* section.
 3. Set white-tailed deer and mule deer population goals at appropriate levels that can be sustained by available habitat on private and public lands, without causing substantial damages to public or private property.
 4. Manage for lower densities of deer when multiple years of drought impact forage availability and social tolerance levels.
- Strategy 3C. Conduct a scientific-based public opinion survey of landowners and hunters every four years (beginning in 2022) to assess public perceptions regarding mule deer and white-tailed deer management, better define social tolerance levels, and re-evaluate population objectives.
- Strategy 3D. Manage deer in Custer State Park (CSP) primarily for quality wildlife viewing opportunities, with limited hunting opportunities provided as follows:
1. Antlerless deer hunting opportunities will be offered based primarily on an evaluation of range conditions in CSP and depredation issues on private properties adjacent to CSP.
 2. White-tailed deer and mule deer hunting opportunities in CSP using “any whitetail” and “any deer” licenses will be allocated approximately 25% to the archery season and 75% to the firearm season.
 3. “Any whitetail” licenses will be set at 1% of the CSP white-tailed deer population estimate. No more than 50 “any whitetail” licenses will be issued in any year. The CSP population estimate for white-tailed deer will be calculated by multiplying the CSP acreage by the current white-tailed deer density estimate for the Black Hills derived using spotlight distance sampling.

4. "Any deer" licenses will be set at 1% of the CSP mule deer population estimate. The CSP population estimate for mule deer will be calculated by multiplying the CSP acreage by the current mule deer density estimate for the Black Hills derived using population reconstruction techniques.

- Strategy 3E. Manage Limited Access Units (24B, 27L, 35L; see *Quality Deer Management* section) and CSP for a quality hunting experience by using the following established thresholds:
1. Maintain a minimum buck harvest success of 80% (3-year average) for licenses containing "any deer" and "any whitetail" firearm tags; or
 2. Maintain firearm license densities no greater than 1.5 licenses/square mile for "any deer" licenses and no greater than 2.5 licenses/square mile for "any whitetail" licenses.
- Strategy 3F. Manage for a minimum buck harvest success of 60% (3-year average) for licenses containing "any deer" and "any whitetail" tags in the Black Hills, East River, and West River firearm deer seasons.
- Strategy 3G. Manage for a minimum buck harvest success of 40% (3-year average) for muzzleloader licenses containing "any deer" and "any whitetail" tags in any USFWS Refuge deer hunting unit.
1. By June 2018, meet with the USFWS to discuss potential harvest strategies needed to reach this objective strategy.
- Strategy 3H. By June 2018, establish criteria to be used to determine where harvest management for mule deer will occur in deer hunting units east of the Missouri River.
- Strategy 3I. By June 2019, develop antlerless harvest strategies for mule deer.
- Strategy 3J. By August 2017, present to the SDGFP Commission a summary of public input received from the Deer Stakeholder Group and others regarding deer license allocation concerns.
- Strategy 3K. Further evaluate Limited Access Units by all user groups by June 2023.
1. Conduct scientific survey to assess factors such as hunter density, hunter distribution, hunt dates, hunter success, and hunter satisfaction of all user groups.

Objective 4: Cooperatively work with private landowners to resolve white-tailed deer and mule deer depredation to growing crops, stored-feed supplies, trees, and private property.

- Strategy 4A. Continue to respond to all white-tailed deer and mule deer depredation concerns on private land in a timely manner.
- Strategy 4B. Explore new management techniques that could minimize damage to private property caused by white-tailed deer and mule deer.
- Strategy 4C. Encourage the enrollment of willing landowners that are experiencing chronic deer depredation issues into Walk-In Area and Controlled Hunting Access Programs to allow public hunting access.

- Strategy 4D. Utilize deer depredation pool hunts (see *Depredation Management* section) when warranted, to address white-tailed deer and mule deer depredation concerns.
- Strategy 4E. Expand hunting opportunities where/when possible to address white-tailed deer and mule deer depredation on private lands.
- Strategy 4F. By June 2019, develop additional depredation management strategies to increase acceptance of deer population goals.
- Strategy 4G. Annually assess effectiveness of SDGFP depredation abatement management techniques and programs.
- Strategy 4H. Work with agricultural and livestock producers, NRCS, and others to increase awareness of available SDGFP depredation assistance programs.

Objective 5: Monitor and evaluate risk and impact of disease in wild white-tailed deer and mule deer herds in South Dakota.

- Strategy 5A. Investigate and collect biological samples from reported or observed sick and/or dead white-tailed deer and mule deer demonstrating symptoms of concern and document in the SDGFP Wildlife Disease Database.
- Strategy 5B. Monitor white-tailed deer and mule deer disease by collecting and sampling voluntary hunter submissions at the discretion of SDGFP.
- Strategy 5C. Work with Tribal entities and government agencies within South Dakota, and surrounding State agencies of Iowa, Minnesota, Montana, Nebraska, North Dakota, and Wyoming on disease concerns of white-tailed deer and mule deer.
- Strategy 5D. Prohibit the unnatural movement of wild white-tailed deer and mule deer within the State of South Dakota.
- Strategy 5E. Annually participate with the Midwest Fish and Wildlife Health Committee to discuss disease issues and management within deer populations.
- Strategy 5F. Educate the public on the potential for increased disease transmission from feeding deer.
1. By June 2018, produce public outreach material.
- Strategy 5G. Work with the South Dakota Animal Industry Board on chronic wasting disease (CWD), bovine tuberculosis, brucellosis, and other potential disease risks due to potential interaction between wild and captive cervids in South Dakota.
1. By June of 2018, establish a SD Animal Industry Board / SDGFP interagency working group to enhance collaborative work on disease management topics such as the following:
 - Create a defined protocol for removal of escaped captive non-domestic animals.
 - Review SDGFP and SD Animal Industry Board administrative rules and state statutes to ensure regulations of both agencies are in agreement and sufficient to manage chronic wasting disease in both wild and captive cervids.
 - Review and define SDGFP and SD Animal Industry Board roles in the approval process of new captive cervid facilities.

- Strategy 5H. Assess rules and procedures to better limit the prevalence and spread of CWD by June 2020.
1. Evaluate methods and funding sources to assess the following:
 - Estimating CWD prevalence in areas of documented CWD.
 - Estimating CWD prevalence in areas with no documented CWD positive deer.
 - Improving monitoring and management protocol for areas with high levels (> 3%) of known CWD prevalence.
 2. Evaluate regulatory needs regarding the transportation of hunter harvested cervids within South Dakota from hunting units with known CWD.
 3. Evaluate regulatory needs regarding the transportation of hunter harvested cervids into South Dakota from other states that have established CWD in deer herds.
- Strategy 5I. By June 2018, develop guidelines for managing leftover unsold licenses and license refunds in areas with documented deer losses to hemorrhagic disease.

Objective 6: Provide the public with access to private and public land for quality white-tailed deer and mule deer hunting opportunities.

- Strategy 6A. Promote the SDGFP Walk-In Area and Controlled Hunting Access Programs with private landowners.
- Strategy 6B. Provide up-to-date public land layers available for free download to be used in conjunction with compatible GPS units.
- Strategy 6C. Annually promote and encourage hunters through social media platforms and news releases to respect private property boundaries and seek hunting permission well in advance of season opening dates.
- Strategy 6D. Work cooperatively with USFS, BLM, and other land management agencies to address road closure and recreational access issues during hunting seasons and critical wintering months.
- Strategy 6E. Identify public land areas that would benefit from signing or additional signing.
1. Continue to work on signing Missouri River GPAs.
 2. Coordinate with other public land management agencies to identify boundary signing needs and potential funding/assistance.
 3. Invite NGOs to assist in volunteer signage of public lands.
- Strategy 6F. By June 2018, form an interagency working group between US Fish and Wildlife Service and SDGFP to develop ways to enhance deer hunting opportunities on USFWS Refuges and other properties.

Objective 7: Engage the public on and evaluate white-tailed deer and mule deer research and management needs.

- Strategy 7A. Annually collaborate with stakeholders to collect and assess research and management needs and ideas.

1. Meet with concerned and interested individuals, non-governmental organizations, academic institutions, surrounding state wildlife agencies, Tribal agencies, local sportsman's groups, USFS, BLM, USFWS, livestock and agriculture organizations, and private landowners to facilitate discussions about white-tailed deer and mule deer populations and management.
2. When appropriate, involve SDGFP Regional Advisory Panels and the Deer Stakeholder Group with further development of this plan and with future issues related to white-tailed deer and mule deer management.

Strategy 7B. Periodically review white-tailed deer and mule deer survey protocols and discuss changes that could improve data collection efficiency and accuracy.

Strategy 7C. Formally evaluate the white-tailed deer and mule deer Management Plan at least every six years. Plan updates and changes, however, may occur more frequently as needed.

Strategy 7D. Meet and discuss deer management issues and strategies with other mid-western and western states' biologists by attending the biennial Western States Deer and Elk Workshop, the annual Midwest Deer and Wild Turkey Study Group meeting, and the Mule Deer Working Group.

Objective 8: Promote public, landowner, and conservation agency awareness of white-tailed deer and mule deer management needs and challenges.

Strategy 8A. Periodically include articles about white-tailed deer and mule deer and associated habitats in the South Dakota Conservation Digest and other popular magazines, journals, and media outlets.

Strategy 8B. Educate sportsmen and sportswomen on laws and regulations regarding the use of nutritional supplements/attractants in South Dakota.

1. By June 2018, work with local South Dakota retail companies in order to better inform customers of the laws and regulations pertaining to deer hunting in South Dakota and the associated permitted use of certain items sold in retail stores.

Strategy 8C. By August of 2017, make available paper and electronic copies of "White-tailed Deer and Mule Deer Management Plan for South Dakota, 2017-2023" to all interested conservation partners, the public, and private landowners.

Objective 9: Cooperatively work with municipalities and other agencies in South Dakota to manage urban deer and deer vehicle collisions.

Strategy 9A. Meet with interested municipalities to discuss urban deer management and related issues.

Strategy 9B. Provide technical advice regarding deer-human conflicts and cooperatively work with municipalities to develop/review urban deer management plans.

Strategy 9C. Promote hunting around and within city limits to manage urban deer populations when possible.

- Strategy 9D. Work with municipalities to issue kill permits to manage urban deer when warranted.
- Strategy 9E. Work with the SD Department of Transportation (SDDOT) and SD Department of Public Safety to identify and mark critical areas where high numbers of deer-vehicle collisions occur.
- Strategy 9F. Consider cooperative and new management techniques and strategies that can minimize deer-vehicle collisions at appropriate locations.
- Strategy 9G. Provide cooperative funding to SDDOT to maintain carcass collections from deer-vehicle collisions on appropriate state highways and interstates.
- Strategy 9H. Periodically meet with SDDOT to discuss upcoming road projects, deer-vehicle collisions, and potential mitigation strategies.

DRAFT