WYOMING GAME AND FISH DEPARTMENT

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WER 15263.00
United States Department of Agriculture
Forest Service - Bearlodge District
Davis Hazardous Fuels Reduction
Project Scoping
Crook County

Ryan Tallmadge
Forest Service
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Sundance, WY 82729
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Dear Mr. Tallmadge,

The staff of the Wyoming Game and Fish Department (Department) has reviewed the proposed Davis Hazardous Fuels Reduction Project. The Department is statutorily charged with managing and protecting all Wyoming wildlife (W.S. 23-1-103). Pursuant to our mission, we offer the following comments for your consideration.

The Black Hills National Forest is proposing to reduce fire hazard in the Moskee area of the Black Hills in Crook County. High fuel loading in this area poses a risk to surrounding lands and communities. The Forest Service is proposing to treat up to 1,304 acres of ponderosa pine, grasslands and hardwoods. Pine forest varies from dense, mature stands to open-canopy woodlands with an understory of grass or dense regeneration. The project would be implemented partly via Good Neighbor Authority agreements with the State of Wyoming. Project activities include commercial thinning of dense to moderately stocked pine stands with trees at least 6 inches in diameter to increase forest health and improve stand resilience to future disturbance. Thinning of smaller trees will also occur to reduce fire hazard and improve growing conditions.

The Davis Hazardous Fuels Reduction Project area overlaps the distribution of approximately 56 Wyoming Species of Greatest Conservation Need. Additionally, the project overlaps with delineated crucial winter-yearlong range for mule deer in Sections 9 and 21, T50N, R61W.

Terrestrial Recommendations:

The Department supports maintaining a mosaic of timber stand types and distribution across the Black Hills National Forest (BHNF). Ensuring viability for the variety of wildlife species occurring on the BHNF necessitates the creation and maintenance of a diversity of structural and stocking conditions of ponderosa pine, and maintaining their proximity to each other and other habitat types. This can be accomplished in conjunction with treatments designed to augment wildfire protection, control and diminish insect infestations, and enhance timber production. Planning requires careful consideration of treatment design, implementation measures, and post-logging activities to ensure timber management goals are achieved while wide ranging, monotypic silvicultural treatments and undesirable impacts to aquatic and terrestrial habitats are avoided. As such, the Department recommend:

- The map indicates some of the project area will include "Non-Commercial Wildlife" treatment activities. The scoping description makes no mention of this type of treatment. Please provide clarification on what type of silvicultural prescriptions will be used in the Non-Commercial Wildlife treatment areas.

- Consider using prescribed fire as a management tool in conjunction with the proposed thinning activities.

- Treatments should yield an irregular shaped mosaic of stand densities where possible. As a rule of thumb, stand or patch sizes of approximately 0.2 to 0.5 acres and polygons with linear widths of about 50 meters represent minimum effective patch sizes for most wildlife species. Clear cut openings and thinly stocked patches (less than 60 ft^2/acre) can provide excellent foraging areas for ungulates and other species. These more open areas should be:

    - At least 0.5 acres in size.
    - Located within 100 meters of dense pine stands (100 ft^2/acre, or at least 55% canopy cover).
    - Unbounded and unbisected by roads if possible, with roads buffered by at least 200 meters, but preferably 400 meters. The buffer zone should consist of moderate to dense timber stands (greater than about 85 ft^2/acre) to provide screening from the road.

- Thinning patches to maintain low crown development is encouraged within 100 meters of open areas capable of producing an understory with forage preferred by big game animals.

- Changes in fire regimes to hotter, more frequent fires can negatively impact wildlife and their habitats. In locations where wildfire control is an issue, open stands (less than 70 ft^2/acre) of pine that foster understory growth of more fire resistant hardwoods should be encouraged.

- Deciduous trees and shrubs in mesic habitat provide valuable and relatively limited habitat within the ponderosa pine community. Open pine stands (less than 70 ft^2/acre) should be created in more mesic locations to encourage understory growth of deciduous trees and shrubs.

- Thinning and logging slash should be chipped and spread, or piled and burned. Burned piles should spread, dragged or disked, and planted with seed mixes designed to benefit wildlife by providing perennial food sources or cover. Leaving smaller slash piles (less than eight foot diameter) of untreated slash in some areas can be beneficial for creating foraging locations along with hiding, denning and nesting cover for a variety mammals, reptiles, amphibians, and birds. If slash piles are eventually burned, reseeding following burning is recommended to control weeds and provide additional forage for wildlife.

- At lower elevations, spring burns may be preferred over fall burns as they produce "cooler" fires resulting in a mosaic of treated and untreated areas. Soil moisture is more available in the spring resulting in quicker plant re-growth. Spring burns should be timed to allow for sufficient re-growth prior to the songbird nesting season. The Department suggests surveying areas for raptor nests prior to burning, as owls and raptors nest early in the season and nest failures may result from spring burns.

- Burning decadent aspen stands, if present in the project area, is recommended to encourage sprouting and restore stand vigor.

- Managers concerned with sustaining and increasing avian diversity in the Black Hills should maintain within-stand and between-stand structural diversity to provide habitat needs of birds during both the breeding season and winter. Thinning projects should leave at least 1 or 2 large snags per acre, and most snags less than 6 inches diameter at breast height should be retained, as theses provide foraging sites for cavity-nesting birds.

- In areas with wild turkeys, stand densities of 60-70 ft^2/acre are appropriate where spring to fall wild turkey use is present. In areas with wintering wild turkeys, ponderosa pine stands should be managed for a basal area of at least 85 ft^2/acre. Turkey roost habitat typically requires stands with a basal area of least 100 ft^2/acre.

Species of Greatest Conservation Need (SGCN)
The project area overlaps the distribution of 56 SGCN. Potential impacts to SGCN, and their habitat, occurring in the project area should be assessed and measures developed to mitigate any impacts. We further recommend:

- Consult with the U.S. Fish and Wildlife Service for recommendations regarding federally listed threatened and endangered species, raptors, and migratory birds.

Big Game Crucial Winter Range
The project overlaps with delineated crucial winter-yearlong range for mule deer in Sections 9 and 21, T50N, R61W. To minimize project impacts in big game crucial winter range, the Department recommends:

- Avoiding project activities from November 15 – April 30.

Control Noxious Weeds and Other Invasive Plants
Project planning to minimize establishment and spread of non-native invasive plants and to suppress infestations which may follow proposed project activities is encouraged. Northeast Wyoming is at high risk for the introduction of medusahead and ventenata. Medusahead has been reported in Sheridan County and ventenata has been reported in 5 Wyoming counties including neighboring Campbell County. The impact of these annual invasive grasses to wildlife habitat are severe. Preventing introduction by cleaning vehicles and equipment prior to reaching work sites to minimize the potential for transporting seeds.

Aquatic Recommendations:
To minimize impacts to aquatic resources, we recommend the most current information found in the Wyoming Forestry Best Management Practices and Forestry BMP's be utilized. Consultation with Paul Mavrakis, Sheridan Regional Fisheries Supervisor, at 307-675-5478 is encouraged if avoidance of specific aquatic issues is in question.

Thank you for the opportunity to comment. If you have any questions or concerns please contact Chris Henkel, Habitat Protection Biologist, at 307-777-2533.

Sincerely,

Will Schultz
Habitat Protection Supervisor

WS/ch/kgb

cc: U.S. Fish and Wildlife Service
Chris Wichmann, Wyoming Department of Agriculture