SDSF Operational Plan Public Review

Responses to Comments

Contents

Background

A draft of the revised "Operational Plan for Management of Sand Dunes State Forest: 2013-2022" was released by the Minnesota Department of Natural Resources (DNR) for a 45-day public review that ran from June 21 – August 4, 2017. Forty-two submissions with comments were received. A few submissions represented multiple people and/or one or more organizations. The public review process also included a public open house on July 10th in Big Lake, Minnesota to discuss the plan; no written comments were submitted at that meeting.

This public review was preceded by a six-month public engagement process that took place from June-December 2016 and included six meetings with a stakeholder advisory group and other interested members of the public. This process informed the revision of the operational plan. Further detail on the public engagement process can be found in the plan.

This document divides public feedback from the review into several major categories. The first four categories – vegetation management, recreation, School Trust Lands, and roads – correspond with Section 2 of the plan, the "Ten-Year Action Plan". Remaining comments are divided into three categories: background and operational considerations, scope of the plan, and other requests for clarification or specific suggested changes to the plan's wording or maps.

Within each category, feedback was separated into themes. Each theme has been synthesized into a single, paraphrased 'summary suggestion' below, based on the specific comments that were provided. Some themes came up in many submissions, while some were only raised in only one or two submissions. These paraphrased suggestions are intended to capture the range of unique, core opinions that were expressed through the public review process, regardless of how many times each was expressed. However, the number of submissions that reflected each suggestion is noted under each theme.

The DNR has provided responses to each summary suggestion below, as well as responses to requests for clarification or specific changes, where possible. We anticipate that the final plan will be released in September 2017, following approval by the Commissioner of the DNR.

A Note About Values

Managing public lands requires balancing a wide range of often conflicting values. It is the DNR's responsibility to manage our lands for the protection and conservation of natural resources, as well as the sustainable economic use and recreational enjoyment of these resources for all Minnesotans. While we cannot always manage for every value on every acre of land, we try to make the best decision for each acre based on the ecological, social, and economic realities of individual sites, as well as the 'bigger picture' we see across the landscape. This is our mission as an agency.

DNR's specific mission in Sand Dunes State Forest involves protecting the rare species and ecosystems found there, producing valuable timber products, and providing high quality recreational experiences for visitors to the State Forest. In some cases, implementing the suggestions below – or implementing them to the degree suggested – would go against our mission or our ability to efficiently implement our mission. In other cases, implementing all suggestions equally would be impossible, because some are in direct conflict with each other. This demonstrates the diverse values held by our stakeholders.

We have examined all suggestions received through this review process, and our responses below reflect an effort to balance the diverse values of our stakeholders with our mission and responsibilities as an agency. Where specific changes to the plan are needed, these changes are noted in the response.

Public Comments and DNR Responses

Comments were received from the following persons/groups:

Date submitted	Name	Organization represented
6/28/2017	Kelly Thole	Self
7/4/2017	Don & Donna Bouley	Stakeholder participants
7/6/2017	Gordon Hommes	Self
7/7/2017	Dan Vollhaber	Self
7/15/2017	Kevin Schmuhl	Self
7/17/2017	Karen Miller	Self
7/19/2017 7/31/2017	Scott Nelson	Self
7/19/2017	Sue	Self
7/20/2017	Michelle Wagner	Self
7/24/2017	Karen Washburn-Maki	Self
7/24/2017	Mary Davis	Self
7/24/2017	Dave Crawford	Self
7/25/2017	Maggie Bogren	Self
7/25/2017	Lynn Pierce	Self
7/26/2017	Larry Kennebeck	Izaak Walton League
7/26/2017	Misi Stine	Minnesota Herpetological Society
7/27/2017	Bob Quady	Co-chair of the SDSF Concerned Citizens Work Group
7/30/2017	Joseph Magda	Self
7/31/2017	Pam Dugdale	Self
7/31/2017	David Janiga	Self
8/2/2017	Todd Maloney	Self
8/2/2017 8/3/2017	Ron Geurts	Self
8/3/2017	Kyle Arola, Thomas E. Casey, Robert Djupstrom	MN Chapter, The Wildlife Society; MN Native Plant Society, Inc.; Friends of MN Scientific and Natural Areas, Inc.
8/3/2017	Dale Wilson	Self
8/3/2017	Carmine Profant	Self
8/3/2017	Jane Fawke	Self
8/3/2017	Blake Klocke	Self
8/3/2017	Steven Hromada	Self
8/3/2017	Mike Pingleton	Self
8/3/2017	John Vanek	Self
8/3/2017	Don Becker	Self
8/3/2017	Marybeth Mataya	Self
8/3/2017	Carolyn Carr	Self
8/3/2017	Tricia Markle	Self

Date submitted	Name	Organization represented
8/3/2017 8/4/2017	Brett Whaley	Self
8/4/2017	Randall Pals	Self
8/4/2017	Anna Wagner	Self
8/4/2017	Paul Erdmann	Self
8/4/2017	Kristopher Lundell	Self

Specific comments are provided below anonymously. Unique submissions are numbered under each theme to show the total number of submissions that reflected each theme, in cases where submissions provided multiple comments on the same theme.

Vegetation management

There were 24 summarized suggestions related to vegetation management. Major topics included oak savanna (increase or decrease planned restoration acreage), timber harvest methods and timing, wildlife and biodiversity (e.g. protection of rare species and pollinators), the presence of pine in SDSF (remove/do not remove), and invasive species control. Other topics included use of prescribed burns and herbicides, protection of tax-payer investment, limiting change to the current landscape, visual impacts/buffers, protection of the land, diversification of oak stands, and HCVFs.

Oak Savanna/open habitat: More

Number of submissions that mentioned: 15

DNR paraphrase: The amount of oak savanna restoration proposed in the plan should be maintained, or it should be expanded beyond what is currently proposed. Oak savanna is a rare ecosystem in Minnesota and the Midwest and it needs to be conserved for the rare species that depend on it. Pine plantations should be restored back to oak savanna.

DNR response: *This issue has been a central topic of discussion among interested stakeholders, so it is understandable that it received so many comments during public review. The diversity of viewpoints reflected in these comments speak to the vastly different values that DNR must balance during its management planning processes. DNR underwent a six-month stakeholder process in 2016 that led to the decisions about oak savanna restoration reflected in this plan. That process also resulted in a shorter plan timeframe than originally proposed, which also covers fewer overall acres. Many acres of SDSF still require management planning, and future planning processes will continue to address the questions surrounding oak savanna restoration in SDSF, post-2022.*

Comments:

Unique Submissions	Specific comments
1	The area of oak savanna in Minnesota has been greatly reduced and is in need of conservation and habitat restoration.
2	I would like to see the continued plan of restoration of planted pines back to natural oak savanna. Hopefully that can be achieved with the cooperation between the adjacent land owners and the MNDNR in such a way that will be beneficial for everyone.
3	I support the MN DNR restoring native habitats such as oak savannas, and support the conservation of rare species.
4	Restoration of oak savanna and oak woodland should be allowed and pursued, where pines have been planted in the past.
5	Restore MORE prairie and oak savanna than the amount laid out in the plan, since the unit is ideal for expanding the acreage of these imperiled plant communities in MN.
6	Most of the grasslands of the Midwest are gone due to farming, and it is vitally important that we do what we can do protect existing grasslands, and restore those with imperiled species still holding on.
7	My own bias is to restore as much of the area as possible to the original oak savannah/oak woodland environment as possible, considering how rare this landscape has become on the Anoka Sand Plain (and the entire Upper Midwest).
	Before moving north in 1982, I often went to the Sand Dunes State Forest (starting in 1975) to swim and camp at Ann Lake with my Boy Scout troop. I find it deeply unfortunate that the Minnesota DNR was "asleep at the wheel" during the 1980s and 1990s and didn't bother acquiring private inholdings within the SDSF as unchecked population growth, urban sprawl, and "white flight" were converting these lands into housing developments and hobby farms. It is a miserable endeavor to manage a landscape that is in a checkerboard of public and private ownership. In any case, please put an emphasis on restoring the original (and best) land cover in the SDSF -- oak savannah, and oak woodlands--now so rare in the state. Also, work with The Nature Conservancy, Trust for Public Lands, and any other entity to acquire those few still undeveloped private lands that are within the SDSF statuary boundaries.
8	In addition, I would recommend increasing the proposed restoration of savanna and native prairie,
9	I want the oak savanah and habitat for rare species and native prairie expanded... Restore more native prairie and oak savanna (go beyond what is in the plan).
10	Restore native Prairie and oak savanna.
11	I've recreated at the Sand Dunes State Forest (traveled from my home state, Illinois). I value native habitat and would like to see pre-settlement habitat restoration. The pine trees planted on the site are not native and crowd out native species.
	Retain native oaks and remove the non-native pine trees, Those trees represent old, outdated management practices.
12	I would like to see more restoration of native prairie and oak savanna, than what is in this version of the plan, it is not enough.
13	Restoring areas to oak savanna is critically important, as they are exceedingly rare as are the species that depend on them.
14	Restoration of native prairie and oak savanna should go beyond what is in the plan.

15	I am glad to see goals that include restoration of native woodland/savanna habitats. I study rare species in KY/TN, and we have seen what appears to be a drastic decline in many of our grassland/savanna species due to loss of those habitats.

Oak Savanna/open habitat: Less

Number of submissions that mentioned: 6

DNR paraphrase: The amount of oak savanna restoration proposed in the plan should be less. Converting from the current forest would reduce recreation opportunities and enjoyment. Oak savanna is harder to ride horses through and will require unsafe prescribed burns. Oak savanna can be restored elsewhere. Rare and endangered species use the current forest habitats in SDSF – restoring oak savanna in these areas would reduce biodiversity.

DNR response: *(see response above to request for less oak savanna)*

Comments:

Unique Submissions	Specific comments
1	I believe the current forested areas of Sand Dunes should be continued to be maintained and managed as a "Forest" and not be converted to Oak Savanna. Converting the forest to this habitat would greatly reduce the recreational opportunities that exist now.
2	The forest should remain a forest and not an oak savanna. Any plans, old or new, should be put on hold as the existing Uncas Dunes Scientific and Natural Area {676 of the5732 acres} is observed.
	You can enjoy a forest more than an oak savanna, keep planning a forest and not an oak savanna.
	In my opinion the DNR has listened to us stakeholders, and with Mr. Newberger's legislation were forced to make changes, but in the long run my opinion is the DNR is going to do what they planned all along and that is to phase out growing pine and convert to oak savanna. At that time we can no longer call it a forest.
3	The oak savannah areas of the forest are already problematic, and there are trails where trotting isn't wise because of the treacherous footing.
4	If safety was really your #1 priority---you wouldn't be proposing a landscape that requires frequent prescribed burns to prevent trees from taking over as the main vegetation.
5	I feel that the DNR needs to leave the forest as is. This is a very nice, beautiful place that people enjoy and don't need the Savannah Oaks to make this place better. There are other locations for this. Somewhere that people can drive by and see the changes and that would make them want to maybe walk through it. The woods by our house are not accessible by the general public.
6	On page 15 of the plan it states: “The FSC requires its certificate-holders to identify and map the presence of High Conservation Value Forests (HCVFs) for a variety of critical and globally, regionally, or nationally significant conservation values defined by FSC (FSC 2010). This aligns with DNR’s statutory requirement to manage for a broad set of objectives and forest resources (M.S. 89 & M.S. 89A). DNR has identified

Unique Submissions	Specific comments
	approximately 262,000 acres of lands to be managed under the HCVF principle." [...] Upon further examination of the types of lands that qualify for HCVF one finds that they are abandoned fields, pastures and even old dump sites. They are the exact same types of lands that make up the 30,000 acre refuge to the north as well as hundreds of thousands of acres of private lands. It appears that if a field or pasture is abandoned and left long enough it will develop into a HCVF. That means it is not necessary to take forested lands and "restore" them to open landscapes.
	On page 15 of the plan it states: "Management decisions are made to maintain or enhance the 'high conservation values' in these forests (MN DNR 2015b). In most cases, HCVFs are maintained as working forests. Out of the 5,732 acres of state-owned land in SDSF, 2,055 acres are managed for HCVFs (Map 15) (MN DNR 2017a). Approximately 1,505 acres are designated HCVFs and 550 acres are on School Trust lands. These sites vary greatly in quality, but include many rare species of animals and plants that depend on the unique savanna and barren habitats of SDSF. HCVFs provide context for vegetation management in SDSF. On HCVF lands, management activities will be tailored to maintain and enhance the natural features and rare resources of these lands. Managers will seek opportunities to foster native trees and other vegetation, enhance habitat for rare species, protect fragile dune structures, and remove non-native species that risk damaging conservation values." The above statements is where there seems to be a disconnect from what the legislation intended as well as what the DNR committed to at the SAG last month. This seems to say: 1) The map on page 74 shows the areas that the DNR considers HCVF. (2055 acres) 2) The DNR is going to manage these areas HCVF's to "enhance the natural features and rare resources of these lands". 3) It states these rare resources "depend on the unique savanna and barren habitat (similar to the Sherburne refuge) 4) Therefore the DNR is going to manage the 2055 acres similar to the Sherburne NWF. IF THAT IS STILL THE PLAN THEN THIS IS WHAT GOT THE LOCAL RESIDENCE AND OTHERS UPSET IN THE FIRST PLACE. There are those that have said to me that it appears we are back to square one. I believe this section needs to be totally rewritten to recognize the following: - the adjacent wildlife refuge, with six times the area of the forest, is being managed for unique savanna and barren habitat. - the forested areas of the SDSF meets the needs of the rare and endangered species that use conifer forests, mixed conifer/hardwood forests and hardwood forests. - there are wetland areas within the forest that meet the needs of rare and endangered species.
	Oak savanna efforts should be focused on those lands and leave the SDSF to support the rare features that need forested habitats. My suggestion would be to: 1) Spend some money to get an accurate assessment of the current oak savanna resource in Minnesota, both quantity and quality. 2) Focus the restoration efforts on those areas that do not have the level of opposition that the SDSF has.
	I was a DNR, Division of Forestry employee for 33 years. The last 17 years of my career were spent in Zimmerman helping manage the Sand Dunes State Forest (SDSF). I retired from the DNR in the fall of 2013. As a field forester I was involved in

Unique Submissions	Specific comments
	every aspect and stage of forest management. As the area timber program forester I even lead a forest certification audit with several stops in the SDSF. During my time managing the SDSF I saw a shift from managing the forest for timber and the recreation and wildlife associated with forests towards rare feature management and open landscape habitats. I had several concerns with this. 1) The citizens of Minnesota had invested a tremendous amount of money establishing the forest. Part of the plan to convert this forest to savannas was to not even let the timber that had been seeded and planted reach marketability. In other cases the timber would be removed long before the economic investment in it was achieved. This did not seem like a good investment of tax payer money. 2) The public, including local residents and recreationist, had come to expect that this area was going to remain forested even though we would periodically be doing timber management. They believed this for two reasons. First it was why the forest had originally been established and how it had been managed for decades, and secondly we had told them this was the intent for the forest. 3) The plans for managing for rare features did not appear to be well conceived or funded. Goals and priorities were poorly defined as were the processes for meeting those goals. There was not a defined funding source for this conversion but rather it was hit or miss though grant proposals. The plans did not address the limitations (insect, disease, fire use, chemical use, residential proximity) of converting the forest. 4) There are dozens of public and private entities in the area that are devoted to creating open landscape habitat (prairie/savanna) controlling 10 times the land area that the SDSF contained. Yet the SDSF represented one of the few blocks of forested land in proximity to the metro area. In effect it would decrease the biological diversity and functional diversity of the area. I expressed these concerns, and others, during the writing of the plan but for the most part the DNR continued with their plan and intent to convert the forest. The plan was completed in 2013 but the conversion had started years before that. Now this conversion plan did not have much public scrutiny and I believed, once the public became aware of plan to convert this forest area of the SDSF to Sherburne Refuge-like habitat they would become more vocal. I then retired. In fall of 2015 I started reading articles about the harvesting that was going on by the SDSF. Most of this harvesting was happening on the Sherburne Refuge. I became involved with a local group of citizens who shared some of my concerns. That eventually led (though it was through many twists and turns) to the Stakeholder Advisory Group (SAG). I do not live by the forest so my involvement was isn't a NIMBY thing. My concern with the some of the things that are being planned is as a forester, tax payer and recreationist. I still have the same concerns that I listed above.

Oak Savanna/open habitat: Perform inventory

Number of submissions that mentioned: 1

DNR paraphrase: More oak savanna has already been restored (across all ownerships) than is mentioned in the plan; the DNR should perform an assessment of the current quantity and quality of oak savanna in Minnesota.

DNR response: *This request goes beyond the scope of this plan; it is the Department's responsibility to manage for G2 (globally imperiled) native plant communities where they are mapped.*

Comments:

Unique Submissions	Specific comments
1	On page 16 of the plan it states: "Oak savanna has a rarity rank of G2, meaning it is imperiled across its entire global range; today this plant community occupies only about 0.02% of its pre-European settlement extent (Nuzzo, 1986)" This 0.02% statistic has often been quoted in many documents and appears in this plan twice so it is worthy of discussion. This comes statistic comes from Nuzzo's mapping of oak savanna in the early 1985 so when the plan uses the word "today" (my bolding) it means 1985. Nuzzo's maps showed that the oak savanna range covered 10 states from Minnesota to Texas. In this vast area there were only 7000 acres of quality oak savanna. Minnesota had 1200 acres of this savanna. It also shows Sherburne County is at the northern fringe of the oak savanna range. This means that, after 32 years and millions of dollars spent on conversion and restoration, we are to believe that Minnesota still only has 1200 acres of oak savanna, and the whole 10 state range still only has 7000 acres? Great River Greening would disagree with these numbers. They currently have on their website the following statement: Over the past four years, 3,000 acres of Minnesota's most imperiled habitat type has been restored at Sherburne National Wildlife Refuge. One of the country's largest oak savanna restorations has completed Phase I at Sherburne National Wildlife Refuge through a partnership between Great River Greening and the U.S. Fish and Wildlife Service. Funded through the Minnesota Clean Water, Land and Legacy Amendment, nearly 3,000 acres of oak savanna habitat -- Minnesota's most imperiled habitat type -- has been restored over the past four years at the refuge, located near Zimmerman MN. So in just 4 years GRG and the SNWR were able to almost triple the amount of oak savanna that was in Minnesota in 1985. It causes one to wonder what did the SNWR do for the first 28 years and what has the DNR done since 1985? Not to mention all the other organization that have been getting funding and promoting oak savanna restoration. The conclusions one reaches in reading the plan is that the DNR really does not have a handle on how much oak savanna there is out there on private and public lands. They even seem to even struggle with a defining oak savanna with the following: oak savanna: A type of savanna, or lightly forested grassland, where oaks are the dominant trees. Typically 5% to 50% crown closure, these savannas were maintained historically through wildfires set by lightning or humans, grazing, low precipitation, and/or poor soil. So that would mean pasture lands with remnant, scattered oak would qualify. We have individual private land owners, private entities such as Nature Conservancy, county lands, SNA's, State Parks, State Wildlife Management Areas, Trails and Waterway lands, Cedar Creek Natural Area, USFWS all trying to establish oak savannas. These lands represent over 100,000 acres. One point the SDSF citizens group has made from the beginning of the process is that a huge amount of public land is already dedicated to oak savanna establishment and furthermore those efforts are currently underfunded. Oak savanna efforts should be focused on those lands and leave the SDSF to support the rare features that need forested habitats. My suggestion would be to:

Unique Submissions	Specific comments
	1) Spend some money to get an accurate assessment of the current oak savanna resource in Minnesota, both quantity and quality. 2) Focus the restoration efforts on those areas that do not have the level of opposition that the SDSF has.
	Also, in terms of adaptive management, I was talking to one of the people at the SAG meeting, who is quite involved with savanna management. In his opinion the Sherburne NWR savanna management had some major flaws, specifically burning too large of areas too frequently. This, he claims, has been to the detriment of certain rare features. Yet Great River Greening claims the refuge has restored 3000 acres of oak savanna habitat (see the discussion on page 16). So the question is: Are these high quality restored savannas or not?

Timber harvest: Do not clearcut

Number of submissions that mentioned: 14

DNR paraphrase: Do not use rotation-age harvest/clearcutting as a timber harvest management technique in SDSF, and/or specifically do not use it in oak savanna or oak woodland communities. Selective harvest/thinning may be used instead.

DNR response: *Rotation-age harvest is needed for managing tree species that require full, or nearly full sunlight to regenerate. Many of the most common tree species in the Sand Dunes State Forest (red pine, white pine, Northern pin oak, bur oak, black cherry) become established and grow best with sunlight. In the past, forest disturbances like fire and wind created conditions favorable to these species. Today, if we want to create conditions for establishing sun-loving trees and other plants, we need to remove most of the shade from the site. Rotation-age harvest is also the most economically efficient means of harvesting trees and delivers the highest rate of return. During a rotation-age harvest on state land, some trees are almost always left somewhere on site as "reserve" trees for habitat, aesthetics, or natural re-seeding. Rotation-age harvest has the biggest immediate visual impact, but also reduces the total number of logging entries over a period of time, thus reducing risk of invasive plant introduction and movement, as well as disruption of native species. Further, rotation-age harvests create blocks of different-aged forests; some wildlife species need young forest, some need older forest, and some require a mix. Rotation-aged harvests create forest clearings that are habitat for grouse, deer, and some species of songbirds. Finally, some rotation-age harvests will be needed to achieve restoration goals and desired future conditions outlined in the SDSF operational plan. For these reasons, total exclusion of rotation-age harvests would not be desirable or practical in SDSF.*

Comments:

Unique Submissions	Specific comments
1	As a young girl scout, in the 1960's, I spent many hours planting pine trees to reduce soil erosion in the Sand Dunes. Clear cutting should not be an option.
2	"Rotation-age harvest" sounds like clear cutting to me, especially if the plan isn't to replace the pine trees that are removed. I am strongly opposed to clear cutting[…]
3	Do not clearcut oak woodland.

Unique Submissions	Specific comments
4	No clear-cutting should occur on oak savanna or oak woodland plant communities.
5	Do not clearcut oak woodland or oak savanna.
6	I am a wildlife biologist who has worked with game species and nuisance wildlife control, as well as in the conservation of endangered species and other non-game species. I think it is important to maintain natural communities, including managing timber and other vegetation resources in an ecological framework. This means no clearcutting of imperiled oak woodlands and savannas, instead focusing on selective harvest and multi-age stand management.
7	The proposed Final Harvest (clearcut) of 236 acres of oak woodland within DNR identified High Conservation Value Forest will adversely affect those features DNR identified as having High Conservation Value. An alternative prescription is advised to balance timber harvest and stand regeneration goals with those of the High Conservation Value Forest. A suggested alternative is to limit final oak-stand harvest to patches 10 acres or smaller, and leave at least 660' buffer between neighboring patches.
8	Do not clearcut oak woodland or oak savanna.
9	Do not clear cut the woodland or savannah oak
10	Please do not remove any oaks.
11	Do not clear cut oak woodland or oak savanna.
12	I want to be sure that the oak woodland, and oak savannas that are there are protected. I don't want them clear cut or have pine planted on them.
13	Habitat at this important area needs to be protected and restored. Oak woodland and savanna should not be clear cut[…]
14	leave as is , select cut as needed

Timber harvest: Harvest on frozen ground

Number of submissions that mentioned: 6

DNR paraphrase: Timber harvest should be done during winter/on frozen ground to reduce disturbance to soil and rare species during the growing/active season.

DNR response: *The season of operability of any timber sale depends on several factors such as the soil type, slope, presence of rare species, tree species, insect and disease issues, and regeneration strategy. Sandy soils can support trafficking during non-frozen times, and in dry years, sandy soils may never really freeze. Non-winter harvests generally bring the highest revenue. Light surface disturbance can be beneficial for some tree seeds like oak and white pine, and some rare species like tiger beetles inhabit recently disturbed sites. Non-winter harvests minimize disruption along snowmobile and ski trails. If site conditions indicate that a particular season of operation would jeopardize the long-term management goals then that season of operation would not be allowed.*

Comments:

Unique Submissions	Specific comments
1	Any timber harvests should be conducted only after soil is solidly frozen to minimize soil disturbance and minimize impacts on native plants and plant communities.
2	If timber harvests are carried out, they should be done so in a manner to minimize damage to imperiled and rare species (e.g. during the winter).
3	Many species of plant and wildlife may be adversely affected by summer timber harvest practices. In addition, unfrozen ground is more susceptible to erosion by logging equipment. The Plan should state that timber stands located within DNR identified High Conservation Value Forest first be offered for sale with a winter harvest (December 1 to March 1, inclusive) restriction. If these stands go unsold with the harvest timing restriction, work with biologists/botanists from the Division of Ecological and Water Resources to develop an alternative prescription to allow summer harvest. Contracts should clearly identify measures to avoid and minimize impacts to features having High Conservation Value, and should include penalties for violating avoidance and minimization measures.
4	Conduct timber harvests during winter to avoid impacts to plants and wildlife during the growing/active season.
5	Please be sure to harvest trees in winter to avoid impacting plants or animals during their active/growing season
6	Timber harvesting should only be conducted in the winter so as to not impact plants and wildlife while they are growing and active.

Timber harvest: Use for management

Number of submissions that mentioned: 3

DNR paraphrase: Timber harvest should be used as a management tool in SDSF.
DNR response: *The DNR intends to utilize timber harvesting as a tool for forest management in the SDSF. Commercial timber sales supply a needed commodity to society and often accomplish a desired management objective at no cost to the taxpayer, and may raise revenue for the state.*

Comments:

Unique Submissions	Specific comments
1	Logging is good management.
2	I think that thinning trees in the camp ground is still a good idea, it is way to overgrown.
3	A sustainable harvest of pine trees is a win-win for people (schools, jobs, safety) and wildlife.

Timber harvest: Limit where possible

Number of submissions that mentioned: 1

DNR paraphrase: Timber management/production should not be a primary objective in SDSF and should only be used in support of conserving native species.

DNR response: *Timber management/production is one of the main reasons the state forest system was created. Lumber and wood fiber provide a valuable commodity to society that can be managed*

sustainably. Conservation of native species is also important and is factored in to every management activity.

Comments:

Unique Submissions	Specific comments
1	Forest product production should be allowed only where it supports the goals stated herein, and should not be considered the primary or highest use of the unit, but instead be performed as a partnership/supplement to native plant community and heritage element management.

Wildlife and Biodiversity: Protect rare/threatened species/features

Number of submissions that mentioned: 10

DNR paraphrase: SDSF is home to many species of greatest conservation need (SGCN) and other rare or threatened species, some of which are rare across the state or the globe; these species should be conserved and protected before they are lost. Their habitat should be protected/expanded.

DNR response: *We acknowledge the importance of managing for these species, and their needs are considered in our annual review of proposed management. The importance of rare species in SDSF is discussed on p. 16, and Appendix B contains a list of all species of greatest conservation need (SGCN) in SDSF.*

Comments:

Unique Submissions	Specific comments
1	Sand Dunes State Forests hosts many species in conservation need and it is greatly important to manage the area for their benefit.
2	Hoping the new plan will help preserve the rare and threatened plant species found here.
	In the last year I have come across a few state threatened plant and animals here: Blandings Turtle in the downed trees of this March's toronado...Scleria triglomerata, Viola lanceolata, cypripedium acaule (undocumented at this site until recently) Welby Smith took a specimen last year...Juniperus horizontalis, and with the help of Jason Husveth the state threatened orchid Platanthera flava var. herbiola in Uncas Dunes which has not been documented as of yet. I'm sure there's more, I'm still pretty new at the botanical aspect of it but I have spent hundreds of hours out here volunteering too. [...] ...I sincerely hope this new plan will be beneficial ecologically for the place as a whole and not just some political window dressing for that guy in Big Lake and pretty pines for residents...
3	I support the MN DNR restoring native habitats such as oak savannas, and support the conservation of rare species.
4	SDSF is an extraordinary landscape, hosting many state-listed rare plant and animal species of oak savanna and oak woodland plant communities, which are now so rare in the state, and even in the world. I am very pleased that the plan describes: "[o]n HCVF lands, management activities will be tailored to maintain and enhance the natural features and rare resources of these lands. Managers will seek opportunities

Unique Submissions	Specific comments
	to foster native trees and other vegetation, enhance habitat for rare species, protect fragile dune structures, and remove non-native species that risk damaging conservation values." [...] The two rare plant communities are so very rare, they should not only be protected in SDSF where they already exist, but should be restored and expanded within this site where they once were present until the pines were planted.
	I hope that the unique natural features and plant communities of this site will be protected.
5	Expand management to support the heritage elements and species of greatest conservation need which are already present within the unit and its surroundings.
6	Most of the grasslands of the Midwest are gone due to farming, and it is vitally important that we do what we can do protect existing grasslands, and restore those with imperiled species still holding on.
7	I served on the advisory committee and am very concerned that the legislators and a small group of citizens were allowed to stall the important work of this site. Over 60 of the 340 of the species of greatest conservation need that are found in the state's wildlife action plan are found in the Sand Dunes State Forest. This site is important, with very rare features, we need to protect and favor those rare features.
8	It is of the utmost importance that we protect and provide habitat for endangered and threatened species, before they are lost forever.
9	This seems like a good plan of action to responsibly replace non-native timber with natural features. Conservation of globally rare ecosystems is an important feature of public lands.
10	Please restore and manage the area for native plants and at risk species.
	Please restore and manage the area for native plants and at risk species.

Wildlife and Biodiversity: Protect pollinators

Number of submissions that mentioned: 9

DNR paraphrase: Pollinators are in decline and management in SDSF must protect them by restoring their habitat, especially the federally endangered rusty-patch bumblebee (*Bombus affinis*) which was recently found in SDSF.

DNR response: *We are coordinating with the USFWS on rusty-patch bumblebee management, and will do so for any other federally-listed species that may be discovered in the future in SDSF. The restoration efforts that the Department is attempting will benefit all native pollinators. A note about the recent discovery of rusty-patch bumblebee in SDSF will be added to p. 16.*

Comments:

Unique Submissions	Specific comments
1	Management to protect pollinators is essential, including the rusty-patched bumblebee, now listed as federally endangered.
2	Be proactive in providing good management for MN native pollinators to try and offset known and suspected/emerging declines across the full range of native

Unique Submissions	Specific comments
	pollinator species. MN DNR needs to be a highly visible and highly effective leader in this effort. Particularly, manage to benefit the federally endangered Bombus affinis documented as present within this unit, and to provide support for re-occupation by this species in parts of the unit where it may not now be present.
3	including specific attention to native pollinators (including the federally endangered rusty-patched bumblebee(Bombus affinis))
4	The Rusty-patched Bumble Bee (*Bombus affinis*), a species recently listed as ”endangered” under the federal Endangered Species Act (ESA), has recently been found within Sand Dunes State Forest. The Operational Plan should include a process through which this species receives the appropriate protection under the ESA.
5	Pollinators are imperiled and need support. Help the endangered rusty-patched bumble bee that was recently discovered on the property by restoring habitat.
6	Help the endangered rusty-patched bumble bee that was recently discovered on the property by restoring habitat.
7	I would like to see more support for pollinators. Restoration of the rusty-patched bumble bee habitat would be important, I understand they were recently discovered there and adding that would be important.
8	Pollinators are important and need support.
9	Pollinators, now imperiled, must be supported.

Wildlife and Biodiversity: Protect reptiles/amphibians

Number of submissions that mentioned: 2

DNR paraphrase: The plan should include management for reptiles and amphibians, such as frogs, salamanders, snakes, and the Blanding’s turtle.

DNR response: *This amount of detail on management is beyond the scope of the operational plan. We acknowledge the importance of managing for these species, and their needs are considered in our annual stand review process.*

Comments:

Unique Submissions	Specific comments
1	Please include the restoration plan for native vegetation and native wildlife species, such as the frogs and salamanders.
2	The Herpetological Society is looking to ensure that the habitat is favorable to the reptile and amphibian species that most benefit from the work you are doing. Restoring native prairie and oak savanna certainly is important to snakes like the plains hognose snake and the gopher snake. With the status of the Blanding's turtle having their habitat needs in consideration will also be important.

Wildlife and Biodiversity: Recognize and protect rare species in conifer and wetland habitats

Number of submissions that mentioned: 1

DNR paraphrase: The plan should recognize the species of greatest conservation need and other rare or threatened species that utilize the forested and wetland habitats in SDSF. DNR efforts have overlooked these species due to the focus on oak savanna.

DNR response: *DNR manages for all state listed species regardless of their habitat associations during our annual stand review process. See Appendix B for list of rare species at SDSF. Related to HCVF comments, HCVF designations were a result of a robust interdisciplinary process, guided by forest certification requirements. More information on HCVFs can be found on the DNR's forest certification page (http://www.dnr.state.mn.us/forestry/certification/hcvf.html)*

Comments:

Unique Submissions	Specific comments
1	On page 15 of the plan it states: "Management decisions are made to maintain or enhance the 'high conservation values' in these forests (MN DNR 2015b). In most cases, HCVFs are maintained as working forests. Out of the 5,732 acres of state-owned land in SDSF, 2,055 acres are managed for HCVFs (Map 15) (MN DNR 2017a). Approximately 1,505 acres are designated HCVFs and 550 acres are on School Trust lands. These sites vary greatly in quality, but include many rare species of animals and plants that depend on the unique savanna and barren habitats of SDSF. HCVFs provide context for vegetation management in SDSF. On HCVF lands, management activities will be tailored to maintain and enhance the natural features and rare resources of these lands. Managers will seek opportunities to foster native trees and other vegetation, enhance habitat for rare species, protect fragile dune structures, and remove non-native species that risk damaging conservation values." [...] I believe this section needs to be totally rewritten to recognize the following: - the forested areas of the SDSF meets the needs of the rare and endangered species that use conifer forests, mixed conifer/hardwood forests and hardwood forests. - there are wetland areas within the forest that meet the needs of rare and endangered species.
	p. 10 Also there is no mention of the rare species that occur in conifer and mixed hardwood/conifer forests.
	The irony, and I would say hypocrisy, is that on SNA land managed by Eco Services they manage for white pine and its associated SGCN. Boot Lake SNA, which is the same native plant community and same soil type as much of the SDSF, has beautiful white pine on it. I have not heard any big push to remove this white pine and convert it to the globally imperiled oak savanna. These managers must believe there are some SGCN associate with white pine to continue to manage the white pine on this SNA. So while savannas are important there are SGCN that use forested habitat types. We have heard all the stats on how many SGCN they are finding in the savanna types in the SDSF but I would say, that is because that is where they are looking. If you spend 95% of your time looking at the savanna (or at least that is the % of time we have heard about savannas) that will be what you find. This skewing of priority and effort is not lost on the public who have been involved with this process. They, and I, would like to see some balance.

Wildlife and Biodiversity: Other

Number of submissions that mentioned: 1

DNR paraphrase: General comment about species protection.
DNR response: n/a

Comments:

Unique Submissions	Specific comments
1	Please do not let a tree farm change the habitat that so many species depend on.

Pine: Remove

Number of submissions that mentioned: 10

DNR paraphrase: Pines should be removed and/or not planted in areas where rare species are present. Pines are not locally native and threaten native species; the rare species in SDSF do not depend on them. Pine plantations should be restored back to oak savanna.

DNR response: *DNR has tried to strike a balance between the amount of pine and other habitat types in the SDSF. Pines provide a valuable commodity to society and many people enjoy recreating in the pine forests. Oak savanna provides a very different habit type that supports many rare species and provides opportunities for unique wildlife viewing. Either type of vegetation can protect the dune systems. DNR believes there is room for both habitat types within the SDSF.*

Comments:

Unique Submissions	Specific comments
1	I would like to see the continued plan of restoration of planted pines back to natural oak savanna. Hopefully that can be achieved with the cooperation between the adjacent land owners and the MNDNR in such a way that will be beneficial for everyone.
	I just wanted to leave another comment since my last one was so vanilla. I first visited here about six years ago not knowing anything about State Forests, Scientific and Natural Areas or Photography, although I've always liked nature and taking pictures. A lot has changed since then and I have this area to thank for that. I grew up in Andover/Anoka Sand Plain so this area is familiar to me. Planted pines are a familiar site but the more I learn about how recently that kind of environment has come about the more I find it disturbing.... I understand how people with houses with mature pines adjacent to the forest don't like the removal of them, let there be a buffer zone of pines in those cases, I have no problem with working with homeowners in those cases. The more that these trees and brush are left to grow just degrades the area more and more...I hope that the management plan will continue to address this.
2	Pines or other non-native species should not be planted in areas with rare plants and/or rare wildlife. Restoration of oak savanna and oak woodland should be allowed and pursued, where pines have been planted in the past.

Unique Submissions	Specific comments
3	Don't plant non-locally-native pine species, unless planting in areas that are not current or future habitat for rare plant or animal species.
4	Pine plantations should be avoided in areas that house state listed and action plan listed species.
5	None of the Species in Greatest Conservation Need found within SDSF require pine stands to complete their lifecycle. Specify within the plan that timber stands located within DNR identified High Conservation Value Forest not be replanted with pine, and that pine regeneration and spread be controlled in these areas.
6	Do not plant pine (non-native to area) in areas with rare plants and wildlife.
7	I've recreated at the Sand Dunes State Forest (traveled from my home state, Illinois). I value native habitat and would like to see pre-settlement habitat restoration. The pine trees planted on the site are not native and crowd out native species.
	Retain native oaks and remove the non-native pine trees, those trees represent old, outdated management practices.
8	I want to be sure that the oak woodland, and oak savannas that are there are protected. I don't want them clear cut or have pine planted on them.
	Pine was not historically found here, it is unfortunate that information like that was inaccurately shared with folks, making this situation more complicated.
9	In my humble opinion we need more oak savanna habitats in this state, and less pine plantations- especially in this area where no pines existed prior to European settlement.
10	[…] and pine, which is not native, should not be planted especially in areas with rare plants / wildlife.

Pine: Do not remove

Number of submissions that mentioned: 4

DNR paraphrase: Pine trees should remain in SDSF and those that are harvested should be replaced. Pine is economically beneficial, provides wildlife habitat, and protect fragile dune systems. Pines are native to SDSF.

DNR response: *(see response above about removing pine; also see response about Map 13 on p. X of this document)*

Comments:

Unique Submissions	Specific comments
1	For every pine tree that is removed, two or more must be planted (red & white pine) The wildlife need these pines for their habitat.
2	Fire is your friend. That said, the maintenance and economic use of red pines is a very good idea--especially on school trust lands where the generation of revenue is of top importance.
3	Leave the pines
4	On page 17 of the plan it states: “Pines and other evergreen conifers, including white pine, Norway (red) pine, jack pine, and spruce, have been planted throughout the

Unique Submissions	Specific comments
	dunes in SDSF since the 1930s, originally for the purpose of stabilizing the shifting dunes during a time of prolonged drought across the Great Plains. These pines did not occur in the SDSF dunes prior to European settlement (Map 13)," The person who wrote this for the plan should not be involved with writing this plan. The conclusion that they have reached (which I have bolded) leads me to one of two conclusions: 1) Either they are extremely unaware of realities of the SDSF, or; 2) They made the statement in order to support a specific agenda. The map that is cited to support this claim is a map (map 13) based on the public land survey (PLS) bearing tree, which Francis Marschner compiled around 1930. If someone is going to cite maps created by the PLS records then they should also discuss the limitation of that record. 1) In Sherburne County the PLS that established the section lines occurred 30 years after Europeans started settling the area and over a decade after lumber mills were established to harvest the pine closest to the twin cities. In other words, the landscape was already being manipulated by Europeans prior to the PLS. 2) The PLS was not set up as a vegetation documentation survey. As such there are biases as to what tree were recorded. Surveyors would walk by short lived trees like aspen or basswood to scribe an oak for a bearing tree, since they wanted the bearing tree to be present for some time. It is also quite likely they would not mark a tree that is very merchantable since it would most certainly be harvested (if it had not already been so). 3) The bearing trees of the PLS are a small sample size. Statisticians say it should be used to show vegetative information on a large scale basis (1,000,000 acres) such as a landscape, multiple counties, etc. It was never meant for a basis for vegetative decisions on a township, section or even stand basis as it is being used in this plan. Not only is this misuse of Marschner problematic, it would require the person that wrote "These pines did not occur in the SDSF prior to European settlement" to ignore the following: 1) The pollen cores taken from Lake Ann that showed the presence of pine post glacier. 2) The Sherburne NWR vegetative planning documents recognize the historic presence of pine. In their current restoration efforts have reserved white pine. 3) The boundary lines of the White Pine Treaty 4) The Minnesota Forest Resource Councils Guidelines have range maps showing the SDSF well within the range of white pine. 5) There are indicator plants (such as pipsissewa, low bush blueberry) that are commonly associated with conifers forests scattered though out the SDSF. 6) Simply looking at the growth rate and prolific nature of pine on these sites indicates it is well suited to the soils and climate to be within its range. What I would agree with is that it was fire that limited the amount of white pine in the area. It is generally accepted that most of these historic fires were not natural but rather man caused by the native populations. Historically as well as today, the

Unique Submissions	Specific comments
	intervention by man has restricted the range of many species as was the case here. The strange thing is that sometimes man's intervention to restrict ranges is applauded and sometimes it is lamented. Back to my original concern as to why someone would make the statement : "These pines did not occur in the SDSF dunes prior to European settlement (Map 13)," . By making such a claim they could say that, since pines were not here back then, its current presence could be considered invasive. A soon as you call something an "invasive" the political purse strings open since no one wants to be overrun by invasive plants. The plan says on page 11: Use science-based adaptive management tools to inform decisions on restoring, protecting, and managing rare plants and wildlife (e.g., mechanical treatments vs. herbicide application, smaller rotation-age harvests). By using statements like "pines did not occur in the SDSF" you hurt your scientific credibility.
	This section also states that: "In most cases, HCVFs are maintained as working forests" . Any objective person looking at the pictures on page 24 would consider these HCVF a working forest. The quality and quantity of timber is far too poor. This section also states that: "Managers will seek opportunities to protect fragile dune structures,". Back on page 9 the plan states : "Pines and small amounts of spruce were planted in the state forest starting in the 1940s to stabilize the shifting dunes during time of drought" So it appears that the original answer to protecting these "fragile dunes" was to put them into forested areas as opposed to maintaining them in open landscapes. It is hard to see what argument now that the best protection of the fragile dunes is to open them back up.

Control invasive species

Number of submissions that mentioned: 9

DNR paraphrase: Invasive species (e.g. buckthorn) are a serious problem in SDSF and DNR must prioritize management of their presence and control of their spread. Management must be persistent so as not to lose ground. DNR might consider engaging the community to help, as the battle cannot be won alone.

DNR response: *As stated on p. 20, DNR recognizes that invasive species can cause significant harm to the economy, environment, or human health. Field staff monitor and submit control projects yearly. Table 1 on page 26 lists some of the acreage that will include invasive control, and also mentions that more invasive species management may be necessary. Funding and staff time limit the number of projects that can be completed each year. DNR also must be sensitive to the use of herbicide and other treatment methods that could have impacts beyond the control of invasive species.*

Comments:

Unique Submissions	Specific comments
1	I would engage Boys Scout Troops, church groups, and Sentence-to-Serve inmates in the battle to control invasive species on the SDSF. I have yet to see a single instance where the DNR has been able to win this battle alone.

Unique Submissions	Specific comments
	Buckthorn and oak wilt are very serious problems in the area, and controlling these should be a top priority.
	As with the entire Anoka Sand Plain, the removal of invasive species (especially buckthorn) [on SLT] should be a high priority.
2	I have spent hundreds of hours out here volunteering too. Cutting/treating Buckthorn/non-native Honeysuckle, pulling Cow Vetch, Hoary Allysum, etc. There's not enough management here as far as I'm concerned but I understand that there is a lot to do and not enough manpower or money to do it al
3	Management of invasives throughout the site - in the oak savanna and oak woodland areas, as plantation areas - must be high priorities.
4	In all parts of the unit, be proactive in reducing the presence, spread, or introduction of invasive plant and animal species.
5	[…] and overall control of invasive species
6	Control invasive species.
7	More control of invasive species would be helpful, you will lose ground over this time period if you don't.
8	Managing invasive plants in the Forest is also very important, as invasive species are the leading threat to endangered species, 2nd only to habitat destruction.
9	And invasive species must be controlled.

Prescribed burning: Disapprove

Number of submissions that mentioned: 4

DNR paraphrase: Do not use prescribed burns as a management tools in SDSF. Due to the population density in and around SDSF, safe burning is not feasible. Burning/smoke may cause health risks to local residents. Prescribed burns do not accurately mimic historic fires and therefore have limited positive impacts for habitat, and thus are an inefficient use of taxpayer money.

DNR response: *Section III, Part A (starting on p. 35) outlines the robust measures in place for prescribed burn safety. It is the responsibility of the burn boss to follow the formal burn plan and ensure that conditions are within range (prescription) for a safe and effective burn treatment. Just as fire intensity and frequency vary with natural fire, over the years prescribed burns will be conducted within a range of acceptable conditions that could produce creeping/smoldering fire or backing and running fire within adequate burn breaks. Burn unit shape and size are carefully planned to aid in safe and efficient implementation. The Health and Safety part (Part A) of the Operational Considerations section (Section III) of the plan (p. 35) is new and was added as a direct result of stakeholder input. This section references other DNR policies and directives that go into much more depth on the topics of prescribed burning and herbicide application. We feel this new part of the plan is adequate to guide the work and decisions of natural resources professionals, and also to communicate to the public.*

Comments:

Unique Submissions	Specific comments
1	Lots of discussion in the plan about conducting prescribed burns without destroying too many animals, properties and people. Considering the population density of the area (approximately 100 residents per square mile in Orrock Township)---converting the forest into a landscape that requires frequent prescribe burns to maintain is an unacceptable risk. Burning is not feasible in the SDSF from a health and safety standpoint.
	If safety was really your #1 priority---you wouldn't be proposing a landscape that requires frequent prescribed burns to prevent trees from taking over as the main vegetation.
2	no burning.....
3	Leave the forest as is. This is why we bought the property and enjoy the forest weekly, if not daily and would not want anything burned and replaced. Burning could cause health issues, long term issues. DNR wont be breathing this. DNR won't be the ones walking, hiking or sledding through the woods.
4	On page 35 of the plan it states: "Importantly: the safety of firefighters and the public is the number one priority when planning and implementing a prescribed burn project." I know that the DNR has to say this but if the safety of the public was the number one priority there would not be any prescribed burning because there are inherent dangers with burning. This is coming from someone who has spent 35 years on wildland fire and who was a prescribed burn boss. There are parts of the state where there is an acceptable margin of error for prescribed burning but the SDSF is not one those. In and around the SDSF the fuels are too volatile and the private property is too close and numerous. Bad things will happen, as they have on the refuge. (This is especially true of running fires. Pile burning during wet conditions or snow cover are far less problematic but even these have to be watched.) The plan says that they want to "mimic historic natural disturbance". No burn boss in their right mind would light a prescribed burn under the conditions that would mimic fires of 200 years ago. There have been two prescribed burns, that I am aware of, in the past 5 years in the North Uncas Unit. Both of them had average flame lengths of one foot or less. Certainly this would not have come close to mimicking historic fires. Why would a burn boss light a prescribed burn in such cool, damp conditions? Because the burn bosses were probably aware of the extreme problems an escaped fire would cause and did not want to take the chance. It is hard for me to believe these wimpy burns actually had any positive habitat enhancement effect. I have requested the preburn habitat survey, the post burn habitat survey and the cost of conducting the burns but have been unable to acquire that information. As a taxpayer I am interested in knowing that my tax dollars are being spent efficiently.

Prescribed burning: Approve

Number of submissions that mentioned: 1

DNR paraphrase: Prescribed burns are useful, though it should not interfere with the economic management of red pine.

DNR response: *Prescribed fire is a useful tool that land managers can use to maintain and enhance plant communities and wildlife habitat. Most, if not all sites, identified for habitat maintenance in Map 10 (p.*

66) and Table 5 (pp. 67-68) of the Operational Plan already exist as open habitats. These sites were either previously harvested or represented by more open mixed hardwood stands.

Comments:

Unique Submissions	Specific comments
1	Fire is your friend. That said, the maintenance and economic use of red pines is a very good idea--especially on school trust lands where the generation of revenue is of top importance.

No change to current landscape

Number of submissions that mentioned: 4

DNR paraphrase: Leave SDSF the way it is now; do not change anything.

DNR response: *It is important to remember that even in the natural world, change is inevitable. Forests and prairies are dynamic places, constantly growing and adjusting to the world around them. The Sand Dunes State Forest has always been managed for a variety of purposes: sustainable timber production, providing outdoor recreation, protecting watersheds, and perpetuating rare and distinctive species of native flora and fauna. Changes were made to the SDSF landscape when pine plantations were introduced, to adapt it to the needs of the time. Today, in light of pressures on the landscape from climate change, invasive species, and a growing human population, more changes will be needed in order to adjust to these circumstances. The changes proposed in this 10-year plan are limited in scope; future plans will continue to address the question of what changes are needed to adapt SDSF to modern needs.*

Comments:

Unique Submissions	Specific comments
1	I really do not understand why you plan to change the sand dunes in any way. There are very few natural habitats left. Altering any of them is never positive. Please hear our voices and leave the sand dunes as it is .. its splendid glory
2	The previous operational plans worked great for a state forest for 70 years---if it isn't broken don't fix it
3	please leave as is.
4	I think that it is great that the DNR wants to try something new. But I would like to see the forest to remain the way it is. I moved here 12 + years ago and have enjoyed this area for the past 12 years and do not want anything to change. There are lots of areas not populated by people that the DNR could use for their special plants and species.

Protect tax-payer investment in planted trees

Number of submissions that mentioned: 3

DNR paraphrase: Trees that were planted/seeded with tax-payer money should be allowed to reach their full economic potential; otherwise the public should be compensated. Conversion from forest to

open landscape will reduce economic potential of the landscape and cost the tax-payers money to maintain.

DNR response: *Deriving an economic return from the trees that have been planted/seeded with taxpayer money has been and will continue to be an important consideration in managing these resources within SDSF. It is also important to evaluate where trees will be planted in the future to avoid these types of conflicts. It is important to realize that all management decisions have an impact to economic potentials. For example, creating a mixed oak-white pine forest versus a red pine plantation also reduces the economic potential; should the public be compensated if a mixed oak-white pine is chosen as the desired habitat? Many environmental projects cost the tax-payers money; for example re-introducing trumpeter swans in Minnesota cost the tax-payers money. In some instances managing the landscape to improve the habitat for rare species is deemed a valuable use of tax-payer money.*

Comments:

Unique Submissions	Specific comments
1	On page 24 of the plan it states: "For portions of the SDSF being restored to oak woodland, a number of different vegetation management activities will be employed including timber harvest, invasive species removal and control, and prescribed burning. All tree species that are not part of this plant community type will be removed and eastern redcedar can be removed if desired, particularly from areas where they may have become dense due to exclusion of fire" [...] This paragraph is where the statement that "pines did not occur in the SDSF" comes into play (see discussion of the plans page 16). If white pines "are not part of this plant community" then it appears that they will be removed. A previous inventory showed that white pine is a component of many of the stands in the south SD as either pole timber or regeneration. Some of these white pine have naturally seeded . Others were seeded or planted with taxpayer money with the understanding that they would be taken to rotation age and create an economic return for the investment. In the mid 90's wildlife and environmental groups pushed the DNR and in turn the legislature, to undertake the White Pine Initiative. These groups expressed their concerns with the loss of white pine habitat across the state and the associate flora and fauna that required that habitat. This was to promote the establishment and protection of the white pine resources across the state. Much time and money was put into that initiative in the SDSF.
2	Any areas where trees that were planted with public money and then removed should be replanted or compensation paid back to the public.
3	Page 16 says that state law requires the DNR to manage state forest for revenue production---so why would the DNR remove the revenue producing vegetation that is in the SDSF and replace it with open landscape vegetation that requires frequent fires and taxpayers money to maintain? The same page goes on to list the many benefits of forested land---the DNR apparently sees no irony in then proposing conversion of forest into open landscape. Nowhere in the plan, do I see any mention of what this conversion will cost the taxpayer nor what source of money will fund it.

Consider buffers/visual impact

Number of submissions that mentioned: 3

DNR paraphrase: Buffers could be left during harvest along private land and roadsides. The plan needs to be more specific about how these buffers will be handled. Shade-tolerant white pine could be inter-mixed in these buffers to create a multi-age buffer than does not require final harvest. The plan also needs to be more specific about how the MFRC guidelines on visual quality will be followed.

DNR response: *DNR has agreed to contact adjacent private landowners when doing timber management adjacent to their lands and to evaluate the potential use of buffers (see p. 11 and p. 43). The effectiveness of buffers needs to be evaluated on a site-by-site basis and can't be applied the same across the entire forest. For example, if oak wilt is found on state land right up to private property removing the diseased oaks may be the best practice even though it doesn't provide a buffer. Buffers have downsides as well. If they blow down in a wind event it costs tax-payers dollars to clean them up versus removing them during an adjacent commercial timber harvest. They can reduce the productivity of the forest, should the public be compensated for this? Buffers can be misleading as to the location of the true property boundary. The MFRC guidelines on visual quality are not site-prescriptive but rather provide a suite of ideas managers can use based on the visual sensitivity of a location. For timber harvesting the DNR will consider the timing of the harvest, apparent size of the harvest, slash disposal, location of landings, and the use of snags, reserve trees, and reserve islands when designing timber sales.*

Comments:

Unique Submissions	Specific comments
1	I understand how people with houses with mature pines adjacent to the forest don't like the removal of them, let there be a buffer zone of pines in those cases, I have no problem with working with homeowners in those cases.
2	I would like to see the plan be more specific about buffers along roads and private property boundaries. Pre-planting shade tolerant species such as white pine in sensitive area now---establishing a multi-aged buffer of shade tolerant trees that wouldn't require a final harvest---would alleviate much of the public outcry over rotation-age harvest.
3	On page 19 the plan states: "During a rotation-age harvest on state land, some trees are almost always left somewhere on site as "reserve" trees for habitat, aesthetics, or natural re-seeding. Rotation-age harvest has the biggest immediate visual impact, but also reduces the total number of logging entries over a period of time, thus reducing risk of invasive plant introduction and movement, as well as disruption of native species." The legislation associated with this plans talks about using the MFRC concerning visual impacts of management. This plan does not really discuss how that would be done. It would include such things as: - Setting up visual sensitivity zones. (MFRCG, Visual Quality pg 6-9) - Reducing the visual impacts of roads (Forest Roads pg 22) - Limit apparent harvest size (Timber Harvesting pg 17) - Encourage utilization of slash (Timber Harvesting pg 30) - Reducing the visual impacts of site prep (Mechanical Site Prep pg 9) - Mixing conifers in with hardwoods during reforestation (Reforestation pg 7-9) - Reduce the visual impacts of timber stand improvement operations (TSI pg 8)
	On page 7 the plan says: "SDSF has valuable timber resources in its red pine, white pine, and oak woodlands that will be managed, thinned, and harvested according to best management practices, including those described in the Minnesota Forest Resources Council Forest Management Guidelines (MFRC 2005)." I believe there is a 2012 revision of these guidelines that is in effect. This statement goes a step above what the legislation called for, which was pertained to the aesthetic aspects of the MFRC Guidlines. It is nice to see this proactive commitment to following these guidelines.

Pesticides – do not use

Number of submissions that mentioned: 2

DNR paraphrase: Herbicides use threatens wildlife and the water supply, especially on sandy soils/near homes, and is more costly to people and the environment than it is worth.

DNR response: *Herbicides treatments are utilized because they are an important tool for successful habitat restoration and maintenance. Mechanical and prescribed burning treatments alone may not achieve the desired outcomes without follow-up applications of herbicide, often through spot treatments with direct targeting of invasive species. The MN DNR has a responsibility to manage invasive species on SDSF under Operational Order 113 (MN DNR 2007). Avoiding herbicide use can lead to much more expensive treatments and loss of initial restoration investment. Herbicide application is often a cost-effective means to control undesirable species (e.g., invasive woody plants in an oak savanna or oak woodland). All herbicides used in SDSF are approved by DNR's third-party certifiers (i.e., FSC and SFI) and DNR follows herbicide label instructions for environmental and human safety. Additional information*

and considerations on herbicide use can be found in the Operational Considerations section on pages 37 and 38 of the Operational Plan.

Comments:

Unique Submissions	Specific comments
1	I am absolutely OPPOSED to using so-called "safe" herbicides in any natural area just because it's too expensive to use non-chemical methods. The long term damage to wildlife, groundwater, and the environment by the use of herbicides is well documented and much more "expensive" in the long run, but conveniently ignored by government agencies who SHOULD be using real scientific information instead of propaganda generated by chemical companies profiting from the sale of herbicides. There is also, as usual, no mention of the impact on the micro environments and creatures that are the backbone of our existence.
2	The DNR plan states that all herbicides used in the SDSF are approved by third party certifiers---just because a herbicide is certified for forest use doesn't mean it is approved for use in sandy soil and close to homes.

Protect the land generally

Number of submissions that mentioned: 2

DNR paraphrase: General comments to protect/not develop SDSF.

DNR response: *DNR shares the concern for maintaining natural lands on the landscape. Given increasing population pressure in and around SDSF (mentioned on p. 9 of the plan), maintenance of public natural lands in this region becomes increasingly important.*

Comments:

Unique Submissions	Specific comments
1	This land must be protected.
2	I don't want this to be developed.

Diversify oak woodland stands

Number of submissions that mentioned: 1

DNR paraphrase: Oak woodlands should be diversified by inter-planting other species, such as white pine. Oak wilt is present in SDSF and is a threat to oaks. Gypsy moth poses a potential future risk to oaks.

DNR response: *We will continue to manage for NPCs in SDSF; DNR accepts that managing for a mixed oak-white pine forest versus an oak-dominated forest or oak savanna is a value judgement and believes there is room for both types of management in SDSF.*

Comments:

Unique Submissions	Specific comments
1	During the whole discussion in the plan about restoring oak woodlands (pages 24 and 25) there is no discussion on the limitations of oak within the SDSF. In a recent aerial survey of the SDSF there were over 100 oak wilt infections sites were discovered and that is just what could be detected from the air. Oak wilt is occurring in both the white oak and red oak groups. Almost every oak stand has an infection site in it and the DNR has pretty much quit doing OW suppression so it will continue to move throughout the forest. Also, gypsy moth moves closer and closer to the SDSF each year. Oak is a preferred food or gypsy moth which, if it does not outright kill the trees will weaken them to become susceptible to drought, two-line-chestnut-borer and other diseases. These insect and disease issues may not be a concern in a savanna setting ,where the trees are scattered far apart, however they are a huge concern in oak woodlands. In fact that was the one reason that forestry was inter-planting white pine amongst the oak, to increase the stands insect and disease resilience.
	On page 40 of the plan it states: "Bur oak and northern pin oak are the target dominant canopy tree species. Other canopy species include northern red oak, white oak, red maple, black cherry, quaking aspen, and paper birch. Sub-canopy cover should range between 25-70% and consist of species such as ironwood, red maple, black cherry, quaking aspen, paper birch, and bigtooth aspen." On page 24 & 25 there was discussion on the management of woodlands in the SDSF. I raised the concern of maintaining that habitat in the presence of oak insect and disease issues. I will repeat it here. During the whole discussion in the plan about restoring oak woodlands (pages 24 and 25) there is no discussion on the limitations of oak within the SDSF. In a recent aerial survey of the SDSF there were over 100 oak wilt infections sites discovered and that is just what could be detected from the air. Oak wilt is occurring in both the white oak and red oak groups. Almost every oak stand has an infection site in it and the DNR has pretty much quit doing OW suppression so it will continue to move throughout the forest. Also, gypsy moth moves closer and closer to the SDSF each year. Oak is a preferred food or gypsy moth which, if it does not outright kill the trees will weaken them to become susceptible to drought, two-line-chestnut-borer and other diseases. These insect and disease issues may not be a concern in a savanna setting, where the trees are scattered far apart, however they are a huge concern in oak woodlands. In fact that was the one reason that forestry was inter-planting white pine amongst the oak, to increase the stands insect and disease resilience.

HCVFs: Disapprove

Number of submissions that mentioned: 1

DNR paraphrase: The definition of "high conservation value forest" (HCVF) is too general. Degraded lands can be HCVF, so there is no need to restore currently forested lands for HCVF purposes.

DNR response: *HCVF designations were a result of a robust interdisciplinary process, guided by forest certification requirements; SDSF HCVF was designated based on the HCV features present. This was a Commissioner's Office Level Decision, not a single Division. More information can be found on the DNR's forest certification page (http://www.dnr.state.mn.us/forestry/certification/hcvf.html)*

Comments:

Unique Submissions	Specific comments
1	On page 15 of the plan it states: "The FSC requires its certificate-holders to identify and map the presence of High Conservation Value Forests (HCVFs) for a variety of critical and globally, regionally, or nationally significant conservation values defined by FSC (FSC 2010). This aligns with DNR's statutory requirement to manage for a broad set of objectives and forest resources (M.S. 89 & M.S. 89A). DNR has identified approximately 262,000 acres of lands to be managed under the HCVF principle." You will see the reference to High Conservation Value Forest (HCVF) throughout the plan as the justification for conversion or "restoration" to oak savanna. Within the DNR it is basically Ecological Services that makes the determination if something is HCVF and therefore should be restored or managed for some specific habitat. Internal DNR documents claim that other disciplines have input as to these designations but personally, as an employee, I wrote of my concerns of some of these HCVF designations and never heard a response or had any indication that they were considered in the designation process. Copies of those concerns should be on file at the Zimmerman Forestry Office. If you look at a rare features map of the SDSF you will see that it is covered by all sorts of rare features. The definition for HCVF is so general as to potentially applying to almost the whole forest. This certainly has been the trend over time. In the SDSF, originally, 65 acres was devoted specifically to rare feature management in the 80's. Then almost 700 acres was designates primarily to rare features in the 90's. Then the 2013 plan that proposed 2500 acres. In a 6000 acre forest that is an increase from 1% to10% to 40%. There are those who made the point during the SAG meetings that the whole forest could be converted to oak savanna and still not meet the needs of the species that use the habitat. Upon further examination of the types of lands that qualify for HCVF one finds that they are abandoned fields, pastures and even old dump sites. They are the exact same types of lands that make up the 30,000 acre refuge to the north as well as hundreds of thousands of acres of private lands. It appears that if a field or pasture is abandoned and left long enough it will develop into a HCVF. That means it is not necessary to take forested lands and "restore" them to open landscapes.

Other

Number of submissions that mentioned: 1

DNR paraphrase: General comments about the Vegetation Management Action Plan.

DNR response: n/a

Comments:

Unique Submissions	Specific comments
1	I fully support the DNR's proposed Vegetation Management Action Plan. The plan is well balanced.

Recreation

There were 10 summarized suggestions related to recreation. Most of these concerned trail management. Other topics include concerns about loss of recreational opportunities, the Bob Dunn Recreational Area, nature viewing, and educational tours.

Trails: Do not limit horse/snowmobile use

Number of submissions that mentioned: 3

DNR paraphrase: Do not close access to any of the trails currently used by horses or snowmobiles, specifically the trails off of 233rd Ave. These trails are used by local equestrian riders. Open new trails where possible.

DNR response: *For proposed changes to the existing recreational trail system in the Sand Dunes State Forest, there is a public input process that is followed. Currently, the DNR is going through that process as it applies to the trails within the Uncas Dunes SNA. While the trails within the SNA are outside the scope of this plan, a public hearing was held earlier this year to solicit public comment about proposed changes to those trails in SNA. The comments received are being reviewed as part of that process until a final decision is made. A similar public input process was followed in 2008, when the current recreational trails in the Sand Dunes were designated for particular uses. The type of recreation allowed and the extent of trail systems managed continues to be decided and guided by principles that consider ecological sustainability and trail experience (p.28 of plan).*

Comments:

Unique Submissions	Specific comments
1	No hiking, horseback or snowmobile trails should be eliminated, and new trails {when possible} should be established, after all this is a state forest and public land.
2	I have been riding horses in the Sand Dunes since 1999. The most beautiful trails are off of 233rd. Many people ride these trails and the ones off of County road 4. I don't see any harm to the animals from horses riding the trails. Please don't close the trails off. It's a huge part of the recreation enjoyed by many. They are also beautiful trails to hike. I know snowmobiles enjoy them in the winter
3	As an avid equestrian rider I have been riding this park for over 20 years. I understand there are some proposals to close some of these trails to horses. These trails are a valuable asset to riders throughout the State. We also are paying for State Trail passes that help fund maintenance of trails. This is important we keep these trails available for use to horses in the area. There are many that are also local horse owners that live close to this park.

Trails: Do limit horse/snowmobile use

Number of submissions that mentioned: 3

DNR paraphrase: Limit horse and snowmobile trails in SDSF. Specifically eliminate equestrian trails through the Uncas Dunes SNA. These trails contribute to spreading invasive species and can impact rare features. Use caution before considering further trail additions.

DNR response: *(see response above about not limiting trail access)*

Comments:

Unique Submissions	Specific comments
1	I want horse and snowmobile trails curtailed.
2	Although perhaps out of scope- I do not support an equestrian trail through Uncas Dunes SNA, as there are plenty of other equestrian trails, protecting SNAs is critically important, and invasive plants are often spread on trails like these.
3	The trail system within SDSF is already quite extensive. Any proposed expansion of the trail system within SDSF should undergo careful review to avoid and minimize adverse affects to rare features and other sensitive areas.

Trails: Add signage about rare features

Number of submissions that mentioned: 2

DNR paraphrase: Post informational or interpretive signs along trails to educate users about rare features and restoration efforts.

DNR response: *As mentioned in Section III, Part D (p. 43), interpretive signs are being considered as part of the communication and outreach efforts for SDSF. With the implementation of the proposed operational plan, there will be landscapes and viewsheds within the Sand Dunes that change or are altered over time, particularly in the restoration areas. Posting informational or interpretive signs along trails, trailheads, and other strategic locations is an important step in explaining restoration efforts and management considerations that are involved. Signs also will serve to inform and engage the public about the rare features and unique oak savanna ecosystem that exist in the Sand Dunes. These provide educational opportunities and help enhance the trail experience of the diverse group of outdoor enthusiasts who use the Sand Dunes State Forest. As noted in the Vision for the SDSF (P. 13), the plan calls for a well-informed neighbors and stakeholders, which interpretive signage can help to accomplish.*

Comments:

Unique Submissions	Specific comments
1	Implement additional signage explaining the value of the rare features within the SDSF at equestrian trailheads, campgrounds, and at locations where trails pass adjacent sensitive habitats. Signage is also important where trails enter from adjacent residential areas, since many users enter from these locations.
2	While restoration efforts are underway and once completed, I encourage the DNR to post informational/interpretive signs to educate users in the processes.

Trails: Join North and South unit

Number of submissions that mentioned: 2

DNR paraphrase: Join the trails between the north and south unit to provide safe passage for equestrian riders.

DNR response: *As is stated in the proposed SDSF Operation Plan, an objective identified in the Recreation Action Plan (p. 27) is to explore how to connect the trail networks of the North and South Units of the Sand Dunes. Creating a safe trail connection enhances the entire trail systems value by creating a longer*

system, creating more riding opportunities, and creating a much safer trail environment that more age groups are comfortable using. Plans to identify a feasible corridor and establish this trail connection will require support and partnerships among all of the trail user groups, including equestrian, snowmobile, and hiking/biking. Funding a project of this scope, likely crossing County Road 15 and the St. Francis River will need multiple partnerships and funding sources (page 30).

Comments:

Unique Submissions	Specific comments
1	I am encouraged to hear that the equestrian trails will still be maintained. My kids and I utilize these trails on a weekly basis, year round (weather permitting). Additionally, I would LOVE to have a safe passage from the south trails to the north trails, but I don't know how feasible such an idea is. Having to ride along busy paved roads to get from one trail system to the other is not safe for horses or riders, so if trails separate from the roads could be made, the conditions for equestrians would be greatly improved.
2	Looking into a trail that joins the units for horseback riding is a good idea

Trails: Monitor

Number of submissions that mentioned: 1

DNR paraphrase: Monitor trail use adjacent to sensitive areas and remedy adverse impacts.

DNR response: *Managed trail systems that are part of the designated recreational trail system are monitored for adverse ecological impacts and sustainability issues. Where a specific type of recreational activity is contributing toward causing adverse effects on the land, and particularly to sensitive areas, steps are in place to correct the problem, and if necessary, re-route the trail. Trails are monitored and inspected through scheduled maintenance visits and as part of routine site visits.*

Comments:

Unique Submissions	Specific comments
1	We recommend DNR monitor trail-use at, and adjacent to, sensitive areas and to identify steps to address trail usage that adversely affects sensitive areas.

Trails: Do not clear trees along

Number of submissions that mentioned: 1

DNR paraphrase: Do not clear the pine trees along trails, they provide shade and windbreaks. Clearing trees will also encourage gopher presence, a danger to horses.

DNR response: *DNR currently has a policy on timber harvests adjacent to recreational trails. The timing of the harvest, altering the size or shape, leaving buffers, and temporarily rerouting the trails are among the factors that can be incorporated. It's important to remember that many trails used for recreational purposes were originally established for accessing a timber sale. Gopher damage and risk to the horse trail can be addressed through good trail maintenance and repeated use. Many of the designated horse trails are maintained as firebreaks, further lowering the attractiveness of the trails to gophers.*

Comments:

Unique Submissions	Specific comments
1	I am strongly opposed to clear cutting, especially since it will remove the lovely shade trees from the trail system (and according to the map, every year there will be more clear cut areas right along the trails). Also, the removal of trees on the trail system will give the gophers a free pass and make the trails dangerous for horses (too many gopher holes).
	Please don't remove all of the pine trees, especially near the trails and the forest roads. We enjoy the tree cover and the shade in the summer and the windbreaks that the trees provide in the winter. We also really appreciate that the trees' roots protect the trails against gopher damage. We moved here in 2008 specifically because of the trees and the trail system, and it is disturbing that the trees are at risk of being cut down to convert the forest to oak savannah.

Trails: Other

Number of submissions that mentioned: 2

DNR paraphrase: General trail related comments.
DNR response: n/a

Comments:

Unique Submissions	Specific comments
1	And thank you for keeping motorbikes and ATVs off of the trails! We have enough problems with them as well as legal vehicles going "mudding" on the forest roads. The trails would be destroyed if these vehicles were actually allowed on them.
2	This seems to adequately address any possible concerns. Managing good habitat for trails is important to educate the public.

Concern about loss of opportunities

Number of submissions that mentioned: 4

DNR paraphrase: There is concern that the proposed vegetation management in SDSF will reduce recreational opportunities, and specific concern about oak savanna management having this impact. Survey recreational users on their perspectives about proposed vegetation management.

DNR response: *The recreational trails that are part of the Sand Dunes State Forest currently provide a variety of recreational activities and experiences to the public. Hiking, biking, wildlife viewing, equestrian, snowmobile, and hunting are likely the most recognized. The proposed vegetation management plan will offer even more diverse habitats, vistas, and outdoor encounters than exist now for trail users. Providing a broader spectrum of pine forests, oak woodlands, prairie openings, and oak savannas will offer enhanced educational opportunities, more sights and species occurrences, and greater outdoor experiences as a result of this diversity. In revising this SDSF operational plan, an in-depth public engagement process was conducted to gain public input on SDSF management. In addition, the MN State Comprehensive Outdoor Recreation Plan serves as an important resource for providing direction on outdoor recreation decisions and helping connect people to the outdoors. With this operational plan, trails will pass by a broader spectrum of habitats and trail users will have greater*

chances in seeing a broader variety of wildlife and vegetation fostering a greater appreciation for what the trails offer.

Comments:

Unique Submissions	Specific comments
1	On page 29 of the plan it states: "Through the implementation of this action plan, the landscape of SDSF will offer ongoing access to high quality recreational opportunities while providing a diverse mosaic of habitats that enrich and complement recreational experiences." The plan to convert most of the south half of the SDSF to habitats similar to the Sherburne NWR would have a major impact on the type of recreation experience the users have. Has there been any survey work done of the various recreation users to see what their feelings about this conversion would be? This question was asked in the early stages of the SAG meetings and at that time there had not been. It seems that you cannot turn around in the DNR without someone wanting to survey you on something. It seems curious that something with this much impact would not be surveyed by recreation users.
2	I believe the current forested areas of Sand Dunes should be continued to be maintained and managed as a "Forest" and not be converted to Oak Savanna. Converting the forest to this habitat would greatly reduce the recreational opportunities that exist now.
3	My main concern is that sand dunes remain a beautiful place that i can easily take my kids hunting. Grouse, woodcock, and deer are abundant as well as the opportunities to hunt them. I hope this will not affect the woods or their food sources.
4	I currently enjoy and have enjoyed the past 12 years snowmobiling, hiking, and biking in the woods. I would hate to have this change. Again there are several areas that the DNR can regrow their species and raise their mice and snakes that don't have to be where people have been enjoying walking, biking, sledding for years

Do not change recreation area

Number of submissions that mentioned: 1

DNR paraphrase: Do not change the recreational area, the current forest is beautiful and a good resource to inspire the youth.

DNR response: *We appreciate your comment and thank you for spending quality time in the Sand Dunes with your family over the years. These experiences do indeed help develop an appreciation for nature for people of all ages, particularly the youth. As the Operational Plan describes on page 9, the Sand Dunes is a good resource that provides something for everyone with its' recreational areas and diverse landscape features. The recreation areas of the Sand Dunes will continue to be managed for public use providing quality outdoor recreational experiences to current and future generations.*

Comments:

Unique Submissions	Specific comments
1	I spend much of my time in the forest particularly on the trail system with my children and grand children. I've seen their appreciation for nature grow because of the time

Unique Submissions	Specific comments
	they've spent here. It seems to be we could make the best use of the forest by using it as an inspiration for young people to grow their love of nature and the beautiful forest we currently have. PLEASE, AT LEAST don't mess with the recreational area!!! It will do more harm than good!!

Add nature viewing

Number of submissions that mentioned: 1

DNR paraphrase: Add “nature viewing” to the Recreational Action Plan and discuss trends and economic benefits.

DNR response: *"Nature viewing" will be added to the trail activities listed on p. 28. However, detailed economic impacts will not be added to the plan. While it is true that nature viewing has significant economic impacts in Minnesota, in both expenditures and jobs, this type of information is beyond the scope of what is needed in the operational plan. The plan is intended to guide management actions. The three main topics specifically called out in the recreation section (vegetation management, hunting and fishing, and trail systems) all require active management, whether it be vegetation manipulation, hunting seasons and regulations, or trail maintenance and alignment.*

Comments:

Unique Submissions	Specific comments
1	More clearly identify Nature Viewing as an important recreational activity within the forest, and discuss current trends and economic benefits in Minnesota and beyond.

Offer educational tours

Number of submissions that mentioned: 1

DNR paraphrase: Offer annual educational tours about rare features in SDSF; utilize citizen experts to assist.

DNR response: *Thank you for the idea. Opportunities are available through the SNA program currently. This suggestion is outside the scope of the operational plan, but could be discussed at annual meetings.*

Comments:

Unique Submissions	Specific comments
1	Develop periodic “educational tours” with emphasis on rare features in the SDSF, to be conducted annually to introduce new residents and remind visitors of these resources. The signatories to this letter could be contacted to assist DNR in such endeavors, if needed.

Other

Number of submissions that mentioned: 3

DNR paraphrase: General comments about the Recreation Action Plan.

DNR response: n/a

Comments:

Unique Submissions	Specific comments
1	Proximity between the Twin Cities and St. Cloud makes this State Forest very accessible to many people. Allowing access and interpretation of this landscape are valuable recreational opportunities. I'm pleased to see an emphasis on educating about the importance of controlling invasives and limiting damage to sensitive areas as issues for recreational access.
2	Sounds like a very good start.
3	I fully support the DNR's proposed Recreation Action Plan. It provides diverse opportunities for many outdoor enthusiasts.

School Trust Lands

There were 4 summarized suggestions related to School Trust Lands (STLs). Topics included potential addition, exchange, or compensation for STLs, revenue generation, and risk of sale.

Do not add more/trade

Number of submissions that mentioned: 4

DNR paraphrase: Do not trade School Trust Lands (SLTs) within SDSF or trade new STLs into SDSF from outside of it. Do not sell SLTs for development. SLTs are problematic because they limit the ability to manage for high conservation values and there is an ever-present risk of sale.

DNR response: *As of May 2017 there were no plans to sell or exchange School Trust land in SDSF. If plans to change the status arise during this planning cycle, the DNR will notify local landowners and other interested stakeholders. The DNR also will hold public informational meetings on any proposed School Trust land status change.*

Comments:

Unique Submissions	Specific comments
1	Do not trade any School Trust Land for other lands (Sections 16 & 36), not within our county or trading with other counties.
2	These lands should be kept in the public domain at all cost. No privatization or trading should occur that would convert these lands into housing developments.
3	Explicitly commit that no additional Trust lands be added to SDSF, given the current challenges of managing SDSF for its DNR identified High Conservation Values while meeting the fiduciary Trust responsibility.
4	My concern with the DNR's proposals for School Trust Lands in the SDSF centered on moving additional STL into the SDSF from outside areas. I think this could cause land in the forest to be auctioned off at some future date---due to the state law that says STL's must be used to maximize income. This close to the metro area, income from resource management can't compete with income from land development.

Generate revenue

Number of submissions that mentioned: 3

DNR paraphrase: Economic management of timber, specifically pine, should be the top priority on all School Trust Lands in SDSF. Actions are already being taken by DNR on SLTs that will negatively impact economic return. Prescribed burns on SLTs will limit economic return.

DNR response: *DNR will continue to meet its fiduciary responsibilities to the School Trust on part of the Trust Lands portfolio through management to maximize long-term timber revenue under sound natural resource and conservation practices. In cases on Trust Lands where managing for high conservation values may prohibit or limit the ability to generate revenue, DNR may seek opportunities to compensate the School Trust, or exchange or sell those lands. If plans to change the status arise during this planning cycle, the DNR will notify local landowners and other interested stakeholders. The DNR also will hold public informational meetings on any proposed School Trust land status change.*

Comments:

Unique Submissions	Specific comments
1	Fire is your friend. That said, the maintenance and economic use of red pines is a very good idea--especially on school trust lands where the generation of revenue is of top importance.
	As per state law, these lands are where intensive timber management should occur to generate revenue for public schools.
2	Under no circumstances should the trust land be used for anything but growing timber to generate money for the trust. White pine would probably be the best choice. Any group that says they will offer compensation for doing anything else should be denied.
3	On page 15 of the plan says: "Of those 262,000 acres, 174,000 acres are designated as HCVFs, while the remaining 89,000 acres are on School Trust lands and are not designated, but will be managed consistent with the FSC HCVF Principle unless there is a conflict with the DNR's legal responsibility to secure the maximum long-term economic return from School Trust lands." Concerning HCVF, there currently is management, and the plan further proposes management, that is in conflict with the responsibility to secure the maximum long-term economic return from the School Trust Lands. I will go into more detail during the discussion of specific proposed management (plan pages 56 -- 70) but here are a few: / By Larson Sough there is a parcel of trust land, part of which is in over mature oak. Economically this should have been harvested and regenerated to oak with an interplanting of more valuable conifers. Instead it continues to decline with insect and disease problems. / There are oak stands on trust lands that were mature or have had oak wilt problems and the oak timber was harvested off of them. There has been no push to introduce the far more valuable conifer component into them (such as Area B page 66). After the oak harvest, the site starts to regenerate to brush, grass and timber and it becomes increasingly difficult and expensive to establish conifers. / There are stands on trust land that this plan recommends prescribed burning. I see no prescribed burning that could enhance the economic return of these lands. Burning would set back valuable conifer regeneration and could only degrade the quality of timber in the stand. (Areas B,C,D, K and parts of E page 66)
	On page 32 of the plan it states: "No tree removal for habitat enhancement would occur on SDSF School Trust land until the School Trust is financially compensated."

Unique Submissions	Specific comments
	This is already happening and is proposed in this plan. "Tree removal" is not the only way that habitat enhancement can reduce the value of these trust lands. Things such as killing or lowering tree quality by prescribed burning or the delay of regenerating conifers can have a negative effect on the fiduciary obligation to the trust. These will be discussed in more specificity during the comments on the specific stand management plan comments (pg 56-69).
	On pages 66-69 of the plan is a map and proposed actions for habitat enhancement the following comments pertain to the site letters: • Site B -- This parcel is on School Trust Fund Lands (STFL). There were immature conifers removed from this which seems contrary to the fiduciary obligation to the trust. This land should be interplanted with conifers to increase its future value. To my knowledge it has not yet been planted. Also the plan calls for prescribed burning. I cannot see how that would help meet the fiduciary obligation to the trust. • Site C - This parcel is on STFL. It is made up of several stands. Some are pine stands and some are oak stands that have pine regeneration in them. Any burning in these stands would be detrimental to the conifer regeneration and not in the fiduciary interest of the trust. • Site D -- Part of this STFL. Conifer regeneration should be encouraged to meet the fiduciary obligation of the trust. • Site K -- This is STFL. This was a oak forest that was harvested. To meet the fiduciary obligation to the trust this oak regeneration should be interplanted with conifers. The longer you wait after the harvest to do this the more expensive it gets and it decreases the chance for success. Burning this as described in the plan would have two negative effects. First it would be contrary to the financial interest of the trust, and second it would be converting a forest stand to oak savanna this is contrary to the intent of the legislation. • Site M -- This is STFL. It has already been harvested. To meet the fiduciary obligation to the trust this oak regeneration should be interplanted with conifers. The longer you wait after the harvest to do this the more expensive it gets and it decreases the chance for success. Burning this as described in the plan would have two negative effects. First it would be contrary to the financial interest of the trust, and second it would be converting a forest stand to oak savanna this is contrary to the intent of the legislation.

Compensate/exchange current STL in SDSF

Number of submissions that mentioned: 2

DNR paraphrase: Exchange STLs or compensate the Trust for them so that lands with rare species or recreation focus can be managed specifically for those purposes, rather than economic return for schools.

DNR response: *A situation where the state may wish to exchange School Trust designation is in cases when managing for the high conservation values on HCVF land may prohibit or limit the ability to generate revenue. In these cases, DNR may first seek opportunities to compensate the School Trust before considering an exchange because the cost associated with land exchanges are considerable for the Trust and DNR.*

Comments:

Unique Submissions	Specific comments
1	I am pleased to see the ideas about the reasons for considering exchanges of school trust lands. I would think it would be valuable for the horse camp to be able to fund its own operations and management with its fees. Similarly, I think it would be important for the areas of the State Forest that are rare plant communities or have the potential to be restored as such plant communities be managed for that purpose primarily, rather than as School Trust Lands obliged to bring the highest income for school operations. Students need to be able to visit and learn about these habitats, rather than have them lost in order to help pay for schools.
2	Clearly identify a plan to compensate and/or buyout the Trust lands located within the forest.

Address risk of sale in plan

Number of submissions that mentioned: 1

DNR paraphrase: Divestment of STLs for development is inevitable and should be addressed in the plan.

DNR response: *From page 32 of the operational plan: "As of May 2017 there were no plans to sell School Trust land in SDSF. However, should management of the school trust lands in SDSF be impacted so as to restrict or prohibit revenue generation; it would then be in the best interest of the school trust to consider a divestment strategy."*

Divestment of some or all School Trust Lands in Sand Dunes State Forest is not inevitable. DNR will meet its fiduciary responsibilities to the trust by managing the school trust lands for maximum long-term economic return under sound natural resource and conservation practices, or by compensating the Trust if revenue generation is restricted or prohibited. In these cases, DNR may first seek opportunities to compensate the School Trust before considering an exchange or sale. A public notification and information process would be followed prior to status change for any School Trust lands.

Comments:

Unique Submissions	Specific comments
1	On page 32 of the plan it states: "As of May 2017 there were no plans to sell School Trust land in SDSF. However, should management of the school trust lands in SDSF be impacted so as to restrict or prohibit revenue generation; it would then be in the best interest of the school trust to consider a divestment strategy." At one of the SAG meetings it was stated, by someone in the DNR, that realistically, resource management is just a temporary place holder for trust lands until the value gets high enough to develop. I believe there is truth to that statement and many of the trust lands, in the state, over the years have already been sold. With the proximity of the SDSF to the metro area it is hard to do any cost analysis where resource management can compete with development. I believe this inevitability should be addressed in the plan. If there was one thing that the divergent opinions at the SAG meetings could agree on was the need to address the school trust land issue.

Other

Number of submissions that mentioned: 1

DNR paraphrase: General comments about the School Trust Land Action Plan.
DNR response: n/a

Comments:

Unique Submissions	Specific comments
1	Seems fine.

Roads

There were 3 summarized suggestions related to roads in SDSF. Topics included rare species corridors, working with Orrock Township, and closing roads to through traffic.

Address rare species needs in corridors

Number of submissions that mentioned: 4

DNR paraphrase: Ensure the continued protection of rare species that inhabit road corridors. Ensure that easements and mowing practices are designed to protect these species.

DNR response: *See Anoka Sand Plain SFRMP for maps and discussion of rare features persistence corridors. Discussions about these issues occur during the review process for vegetation management. Within SDSF treeless roadsides serve as a significant portion of the remaining rare species habitat and are thus critical to these species persistence in the state forest. While the long term goal is to enhance habitat for these species in SDSF, in order to ensure that some species persist until that time some roadsides in SDSF need to be given special consideration (see p. 36 of the operational plan). Towards this end rare features persistence corridors were established in the Anoka Sand Plain SFRMP as a special management area. More info about them can be found on pages 3.44 and 3.55 of the SFRMP.*

Comments:

Unique Submissions	Specific comments
1	Road ownership, road easements and road management seem to be legally complex. In addition, rights-of-way on roads in the North Unit have native grasses and forbs that serve as persistence corridors for rare animals, insects and organisms that need protection. I am glad to see the recognitions that "[d]isturbances in these persistence corridors should be minimized and coordinated with staff from DNR's Division of Ecological and Water Resources."
2	Specify that mowing roadsides with easements shall follow the state mowing law. As required by state law, require that reseeding of disturbed soils shall use seed mixes from native species of a local ecotype to Sherburne or Benton County.
	Many Species in Greatest Conservation Need occur in, or immediately adjacent to, roadsides within SDSF. For existing Orrock Township roads within SDSF that lack easements, it is recommended that DNR provide an easement to the Township for only the driving surface of the roadway and the first eight feet of the roadside (inslope). This will minimize adverse effects to rare plants and wildlife inhabiting ditch

Unique Submissions	Specific comments
	bottoms and backslopes, and provide the Township the ability to maintain a safe driving surface.
3	I support this plan as the roads are needed for tree harvest, vegetation maintenance, and other management activities. Roads also act as corridors for wildlife and as fire breaks. They are also important for recreation and wildlife viewing.
4	Maintaining persistence corridors is important for rare species.

Work with the township

Number of submissions that mentioned: 3

DNR paraphrase: Work with Orrock Township on issues pertaining to 233rd Ave, 253rd Ave NW, and other forestry roads.

DNR response: *The DNR is currently working with Orrock Township on resolving the road easements in SDSF. This is already addressed in the Forest Roads Action Plan.*

Comments:

Unique Submissions	Specific comments
1	DNR should expedite the transfer of 233rd to the township which could then eventually be changed to a county road.
2	To reduce traffic volume and speed, identify a plan to work with the Township to reclaim portions of 253rd Ave. NW as a gravel forest road (between 180th and the existing gravel to the east). Reducing traffic speed and volume will increase recreational forest-user safety, and reduces the likelihood of wildlife-vehicle collisions.
3	I drive the roads in the forest on a regular basis. I think they need to work with Orrock and make a plan that can work. This is not a DNR issue, it is a Orrock county issue.

Close to through traffic

Number of submissions that mentioned: 2

DNR paraphrase: Close certain forest roads to through traffic, except during the hunting season, to reduce wildlife/vehicle collisions, litter, and erosion.

DNR response: *Roads provide for wildlife viewing, berry picking, and access to the Ann Lake campground and horse camp. They provide quick response in the event of a wildfire. By policy, designated forest roads must remain open to the public except for public safety or when the road surface would be subject to severe damage by vehicle traffic (example: during spring road restrictions). Many of the access routes in SDSF are seasonally gated closed.*

Comments:

Unique Submissions	Specific comments
1	Post a sign at the entrance to SDSF on 253rd Ave. NW that the road is closed to through traffic to reduce wildlife-vehicle collisions.

Unique Submissions	Specific comments
2	I do not have any issues with the Forest Roads Action Plan. It would be nice if the forest roads were closed to through traffic, though, except during hunting seasons. There are lots of problems with people driving too fast, "mudding," and discarding TVs, microwaves, couches, etc., and leaving general litter on the forest roads.

Other

Number of submissions that mentioned: 1

DNR paraphrase: General comment about Roads Action Plan.
DNR response:

Comments:

Unique Submissions	Specific comments
1	Another good start.

Background and Operational Considerations

There were 7 summarized suggestions related to background or operational considerations in the plan. Topics included communication with the public, climate change, the role of public lands, and compliance with 2017 legislation.

Communicate with public

Number of submissions that mentioned: 5

DNR paraphrase: The emphasis in the plan on Public engagement/communication around management is important; continue to inform state-wide and local interests about management in SDSF. Continue to update the website about the status of the plan. Clarify how perspectives of local landowners will be considered during implementation of the plan.

DNR response: *DNR intends to hold annual or biannual (as needed) meetings to inform the public about yearly activities planned on the forest. Local landowners are encouraged to attend and provide prospective. DNR intends to use the website and GovDelivery as avenues to communicate about activities on the forest. Specific communication strategies are listed in Section III, Part D (p. 42-43).*

Comments:

Unique Submissions	Specific comments
1	p. 10 The plan also lacks specificity on the on how the “perspectives of nearby residents and other stakeholders will be carefully considered.”
2	Public engagement about ongoing management of lands with multiples users and purposes is complex, and I am glad to see the emphasis on communication.
3	It is important to ensure statewide stakeholders as well as local constituencies continue to be informed when making decisions regarding public use and management of the lands and resources within the SDSF.

Unique Submissions	Specific comments
4	This plan is well done, with lots of good information on different topics that can help the average citizen learn more about different aspects of the work, and how it might impact them. I think it would be important to have more information like this available in documents like these that are shared with the public going forward.
	The DNR is doing a good job of managing the site based on the best science available. The DNR is working to improve the communication with stakeholders, and working with the neighbors needs, as it pertains to the transition to their properties, which is important.
5	For communications, please continue to update the website with the status of the plan.

Climate change: Account for mitigation

Number of submissions that mentioned: 2

DNR paraphrase: The carbon footprint of DNR's management in SDSF should be taken into account. Trees sequester carbon, while burning grassland releases carbon – how do these practices fit with DNR's responsibility to address climate mitigation?

DNR response: *Carbon storage in forests, grasslands, and other ecosystems can be difficult to measure and it changes over time based on many factors, including type and age of the vegetation, and time since the last disturbance. Ecosystems store carbon above ground (in vegetation) and below ground (in soil and in plant roots). In general, forests tend to store more carbon above ground than grasslands, and grasslands tend to store more carbon below ground than forests. Forest carbon can also be stored over time in long-lived timber products such as buildings or furniture.*

Management actions such as timber harvest and prescribed burns release carbon dioxide, but also stimulate vegetation growth that recaptures some of the released carbon over time. DNR takes climate change and its impacts to natural resources seriously. As an agency, we are seeking opportunities to mitigate climate change through our business operations and management practices where we can; but we must balance these opportunities with our other obligations, such as providing sustainably-grown timber and habitat for rare species. Changes in Minnesota's climate are threatening rare species and habitats in new ways, and DNR has a responsibility to adapt to these changes by bolstering the resilience of Minnesota's threatened ecosystems to those changes. This is why in places such as SDSF, we must consider the need for climate adaptation alongside our responsibility to help mitigate climate change.

Comments:

Unique Submissions	Specific comments
1	On page 41 under "Climate change considerations" The plan talks about species adaptability to climate change. However, one consideration that the DNR is suppose to take in to account in their management is the carbon foot print. More specifically, how are the management practices affecting global warming. That seems to be missing in this climate discussion. How do the various management practices effect carbon sequestration? Also, do not even get me started on you double asterisks in table three. Spend some time reading about the various pollen core studies done in an around the SDSF.

Unique Submissions	Specific comments
2	Under what rational, does removing the carbon sequestering trees in the SDSF and burning the landscape to grassland fit into your commitment to deal with climate change. Under the Paris Climate Accord---the developed countries are donating billions of dollars to third world countries to stop their deforestation and burning to grassland---in an attempt to limit global warming.. Here in Orrock Township, the DNR (and the Sherburne National Wildlife Refuge)---is spending taxpayer's money to do the opposite. This isn't dealing with climate change---this is contributing to climate change

Climate change: Protect rare species/habitats

Number of submissions that mentioned: 1

DNR paraphrase: While planting trees helps sequester carbon, encroaching forests can contribute to further habitat loss of rare grassland species. Grasslands for rare species much be protected as well.

DNR response: *[see response above about climate change mitigation]*

Comments:

Unique Submissions	Specific comments
1	Discussions of wildlife conservation often center around climate change, due to the number of species in declined due to shifts in climate where they occur. With the focus on climate change though, people often focus on planting more trees and growing forests to offset carbon emissions, often overlooking the species put at risk from loss of habitat from forest encroachment into grasslands and sand dune areas. Most of the grasslands of the Midwest are gone due to farming, and it is vitally important that we do what we can do protect existing grasslands, and restore those with imperiled species still holding on.

Public lands: SDSF is a state-wide resource

Number of submissions that mentioned: 2

DNR paraphrase: SDSF is an asset for all state residents. The plan addresses local concerns well, but risks setting a precedent of being overly accommodating to local interests to the detriment of state-wide interests.

DNR response: *DNR has maintained that SDSF is a state resource and the views of all Minnesotans must be factored in to the management decisions. DNR feels the operational plan balances statewide interests with local interests.*

Comments:

Unique Submissions	Specific comments
1	We feel the plan, while doing a good job in accommodating local concerns, has the potential to set a statewide precedent; restricting what is best in the interest of the state's resources when bowing to the "not in my backyard" pressure applied by adjacent landowners. We can't forget that the SDSF is a state property that has been present many years before most of the residents in the area.

Unique Submissions	Specific comments
2	This is a state asset, held in trust for all state residents and should be treated as such.

Public lands: SNWR references

Number of submissions that mentioned: 2

DNR paraphrase: The nearby federally-managed Sherburne National Wildlife Refuge (SNWR) already manages a much larger area than SDSF for oak savanna, so oak savanna management in SDSF is unnecessary.

DNR response: *While our federal neighbors to the north, the Sherburne National Wildlife Refuge, have made great strides toward restoring rare oak savanna ecosystems, the unfortunate reality is that this progress is small compared to what has been lost. Midwestern United States oak savanna is one of the rarest ecosystems in the world – only 0.02% remained of the pre-European settlement ecosystem after agriculture swept through the Heartland (1). So while other restoration efforts are important, we must all work together to bring back this rare ecosystem to the landscape. The important work done on the Refuge and on private lands does not relieve DNR of our responsibility to protect these species/habitats on state land, especially as SDSF houses some unique dune features that are not present in the Refuge.*

(1): Nuzzo, V. 1986 Extent and Status of Midwest Oak Savanna: Presettlement and 1985. natural Areas Journal 6(2):6-36.

Comments:

Unique Submissions	Specific comments
1	Any overcrowding of rare species could be moved to the Sherburne National Wildlife Area {30000 acres} oak savanna.
2	On page 15 of the plan it states: “Management decisions are made to maintain or enhance the ‘high conservation values’ in these forests (MN DNR 2015b). In most cases, HCVFs are maintained as working forests. Out of the 5,732 acres of state-owned land in SDSF, 2,055 acres are managed for HCVFs (Map 15) (MN DNR 2017a). Approximately 1,505 acres are designated HCVFs and 550 acres are on School Trust lands. These sites vary greatly in quality, but include many rare species of animals and plants that depend on the unique savanna and barren h0abitats of SDSF. HCVFs provide context for vegetation management in SDSF. On HCVF lands, management activities will be tailored to maintain and enhance the natural features and rare resources of these lands. Managers will seek opportunities to foster native trees and other vegetation, enhance habitat for rare species, protect fragile dune structures, and remove non-native species that risk damaging conservation values.” [...] I believe this section needs to be totally rewritten to recognize the following: - the adjacent wildlife refuge, with six times the area of the forest, is being managed for unique savanna and barren habitat.
	On page 29 of the plan it states: “As a large contiguous tract of public land, SDSF is a popular destination for hunting and fishing recreation in the central part of the state. The optimal mix of habitat types paired with the diversity of vegetation and terrain create many opportunities for hunting and fishing recreation.” For public recreation purposes the SDSF and the Sherburne NWR need to be looked at one large block of public land. The SNWR has its 30,000 acres devoted to oak savanna, oak woodlands

Unique Submissions	Specific comments
	and wetlands habitats. The SDSF, with its 6,000 acres, historically has been coniferous forest, mixed coniferous/hardwood forest, oak forests and wetland habitats. The plan to shift almost half of the forest to oak savanna and oak woodlands would DECREASE habitat diversity in the area because you would then have 33,000 acres devoted to this type of habitat and only 3,000 acres of coniferous/ mixed hardwood-conifers.

Public lands: Acquire more land for SDSF

Number of submissions that mentioned: 1

DNR paraphrase: Work with non-profits or other entities to acquire undeveloped private land that remains within the SDSF statutory boundaries.

DNR response: *DNR land acquisition is accomplished through willing sellers. Parcels within the statutory boundaries of SDSF offered for sale to DNR by willing sellers will be considered for acquisition. They will be considered with other lands statewide under the constraints of limited acquisition funds, and prioritized based on their relative contributions to DNR's conservation mission, and improved management efficiency and access.*

DNR works regularly with individuals, conservation organizations and local units of government to optimize its acquisition and strategic management of its land assets, and will continue to do so.

Comments:

Unique Submissions	Specific comments
1	Before moving north in 1982, I often went to the Sand Dunes State Forest (starting in 1975) to swim and camp at Ann Lake with my Boy Scout troop. I find it deeply unfortunate that the Minnesota DNR was "asleep at the wheel" during the 1980s and 1990s and didn't bother acquiring private inholdings within the SDSF as unchecked population growth, urban sprawl, and "white flight" were converting these lands into housing developments and hobby farms. It is a miserable endeavor to manage a landscape that is in a checkerboard of public and private ownership. In any case, please put an emphasis on restoring the original (and best) land cover in the SDSF --oak savannah, and oak woodlands--now so rare in the state. Also, work with The Nature Conservancy, Trust for Public Lands, and any other entity to acquire those few still undeveloped private lands that are within the SDSF statuary boundaries.

Comply with legislation

Number of submissions that mentioned: 1

DNR paraphrase: The plan needs to be double-checked for compliance with the legislation passed earlier this year, referenced at the beginning of the plan, specifically as it pertains to the mandate to "not convert additional lands to oak savanna" for two years. Certain restoration and habitat enhancement methods proposed may violate the legislation if performed during the two-year period.

DNR response: *Page 6 of the draft Operational Plan states that the DNR will not convert additional land in SDSF to oak savanna or convert oak savanna to non-forest land during the life of the legislation. Doing maintenance projects in existing oak savanna or non-forest land does not conflict with the legislation.*

Projects that do not reduce the crown cover or basal area (such as prescribe burning in an oak forest) do not convert a site to oak savanna, the site remains an oak forest.

Comments:

Unique Submissions	Specific comments
1	Also, the legislation would seem to indicate that all areas should continue to remain in forest cover since it restricts the conversion to non-forest areas.
	On page 23 of the plan it states: "On portions of the SDSF being restored to oak savanna, all tree species that are not part of this plant community type will be removed." Again this plan lacks specificity. What portions of the SDSF are being restored to savanna? How is this consistent with the legislation to "not convert additional lands to oak savanna"?
	On page 26 of the plan it states: "These areas were or will be actively managed with appropriate techniques including timber harvest, prescribed burning, invasive species control, and other restoration practices. Management of the Uncas Dunes SNA units will continue to follow the Uncas Dunes SNA Management Plan (MNDNR 2009)." I have looked on line and not been able to see a copy of the 2009 plan, or any of the previous plans for that matter. Are they available on line? Also, I have a copy of the 2009 plan from a document request I did last year. On it I do not see any department approval signatures or I am not aware that this went through any public review process. What are the processes for creating, reviewing and implementing an SNA plan? It would seem to me that the SNA is not exempt from the legislation that applies to the SDSF so the current Uncas SNA plan would have to be reviewed to make sure it is consistent with the legislation.
	On page 43 of the plan it states: "The vision for SDSF described in Section I of this plan is intended to be long-term, encompassing goals that DNR should strive to implement indefinitely into the future. This vision will guide future planning efforts for SDSF." Section 1 contains the legislation concerning the management of the SDSF. Will future planning efforts include the intent of the legislation?
	On page 6 the plan states: "DNR will not convert additional land in SDSF to oak savanna or convert oak savanna to non-forest land during the life of the legislation (two years)". This statement makes it appear that the DNR will follow the legislation parameters for 2 years and then would not need to follow them after that. This seemingly would apply to the other subdivisions of the legislation (prairie seed use, aesthetic management, prescribed burn, school trust lands, township roads). My understanding of the intent of the legislation, which originally started out very prescriptive and the final version being more flexible, was to give the DNR two years to compete the planning process and incorporate the principles laid out in the legislation into that plan. At the last stakeholders group meeting we were told that the DNR planned to follow the intent of the legislation for the duration of this plan (through 2022). However, when you read through the plan there is a lot of discussion about "restoration" which is another way of saying turning mixed hardwood/conifer forests to oak woodland, savanna and grassland. I will be more specific on these stands this during the specific discussion on proposed management that occurs on plan pages 66 -- 69.
	It states on page 10 of the plan: "Because of the rare and distinct ecological and geological features that occur within SDSF, key areas will be restored and managed for

Unique Submissions	Specific comments
	rare plant and animal species and the native plant communities on which they depend, including oak savanna, oak woodland, tamarack swamp, emergent marsh, and sedge meadow. At the same time, commercial timber harvest and recreational uses will be maintained and the perspectives of nearby residents and other stakeholders will be carefully considered." The plan lacks specificity as to which areas will be restored and managed. How is this restoration consistent with the intent of the legislation not to convert lands to oak savannas or nonforested?
	On pages 66-69 of the plan is a map and proposed actions for habitat enhancement the following comments pertain to the site letters: • Site A -- Is there any conifer regeneration or hardwood species that would be killed or set back by prescribed burning? If so the plan to prescribed burn would seem contrary to the intent of the legislation that says there should be no conversion to oak savanna. • Site E -- Parts of this stands have conifer regeneration in them. Any burning in those areas would be converting to oak savanna contrary to the legislation. • Site G -- This stand has conifer regeneration in them. Burning these areas would convert this to a nonforest type contrary to the legislation. Site I -- This stand was and oak forest that was harvested and is converting back to oak forest. Burning it would convert it to oak savanna, contrary to the legislation. • Site J -- This is a regenerating forest with oak, aspen, maple, Norway pine, and jack pine regeneration. There are scattered larger trees of these species as well. Burning this would convert it to oak savanna, contrary to the legislation. • Site N -- This is made up of several stands all of which were forested and most of them have a conifer component to them. Burning in these would have a detrimental effect on the regenerating conifers and the shift to oak savanna would be contrary to the intent of the legislation.

Other

Number of submissions that mentioned: 2

DNR paraphrase: General comments about the Operational Considerations section of the plan.

DNR response: n/a

Comments:

Unique Submissions	Specific comments
1	More than adequate.

Scope of Plan

There were four suggestions related to the scope of the operational plan. These related to planning horizon (timeframe) of the revised plan compared to the previous version, and the exclusion of the Uncas Dunes Scientific and Natural Area management plan from this operational plan.

Timeframe: Need long-term vision

Number of submissions that mentioned: 2

DNR paraphrase: The plan is not specific enough in its long-term vision, specifically for vegetation management**.**

DNR response: *A shorter planning timeframe was chosen for the plan after the public engagement process in 2016, where stakeholders expressed concern about changes happening too quickly over too many acres. The shorter timeframe allows DNR to adapt as we learn from management practices in SDSF, and to continue to engage with stakeholders along the way. However, a general vision for SDSF is provided on p. 13 (Section I, Part C). A general vision for high conversation value forests (HCVFs) is also provide on p. 15. HCVFs provide important landscape context for the current and future plans, when determining how various values (e.g., sustainable timber harvest, rare species protection, recreation) will be balanced in SDSF.*

Comments:

Unique Submissions	Specific comments
1	On page 19 the plan states: "All areas designated to continue in forest cover are reforested with tree species that are appropriate for the site and provide a variety of benefits such as habitat, aesthetics, and revenue." What this plan lacks is the specificity on any of the management. What areas are designated to continue in forest cover? By this statement above it appears that those areas have already been defined. There is no map of desired future conditions so a reader is left to guess by the various proposed management what the long term goal is for any particular stand. This is somewhat understandable since it was the specificity of the original plan (to turn most of the south part of the SDSF into savanna) that got many people concerned, however, it lacks the transparency that meaningful public involvement would require. Also, the legislation would seem to indicate that all areas should continue to remain in forest cover since it restricts the conversion to non-forest areas.
	On page 14 the plan state: "This includes 10-year action plans for:" The reality is that this is a 5 year plan since plans are based on fiscal year and we are just starting FY18 and this plan runs through FY22. I wish it could have been a longer plan but I realize the desire to sync up with the subsection process (if that is still going on). Considering the time it takes to write a plan and go through the review process it appears we will be back at this again soon.
2	A long term vision for the SDSF is needed in this operational plan---showing how the proposed plan fits into the long term vision for each area. Limiting the scope of this plan to 5 years makes the new plan appear to be different than the 2013 plan. Very difficult to analyze the plan in a vacuum. It was only in looking at how the 2013 plan's "immediate conversion area" fit into your 50 year vision, that it became evident the SDSF would someday become the SDS Prairie. What is the desired long term vegetation for any given area of the SDSF? It is evident that the proposed plan is still very much into the conversion mode as soon as the 2 year sunset provision kicks in on the 2017 legislation. [...] The plan states that the DNR will use science based adaptive management to support rare plants,animals and natural features---many rare plants and animals prefer wooded environments ---your plan seems to favor rare plants and animals that like open landscape. This tells me that the forest will be "managed" to open landscape in the long term. Science based adaptive management can result in any

Unique Submissions	Specific comments
	outcome you set as a goal. Is “habitat enhancement” using “selective tree removal and/or burning” another way of saying “convert forest to open landscape?

Timeframe: Shorter timeframe is good

Number of submissions that mentioned: 1

DNR paraphrase: The shorter timeline used in the revised plan is preferable to the previous version.

DNR response: *(see response above about timeline)*

Comments:

Unique Submissions	Specific comments
1	We support the decision to adopt a shorter timeframe to guide management decisions in the SDSF.

Include SNA Plan

Number of submissions that mentioned: 2

DNR paraphrase: The management plan for the Uncas Dunes Scientific and Natural Area should be included in the plan, at least as an appendix.

DNR response: *The Uncas Dunes SNA management plan falls outside of the scope of this operational plan. The citation for this plan is on p. 46 ("An evaluation of the ecological significance of the Sand Dunes State Forest, Sherburne County, Minnesota"). The Uncas Dunes SNA plan is not currently available online; though it could be made available to members of the public upon request, after being examined for non-public data.*

Comments:

Unique Submissions	Specific comments
1	Management actions in the SNA (such as your recent proposal to close the 245th ave forest access trail across the SNA, prescribed burns etc.) directly impacts the residents of the SDSF, as well as users of the forest. Management plans for the SNA should be part of the SDSF operational plan.
2	On page 26 of the plan it states: “These areas were or will be actively managed with appropriate techniques including timber harvest, prescribed burning, invasive species control, and other restoration practices. Management of the Uncas Dunes SNA units will continue to follow the Uncas Dunes SNA Management Plan (MNDNR 2009).” I have looked on line and not been able to see a copy of the 2009 plan, or any of the previous plans for that matter. Are they available on line? Also, I have a copy of the 2009 plan from a document request I did last year. On it I do not see any department approval signatures or I am not aware that this went through any public review process. What are the processes for creating, reviewing and implementing an SNA plan? It would seem to me that the SNA is not exempt from the legislation that applies to the SDSF so

Unique Submissions	Specific comments
	the current Uncas SNA plan would have to be reviewed to make sure it is consistent with the legislation.
	Starting on the bottom of page 6 and continuing on page 7 the plan states: "This plan also does not cover the specific management actions scheduled for the Uncas Dunes Scientific and Natural Area (676 of the 5,732 acres), which is managed through its own planning process." I am not sure why this is the case. The SNA in the north SDSF is forestry administered lands. Forestry has always been responsible for the implementation of the management on this. The plan confirms Forestry's responsibility on page 43. These lands were not excluded from the legislation because these lands are within the SDSF. These lands should be subjected to the same public review process that the other lands within the SDSF are subjected to. If there is a plan for these lands is should be included as an appendix to the SDSF ops plan.
	On page 76 and 77 of the plan you have maps showing the forest inventory. A question I had was how up to date is the stand information in ForestView? There is a lot of 15+ year old data on the site and I know we have done alterations since then. The inventory map shows a 460 acre upland grass type that makes up most of the Uncas SNA. The casual observer may think this is accurate but in fact there is probably less than 40 acres of upland grass on the SNA. This was typed this way for two reasons: 1) we wanted to be able to visually pick out the SNA on inventory maps as the one solid block. 2) we did not want the timber species and volumes in the SNA skewing our planned cut numbers because there was no guarantee that they were going to be cut, or if cut that the acreage would stay in that covertype. The SNA is made up of oak forest, oak regeneration, conifer regeneration, brushland, conifer forest, mixed stands, etc. At some point it would be good to get an accurate covertype map of the area. Hopefully this would be included in the SNA appendix to this plan.

Do not alter SNA management

Number of submissions that mentioned: 1

DNR paraphrase: It is good that the revised plan does not alter management in the Uncas Dunes SNA.

DNR response: *(see response above about SNA plan)*

Comments:

Unique Submissions	Specific comments
1	Was pleasantly surprised to see the new proposals do not include/interfere with the management of Uncas Dunes. I'm hoping that will continue to be the case.

Other: Requests for Clarifications and Specific Changes

There were a variety of comments that sought clarification on a specific topic, specific changes to wording or maps in the plan, or answers to questions not covered in the plan. As these comments were very specific, individual responses were prepared for each and are included in the comments table below each comment.

Clarification needed

Number of submissions that mentioned: 3

DNR paraphrase: Specific clarifications are needed in the plan (see comments).
Comments:

Unique Submissions	Specific comments
1	[Vegetation Management Plan] Very vague. Almost anything could be clear cut according to using the term "selective tree removal." ***DNR Response:*** *Clearcutting (rotation-age harvest) generally removes the majority of trees on a given site with the purpose of creating growing conditions for sun-loving trees and regenerating a new forest. There are almost always reserve trees left standing in a rotation-age harvest; these may be scattered across the site or clumped in a reserve island(s).* *Selective tree removal (also referred to as thinning) generally results in the removal of about 1/3rd of the trees on a given site with the purpose of improving the growing space for the remaining trees. Selective tree removal in this plan also refers to removing a specific tree species from a given site like removing white pine or scotch pine from a hardwood stand. The glossary term for "selective tree removal" on p. 54 will be updated to add this clarification.*
2	Previous SNA plans state that 2 trails will cross the Uncas SNA--- map 14 on page 73 of the plan doesn't show the trail originating off of 245th Ave ***DNR Response:*** *The trail originating off of 245th Ave. (the 'north trail') and extending through the SNA was a trail segment identified under two management plans. The SNA plan identified this trail and another more southerly trail as a trail originally designated for motorized use, including snowmobile use. The recreational management plan, based on the DNR's State Forest Classification Review and trail designation process from 2008, identified this 'north trail' through the trail inventory process but did not designate this trail as part of the Sand Dunes State Forest recreational trail system being managed, in part due to the close proximity of the first (the more southerly trail), which was designated to be managed and maintained. Map 14 shows only the recreational trail system that is managed and maintained by the DNR, which is why the 'north trail' is not included on the map.*
3	On page 23 of the plan it states: "On portions of the SDSF being restored to oak savanna, all tree species that are not part of this plant community type will be removed." Again this plan lacks specificity. What portions of the SDSF are being restored to savanna? How is this consistent with the legislation to "not convert additional lands to oak savanna"? On page 24 of the plan it states: "For portions of the SDSF being restored to oak woodland, a number of different vegetation management activities will be employed including timber harvest, invasive species removal and control, and prescribed burning. All tree species that are not part of this plant community type will be removed and eastern redcedar can be removed if desired, particularly from areas where they may

Unique Submissions	Specific comments
	have become dense due to exclusion of fire" Again this plan lacks specificity. What portions of the SDSF are being restored to oak woodland? ***DNR Response:*** *See map 10 and table 5. We will not "convert additional land to oak savanna or convert oak savanna to nonforest land" during the two-year period of the legislation, nor are there plans to do so through the duration of the planning timeframe (2022).*
	In talking to restoration managers, as to what are the restoration goals are and what process will be used to achieve them (grazing, mechanical, prescribed fires, chemicals) there is often no definitive response. This lack of specificity as to what the final vegetative goal is and the method of achieving it can be concerning to the public. Managers address this by creating very broad goals (5-50% crown cover for oak savanna) and then use adaptive management (we will see if something works and if not we will try something else). This plan does nothing to address the public's concern of specificity to the goals and process of achieving them. ***DNR Response:*** *See map 10 and table 5, which details planned habitat enhancement efforts.*

Unique Submissions	Specific comments
	Now I would like to discuss a concept that occurs throughout the plan that needs further examination. That is the concept of native plant communities (NPC). Now the definition claims they are "a unique plant species composition and structure related to geography, to important ecological processes and linked to abiotic factors." The word "unique" makes it seem like they are definable, separate communities and much of the plan takes this view. The reality is that these NPC's fall on a continuum and the stands are constantly shifting between them. A stand may be a mix of two or more communities as it transitions from one to another. An area may start out as a UPs14 (Southern Dry Savanna) and with a little more tree cover (white pine, oak, red cedar, cherry) and the ground cover associated with the trees it succeeds into a FDs27b (Southern Dry-Mesic White Pine-Oak Woodland). Then the FDs27b has a few more tree introduced and a thicker canopy and it evolves to an FDc34 (Central Dry-Mesic Pine-Hardwood Forest). So we have gone from savanna to woodland to forest. If a major disturbance comes along, and the seed sources are still present, then the NPC would go back down the scale. All the time the climate is changing, the soils are evolving and exotics are introduced, further complicating the process. This gradient of various plant communities is obvious when you do the survey work. You list all of the plants that occur on your plot. You see that the plant of three or four different NPCs. Are present. Then you label it as the NPC that has the most plants represented, even it only "wins" by a couple of plants. This is a fairly subjective process. Another term that is used, I believe erroneously, is "pre-European settlement". Now the DNR really does not mean pre-European settlement because 2000 BC and 600 AD are both pre-European settlement but rather they mean the 1850's. The reason they use 1850's is because they base much of their decision making on Marschener's map. I have already discussed the bias of Marschner and will not revisit that here. Instead of pre-European settlement they should just say -- "we want to recreate the plant communities that were here in 1850". But to say that would point to the folly of it all, for it begs two questions: 1) What is so special about 1850 plant communities that we should spend millions of dollars trying to recreate them? 2) What makes you think you can recreate what was here in 1850 when nothing is the same as it was in 1850? So NPC are much like the successional stages of a forest. In a forest you have the early pioneer stage, the intermediate transitional stage, and the late climax stage. Each stage has different tree species associated with it. Forest managers can move the forest back and forth between these stages by using various forest management techniques. The same can be said about NPC. So the question becomes which forest stage or NPC stage should we be striving for? This comes down to a value decision which is ultimately the same as a political decision. ***DNR Response:*** *The DNR is interested in vegetation patterns before and during early European settlement for the following reasons:* • *Similar climate and vegetation patterns as today (compared to other epochs of time when it may have been colder or warmer, or covered in glaciers)*

Unique Submissions	Specific comments
	• *European settlement was the beginning of major land use changes (farming, pasturing, land division and fragmentation, road building, wetland draining, towns, logging, etc.). With these land use changes, natural areas were altered, sometimes dramatically, in size, plant and animal composition, and landscape connections, function, etc. Despite this, some of the ecosystems, plants, and animals present before European settlement are still present today, though in altered and smaller amounts now.* • *We have vegetation data for the beginning of this time period (bearing trees and line notes from the original land survey; historical accounts from early settlers). These historical vegetation data along with current vegetation, soils, landforms, topography, can give us a good idea of the landscape composition at that time before major land use changes started occurring and can inform natural resource management on state lands. We will never be able to fully manage the full suite of habitat components of the past. However, we know what plants, animals, and ecosystems are rare or in decline and can manage the vegetation to support these rare resources into the future as best we can.* *In reference to forest succession, we know that prairie and savannah NPCs will change to a woodland or forested condition over time if fire (or similar disturbances like insect/disease outbreaks, windthrow, harvesting, etc.) are not maintained. We also see that our dry and dry-mesic forest communities, (Fire dependent and some Mesic Hardwood communities) can become more mesic-looking over time too without fire disturbance. But, generally speaking, one native plant community does not turn into another plant community unless there is major alteration of hydrology or soil. The fire-dependent woodland plant communities in SDSF (FDs37) are not succeeding to other native plant communities per se, but are just FDs37 communities in older growth stages, or are becoming novel plant communities (with white pine ingression). Likewise, the oak savanna communities are "filling-in" with oaks, pines, and other woody species and appear more oak woodland-like. Specifically with the oak savanna communities, we do see that some change into a different native plant community can happen with lack of management over time. However, not all do. In fact, many of the south and west facing dune slopes are still prairies and savannas despite decades of fire-suppression. These slopes are harsh environments for trees to establish but eventually, with time and no management to maintain openness, trees will likely come in from their edges.*

Specific change suggested

Number of submissions that mentioned: 2

DNR paraphrase: Specific wording or map changes suggested for the plan (see comments).
Comments:

Unique Submissions	Specific comments
1	On page 16 of the plan it states: "The remaining dunes support a rich array of native plant communities, some of which are sand specialists that depend on the unique features of the dune

Unique Submissions	Specific comments
	systems." The sand dunes are a landform just like an esker or drumlin. The sand dunes are unique so whatever plant communities became established on them would be unique whether that is a mixed conifer-hardwood forest or an oak savanna. It is the landform that is unique not the vegetation. ***DNR Response**: The dunes in SDSF are indeed a unique geologic feature of the region. However, it would be incorrect to say that the plants found on those dunes are not also unique. Some of the plant species found on SDSF's dune are specially adapted to the loose, droughty soil conditions found there, and are not found growing outside of those conditions. There is an intersect between geological and biological uniqueness on the SDSF dunes.*
	On page 22 the plan states: "Protecting rare features requires the presence of natural processes. Historically, regular fires were an important natural process in oak savannas and associated communities. The natural history of SDSF fire-dependent communities indicates that light surface fires occurred every 10 years on average, and catastrophic fires occurred every 110 years on average. Fire intensities depended on fire frequency and the amount of fuel accumulated between fires. Information on prescribed fire safety procedures can be found in Section III, Part D (Health and Safety Considerations)." It should be Section III Part A. As mentioned during the discussion on page 17 concerning ranges, it is believed that much of the fire that occurred was not natural but rather man-caused. A write up on the oaksavanna.org website says: The Native peoples vastly altered the landscape of the Midwest. One of the most important causes of alteration was the use of fire. It is now well accepted that Native peoples burned the land yearly, primarily in the late fall of the year. Fires were created for a variety of reasons, but an important consequence was that the oak savanna landscape flourished. This would almost have to be the case in order to get the frequency of fire described in the plan (every 10 years over the whole landscape) since natural (lightening) caused fires are fairly rare in Sherburne County. In fact the vast majority of fire suppression (99%) is done on man caused fires. On page 35 of the plan it states: "Habitat management activities include restoring, enhancing, and maintaining SDSF's fire-dependent plant communities using various management activities that mimic historical natural disturbances." And: "These native plant communities have been damaged by the exclusion of natural fire, due to invasion of non-native plants as well as native plants that normally would have succumbed to frequent fires." As previously discussed (pg 17 and 22), many of the historic fire were not natural but rather purposeful, man caused fire. ***DNR Response**: We appreciate this comment and recognize the fact that use of fire by Native peoples contributed to the fire frequency and return intervals across the Midwest, leading to the fire-adapted plant communities that flourished for thousands of years prior to European settlement. Most relevant to this plan is the fact that fire suppression and lack of other regular disturbance have dramatically altered the plant communities of the remaining oak savanna, and such disturbance is a critical consideration for restored savanna. The plan will be edited on p. 23 to refer to the "natural history" (rather than "natural processes") that drove the evolution and establishment of fire-dependent rare species in SDSF.*
	On page 30 of the plan it states: "SDSF is a destination for equestrians, offering many miles of equestrian trails. Currently, the existing mapped equestrian trail through the Uncas Dunes SNA is not consistent with the Commissioner's Designation Order for this SNA (MN DNR 1997). The DNR

Unique Submissions	Specific comments
	will organize and hold a public hearing to consider a change in use at this SNA that would officially allow an equestrian trail to cross the SNA consistent with existing trail use." The 2009 Uncas SNA plan states the following: All motorized vehicles, are prohibited in the SNA except for management purposes and on two recreational trails that cross the SNA. These trails were previously established for snowmobiles, horses and hiking. A regular 33-foot easement will be used, with divergence of the trail from the existing route only when necessary to protect a natural feature or listed plant species. The maps that are part of the 2009 plan show these two trails. In fact when the SNA was set up, in a land exchange with forestry, these two 33' trail corridors were not suppose to be part of the exchange but rather remain as state forest land. That way they would not be bound by SNA restrictions and remain with forestry for management access, fire breaks and recreation activity. So what the DNR should be doing is to change the boundaries of the SNA (if they messed that up years ago) to reflect that these trails should not be part of the SNA. Then you do not need to worry about the Commissioner's Designation Order. ***DNR Response**: The exclusion of a 33-foot wide zone within Uncas Dunes SNA does not match the Commissioner's Designation Order, which established everything within the delineated boundaries as SNA. The 33-foot corridor referenced in the SNA plan is intended as a management allowance, but it is not excluded from the SNA itself.*
	On page 72 of the plan you have a map of bearing tree information. My concern with this map without the qualifiers that I discussed in my comments on page 17, is that this information is often used incorrectly. ***DNR Response**: The Public Land Survey recorded vegetative notes beyond the bearing trees – including meander trees, line trees, note trees, and the trees listed in summary of each mile of line surveyed. All of these records describe a landscape consisting of scattered oak trees, prairie, and some forested wetlands. Pine is occasionally indicated elsewhere in Sherburne County, though not in SDSF, and begins to appear in greater density north of Sherburne county, just south of Milaca. A clarification will be made on p. 17 of the plan to read "Though white pine was found elsewhere in the Anoka Sand Plain, we do not have evidence that these conifers occurred naturally in the SDSF dune communities prior to European Settlement (Map 13). Their presence has resulted in conversion of portions of the site to forests that consist of a mix of large oak trees, pines, tall shrubs, and understory plants adapted to shady environments." A clarifying footnote will be added to Map 13 to read: "This map shows bearing trees chosen during the late 19th century Public Land Survey (PLS). PLS records include bearing trees, meander trees, line trees, note trees, and the trees listed in summary of each mile of line surveyed. These records suggest that the only forests and timber in SDSF occurred either in swamp forests or in the bottoms of the St. Francis River. Most of the area was occupied by brushland or widely spaced trees variously described as openings, oak barrens, scattering of oak, or thickets. Extremely flat portions of SDSF were described as open prairie, including the Craig Prairie as documented on the survey plat and in the Geological and Natural History Survey of Minnesota (ca. 1882)."*
	On page 73 of the plan you have a map of recreation features. You are missing the north trail across the north unit of the Uncas SNA. ***DNR Response:** The trail originating off of 245th Ave. (the 'north trail') and extending through the SNA was a trail segment identified under two management plans. The SNA plan identified this*

Unique Submissions	Specific comments
	trail and another more southerly trail as a trail originally designated for motorized use, including snowmobile use. The recreational management plan, based on the DNR's State Forest Classification Review and trail designation process from 2008, identified this 'north trail' through the trail inventory process but did not designate this trail as part of the Sand Dunes State Forest recreational trail system being managed, in part due to the close proximity of the first (the more southerly trail), which was designated to be managed and maintained. Map 14 shows only the recreational trail system that is managed and maintained by the DNR, which is why the 'north trail' is not included on the map.
	On page 78 of the plan it states: "Species in Greatest Conservation Need and Key Habitats are maintained or enhanced in the subsection." I find this interesting and think it should more accurately read Species of Greatest Conservation Need (SGCN) -- if they are on oak savanna -- will be maintained or enhanced. I say this because of Eco's myopic focus on savannas. During our SAG meetings everyone who talked about SGCN referenced them to savannas. Throughout this plan there is barely a mention of any other habitats that support SGCN. Even just looking at the bibliography of this plan tells the same story -- we are really only concerned about SGCN that occur in savannas. The saying, when all you have is a hammer, everything looks like a nail applies here. We are told there are excellent examples of oak savanna sites on old fields, sand borrow pits, pasture lands, old dump sites. I recall during a certification audit while standing in a white pine plantation that once had been a pasture, we were discussing High Conservation Value Forest sites and the need to enhance savanna habitats. One of the auditors looked us and said, "Well you don't mean this site do you." He was told by Eco Services that yes they did believe that site met the HCVF criteria for savanna. The ASP Profile showed SGCN of the following habitat types: Upland Deciduous Forest (Aspen/Oak) 22 SGCN, Forest -- Upland Coniferous 22 SGCN, Savanna 30 SGCN ***DNR Response**: All SGCN species that are presently found in SDSF are listed in Appendix B, including any forest or wetland dependant species. While there are some SGCNs in SDSF that depend on forests, none of these are conifer forest specialists. For example, the red-shouldered hawk is dependent on mature oak stands.*
	The proposed Final Harvest (clearcut) of 236 acres of oak woodland within DNR identified High Conservation Value Forest will adversely affect those features DNR identified as having High Conservation Value. [...] A suggested alternative is to limit final oak-stand harvest to patches 10 acres or smaller, and leave at least 660' buffer between neighboring patches. ***DNR Response**: DNR will be field-evaluating this site and having interdisciplinary review before deciding on a treatment regime. There are concerns with red shouldered hawks, oak wilt, and aging oak that need further consideration. Patch cuts will certainly be considered. A clarification about DNR's stand examination process will be added to p. 26 under " Vegetation Management Activities in SDSF: 2013-2022".*
2	Site A on Map 10: Modify boundary to encompass the entire area of oak savanna that was treated via a commercial timber sale in the last 36 months to avoid further fragmentation within the site by burn breaks, etc. The entire area should be evaluated for site maintenance and treated to control invasive species and enhance habitat for Species in Greatest Conservation Need.

Unique Submissions	Specific comments
	***DNR Response**: The site treatment boundary has been reduced from the size of the recent timber sale to focus on the area of highest concern and most in need of follow-up treatment. Evaluation of the site will be on-going and other treatments may be considered in the future.*
	Identify the Horse Campground as an area requiring maintenance action to enhance habitat (i.e., invasive species control, reseed with native grasses and forbs) and to improve aesthetics. In addition to a popular recreational destination, this area is home to several Species in Greatest Conservation Need that may benefit from habitat enhancement. ***DNR Response**: The Horse Campground features rustic camping for individual and group campsites, which is the initial function of facility. Maintenance activities within the Horse Camp include vegetation management efforts that focus on control work for invasive plants, noxious weeds, and non-native tree species, as needed or where deemed necessary. Habitat enhancement opportunities are considered as opportunities arise and resources are available, to further support the rare species in the area and improve aesthetics. This focus is outside the 10-year plan described here. The Minnesota State Parks and Trails System Plan also guides the DNR in how to best invest in resource improvements and provide quality recreation opportunities.*

Unanswered questions

Number of submissions that mentioned: 1

DNR paraphrase: Questions that have not been answered by the plan (see comments).

Comments:

Unique Submissions	Specific comments
1	On page 14 of the plan it states: "However, this plan is intended to broadly guide resource and management decisions for SDSF; site-specific management will be determined by annual management planning processes, after staff are able to thoroughly assess the sites and complete site-specific stakeholder coordination." What does "complete site specific stakeholder coordination" mean? ***DNR Response**: Forested stands are selected for evaluation and possible treatment (harvest) based on certain criteria (age, basal area, etc.) and our forest inventory data. Staff visit the stands before deciding on the actual treatment. After these visits, DNR staff will engage with stakeholders about treatment options via annual meetings and communicate with adjacent landowners about visual impact considerations prior to harvests. A clarification will be added to p. 14.*
	On page 26 of the plan it states: "These areas were or will be actively managed with appropriate techniques including timber harvest, prescribed burning, invasive species control, and other restoration practices. Management of the Uncas Dunes SNA units will continue to follow the Uncas Dunes SNA Management Plan (MNDNR 2009)." I have looked on line and not been able to see a copy of the 2009 plan, or any of the previous plans for that matter. Are they available on line?

Unique Submissions	Specific comments
	***DNR Response**: The Uncas Dunes SNA plan is not currently available online; it could be made available to members of the public upon request, after being examined for non-public data.*
	On page 27 of the plan it states: "Monitoring efforts will build upon rare species research in SDSF that has been ongoing since 2008 (Harper et al. 2010; Hoagland, Smith, and Texler 2012). We will continue to gather information before and after habitat enhancement work to be able to assess the impact of management. The adaptive management approach used in SDSF will allow lessons from early habitat enhancement efforts to be applied to any future enhancement efforts in SDSF's High Conservation Value Forest (HCVF), and will be applicable to habitats hosting our focal species statewide." Presumably part of this assessment and adaptive management process would be a cost benefit analysis of the various enhancement techniques. I have requested any documents that would give some indication of the costs of these practices and what did they achieve. I have yet to see any of those figures. How does that public get information concerning the costs of these enhancement practices? Hopefully it is more than dollars spent but is tied to some achievement. I know in the case of forestry practices, the cost are documented in the computer modules that they use to track accomplishments. I have not seen that level of transparency in the habitat enhancement work. They have been doing this for decades; certainly there is a track record and some information that could be shared with the public concerning cost/benefits. ***DNR Response**: The public can perform a data practices request (http://www.dnr.state.mn.us/aboutdnr/dataaccess/index.html) to gain any existing publically-available data from the DNR. It is possible that the data summaries the commenter mentions do no currently exist. Alternatively, they can review reports submitted to the Legislative-Citizen Commission on Minnesota Resources (LCCMR) and the Lessard-Sams Outdoor Heritage Council (LSOHC) relative to habitat enhancement projects.*
	On page 35 of the plan it states: "Importantly: the safety of firefighters and the public is the number one priority when planning and implementing a prescribed burn project." I know that the DNR has to say this but if the safety of the public was the number one priority there would not be any prescribed burning because there are inherent dangers with burning. This is coming from someone who has spent 35 years on wildland fire and who was a prescribed burn boss. There are parts of the state where there is an acceptable margin of error for prescribed burning but the SDSF is not one those. In and around the SDSF the fuels are too volatile and the private property is too close and numerous. Bad things will happen, as they have on the refuge. (This is especially true of running fires. Pile burning during wet conditions or snow cover are far less problematic but even these have to be watched.) The plan says that they want to "mimic historic natural disturbance". No burn boss in their right mind would light a prescribed burn under the conditions that would mimic fires of 200 years ago. There have been two prescribed burns, that I am aware of, in the past 5 years in the North Uncas Unit. Both of them had average flame lengths of one foot or less. Certainly this would not have come close to mimicking historic fires. Why would a burn boss light a prescribed burn in such cool, damp conditions? Because the burn bosses were probably aware of the extreme

Unique Submissions	Specific comments
	problems an escaped fire would cause and did not want to take the chance. It is hard for me to believe these wimpy burns actually had any positive habitat enhancement effect. I have requested the preburn habitat survey, the post burn habitat survey and the cost of conducting the burns but have been unable to acquire that information. As a taxpayer I am interested in knowing that my tax dollars are being spent efficiently. ***DNR Response**: The public can perform a data practices request (http://www.dnr.state.mn.us/aboutdnr/dataaccess/index.html) to gain any existing publically-available data from the DNR. It is possible that the data summaries the commenter mentions do no currently exist.*
	On page 38 of the plan it states: "The habitat enhancement prescriptions in this operational plan focus on oak savanna and oak woodland native plant communities. A summary table comparing and contrasting the desired characteristics of oak savanna and oak woodland native plant communities can be found below (Table 2). More detailed information and species lists can be found in the Native Plant Communities of Minnesota Field Guide (MN DNR 2005)." When I worked for the DNR we did native plant community (NPC) transects in the SDSF to look at plants and determine the NPC. I did some of these plots myself but generally I was overseeing interns that did the field work. The NPC that we got most often in the SDSF was FDs37 (southern dry oak (maple) mesic woodlands). At times, with the presence of pipsissewa, red cedar, low bush cranberry and white pine that had not been planted, the NPC would border on FDs27 (southern dry mesic pine-oak woodland). Interestingly in these same stands, presumably using the same methods, there are people getting a NPC of UPs14 (southern dry savanna) as well as other prairie and savanna NPC. Now when we did it we chose our plot starting point and transect direction objectively (random) within the stand. One explanation for the difference between what we got and what other people are getting, would be if someone started their plot subjectively which means that they chose a specific place to start the plot. The concern I would have about subjectively choosing the starting spot would be the potential for bias in that the person may choose the spot that would give them the outcome they desired. I would like to see more information on how the DNR came up with the NPC they did. I would also like links to the NPC survey field sheet showing the location of the plots and the plant list associated with that plot. ***DNR Response**: In reference to NPC data, there have been several efforts to classify native plant communities:* • *The Minnesota Biological Survey has conducted field surveys since the 1990s. You can obtain their data by contacting Dan Wovcha (Daniel.wovcha@state.mn.us).* • *Starting in 2007, staff from the Division of Forestry have collected NPC data at Sand Dunes State Forest. From our records, there are 9 completed NPC worksheets. Staff in the Division of Forestry are varied in their experience in conducting NPC classifications and also botanical knowledge, thus accuracy of these datasheets can vary also. To obtain these datasheets, contact Dan Hanson (dan.hanson@state.mn.us).* • *In July and August of 2015, DNR staff began field sampling for mapping project of the SDSF for purposes of defining where upland prairie ecological systems ("UP"; which include both savanna and prairie NPCs, mostly UPs14 and UPs13) and fire*

Unique Submissions	Specific comments
	dependent woodland ecological systems ("FD"; which include any dry to dry-mesic forest or woodland, mostly FDs37) occur within SDSF. For these data, contact Michelle Martin (michelle.martin@state.mn.us). *In terms of NPC sampling approach, we ask staff to be "subjective". This is because native plant communities do not occur randomly on the landscape. Landforms, soils, slope, aspect, depth to water table, adjacent NPCs, and composition of the larger landscape's NPCs, and past and current land use can all dictate where NPCs occur. With random plot placement, accuracy problems are likely to occur when classifying sites using the Field Guides to the Native Plant Communities of Minnesota. The MNDNR's Releve Handbook (http://files.dnr.state.mn.us/eco/mcbs/releve/releve_singlepage.pdf) discusses subjective and objective sampling (see pages 2-6).* *Additionally, in the Field Guides to the Native Plant Communities, we instruct people to be subjective about plot placement: "Select a uniform and representative area in the community you are classifying. In general, an area of at least 66 x 66 feet (20 x 20 meters) for wooded communities and 33 x 33 feet (10 x 10 meters) for open communities should contain most of the indicator plants listed in the key" (Eastern Broadleaf Forest Province Field Guide, p. 10).* *Likewise, specific directions for filling out a NPC datasheet for the MNDNR Division of Forestry state something similar (an excerpt from the worksheet instructions):* • *"Use an air photo and relevant maps, pre-delineate your site into polygons that are likely to be different plant communities. For example, a forest stand or group of stands might have several combinations of cover-types, slope positions, tree heights, etc. that could indicate different communities. In theory, a worksheet could be completed for each of these combinations. In practice, some of these polygons will obviously be the same plant community when seen on the ground and some will prove to be minor inclusions. Focus on the main community or two that will be affected by management or focus on the communities that you want to document.* • *When you get to the site determine a path that will take you through all likely community types. For a typical 20 to 40 acre stand, one can usually walk this course to the far end of a stand to get a feeling for the variety of communities that occur in the stand. At that time, decide which communities to sample and where you want to sample them as you re-trace your steps.* • *A worksheet should be filled out for each sample location. If more than one NPC occurs in a stand, do a worksheet for each one. A sample should consist of a four-chain transect or an area of about 400 square meters. "Flagging out" a transect by putting flags at one-chain intervals before starting can help you to concentrate on searching for indicator plants rather than pacing."*
	On page 12 of the plan it quotes the legislation and states: "(1) not convert additional land to oak savanna or convert oak savanna to non-forest land unless it is done as a result of a contract entered into before the effective date of this section;" Is there a map or shape file of the areas that were under contract before the effective date of the legislation?

Unique Submissions	Specific comments
	***DNR Response**: As indicated in Table 1 on p. 26, there are no plans to convert additional land to oak savanna or convert oak savanna to non-forest land during the timeframe of this plan; no contracts for this currently exist.*
	On page 62 of the plan it shows the proposed thinning for 2017 -- 2022 Some questions concerning these: 1) Stand 320 is a jack pine stand north of 233rd. It shows that as a thinning. It is unusual to thin JP. What is the plan here and why? ***DNR response:** See response to Site L.* 2) Stand 414 by Carr's and Volhaber's is a oak stand that is almost 100 years old. Inventory shows that it is high risk. Is the plan to thin it? ***DNR response:** The original prescription in the Anoka Sand Plain SFRMP was to clearcut this stand along with the adjacent stand 358. At the stakeholders advisory group meetings DNR has agreed to thin these stands rather than apply a rotation-aged harvest at this time.* 3) Stand 329 is on trust land and is approaching 60 years old. Would it make sense to regenerate half of it instead of thinning it and then in 15 years regenerate the other half in order to lessen the visual impact? I believe there were some pockets of pine mortality in this stand. ***DNR response:** Stand 329 was selected for thinning in the original Anoka Sand Plain SFRMP due to criteria in effect at that time. Since then some criteria have been adapted (IE the rotation age of plantation red pine on School Trust land). This stand will be field evaluated and a treatment will be determined. Decisions on treatment will be presented in annual meetings as stated on page 42 and 43 of the draft Operational Plan.* 4) In the old plan white pine rotation age was 150 years. Is that still the plan on forestry land? School Trust land? ***DNR response:** The only change to rotation ages is for plantation red pine on School Trust land. The Anoka Sand Plain SFRMP states that white pine will be managed as an uneven-aged covertype and therefore doesn't have a rotation age. (Table 3.9 in ASP SFRMP)*
	On page 63 of the plan it shows the rotation age harvest for 2017 - 2022 Some questions concerning these: 1) Will the visual impact zones, as described in the MFRC guidelines, be established before these are harvested? How will the harvest reflect the guideline recommendations? ***DNR response**: It's unknown at this time whether visual management zones will be established before some sites are harvested. Visual impacts will be taken into account regardless. For example, DNR has committed to treat stands 30 and 54 in 2-3 blocks rather than removing the timber in one operation.* 2) Will the Silviculture Prescription Worksheets for these stands be available for public review so the public can see the management plan for these stands? Will the oak in

Unique Submissions	Specific comments
	Sections 16 & 36 be regenerated to mixed oak/pine stands? Will the oak in section 25 be regenerate to mixed oak/pine? ***DNR Response**: The silviculture prescription worksheets have been replaced by the Stand Exam Layer which captures similar information. Stand Exam Layer information would be available by request. Also, the management for the upcoming year will be shared at annual meetings. The specific regeneration methods and species will be determined after field visiting the stands and interdisciplinary review.*
	On pages 66-69 of the plan is a map and proposed actions for habitat enhancement the following comments pertain to the site letters: Site L -- This is regenerating jack pine stand that has white pine regeneration scattered amongst it as well as scattered mature oak. The plan to thin jack pine is curious and I would be interested in hearing what the long term plan for this is. ***DNR Response**: The initial prescription for this site was to remove the jack pine and reserve all hardwoods, thinning the stand. Previous foresters have indicated that jack pine does not grow very well in SDSF. DNR will be field-evaluating this site and having interdisciplinary review before deciding on a treatment regime.*
	On page 76 and 77 of the plan you have maps showing the forest inventory. A question I had was how up to date is the stand information in ForestView? There is a lot of 15+ year old data on the site and I know we have done alterations since then. The inventory map shows a 460 acre upland grass type that makes up most of the Uncas SNA. The casual observer may think this is accurate but in fact there is probably less than 40 acres of upland grass on the SNA. This was typed this way for two reasons: 1) we wanted to be able to visually pick out the SNA on inventory maps as the one solid block. 2) we did not want the timber species and volumes in the SNA skewing our planned cut numbers because there was no guarantee that they were going to be cut, or if cut that the acreage would stay in that covertype. The SNA is made up of oak forest, oak regeneration, conifer regeneration, brushland, conifer forest, mixed stands, etc. At some point it would be good to get an accurate covertype map of the area. Hopefully this would be included in the SNA appendix to this plan. ***DNR Response**: The forest inventory data in ForestView was last updated in 2013. ForestView is an old application that is due for an upgrade. Under the "Stand Attributes" column the "year of inventory" is listed. Field staff are continuously updating our forest inventory data. The maps in our Operational Plan for Management of Sand Dunes State Forest 2013-2022 use our latest forest inventory data which may not be reflected in the ForestView application.*

Definitions/glossary

Number of submissions that mentioned: 1

DNR paraphrase: Clarify certain definitions of terms used in the plan (see comments).
Comments:

Unique Submissions	Specific comments
1	They even seem to even struggle with a defining oak savanna with the following: oak savanna: A type of savanna, or lightly forested grassland, where oaks are the dominant trees. Typically 5% to 50% crown closure, these savannas were maintained historically through wildfires set by lightning or humans, grazing, low precipitation, and/or poor soil. So that would mean pasture lands with remnant, scattered oak would qualify. ***DNR Response**: In order to be consistent with the Native Plant Community Field Guide, the definition of oak savanna will be clarified in the glossary to note that tree canopy cover in oak savannas is "10-70% (typically 25-50%)" rather than "5-50%". This combines the definition of "savanna" in the NPC field guide glossary with the specifics listed for tree cover in the UPs14 "Southern Dry Savanna" description. In places where the target for oak savanna is noted, a somewhat narrower range of 10-50% will be used. This is because currently in many places, the tree and shrub layers in oak savannas have become overgrown due to fire exclusion, the planting of pines and other tree and shrub species, and the spread of non-native invasive shrubs. The restoration of a more open canopy will allow the return and expansion of native oak savanna plant and animal species needing more sunlight.*
	On page 50 of the plan it states: "adaptive management: A decision process that promotes flexible decision making in the face of uncertainty or changing conditions, and allows for adaptation as the effect of management actions and outcomes become better understood. Monitoring of conservation actions and outcomes is a key component of adaptive management." I would add the word "and limitations" after the word outcomes. Another key component of adaptive management would be societal/political expectations. Some management action (prescribed burn, chemical use) may work to achieve a goal but the societal concerns may not allow them which would require adaptation to different techniques. Certainly this new plan is an adaptation from the previous plan. ***DNR Response**: DNR agrees that "adaptive management" includes evaluating management actions that result in success and/or failure and monitoring social/political acceptance. DNR feels the statement "…promotes flexible decision making in the face of uncertainty or changing conditions…" covers the points the commenter raises.*
	On page 50 of the plan it states: "conifer: A tree that bears cones and evergreen needlelike or scale-like leaves. Conifers present in SDSF include red (Norway) pine, white pine, jack pine, scotch pine, white spruce and redcedar." You could also include Norway spruce, larch and white cedar. ***DNR Response**: DNR acknowledges that the additional listed conifers occur in SDSF and will make the change to the plan.*

Typo/error

Number of submissions that mentioned: 1

DNR paraphrase: A few errors need to be corrected (see comments).
DNR response:

Comments:

Unique Submissions	Specific comments
1	p. 23 Information on prescribed fire safety procedures can be found in Section III, Part D (Health and Safety Considerations)." It should be Section III Part A. ***DNR Response**: The typo will be fixed.*
	On page 7 the plan says: "SDSF has valuable timber resources in its red pine, white pine, and oak woodlands that will be managed, thinned, and harvested according to best management practices, including those described in the Minnesota Forest Resources Council Forest Management Guidelines (MFRC 2005)." I believe there is a 2012 revision of these guidelines that is in effect. ***DNR Response**: The typo will be fixed.*

Other

Number of submissions that mentioned: 4

DNR paraphrase: General comments about the plan.
DNR response: n/a

Comments:

Unique Submissions	Specific comments
1	Thank for the detailed descriptions here of the plant communities, and the climate change context.
2	Be sure to follow your procedures.
3	I want the old plan back.
4	This is overall a well balanced plan that has taken into consideration many, and oftentimes opposing, viewpoints. I appreciate the DNR's and the public's efforts in formulating this plan, and believe that it is the best path forward for Sand Dunes State Forest.