

Sand Dunes State Forest Stakeholder Advisory Group – Meeting 3

Meeting Summary and Notes

Date: August 29, 2016, 6pm-9pm

Location: Lions Park Center; 1104 Lions Park Drive, Elk River, MN 55330

The meeting agenda can be found in Appendix A.

Attendees included:

- 22 stakeholder advisory group members, which included one DNR staff member assigned to the group and two State Representatives – Representatives Erickson and Newberger.
- 11 audience members
- 9 other DNR staff, 1 facilitator from MN Management & Budget

The Stakeholder Advisory Group introduced themselves, sharing one key take-home message for them from the last meeting, such as realizing the diversity of opinions around how the forest should be managed and the intense feelings and deep connection that many have for the Sand Dunes. Other attendees and DNR staff in the room introduced themselves as well.

Project planners provided a brief overview of the purpose of the stakeholder advisory group, and discussed a few logistics (new binders, new website for the project). Then John Korzeniowski, project manager, reported back on feedback from the previous meeting. He clarified a few misunderstandings, and then provided examples of suggestions received from attendees and how the DNR would respond. He gave examples of: 1) suggestions the DNR was able to act on, 2) suggestions that required more discussion before decisions could be made, and 3) suggestions the DNR wasn't able to act on (Appendix D). He also provided an overview of planned management activities in the SDSF over the next few months. Attendees asked questions and discussed the DNR responses.

The main topic for the meeting was recreational opportunities in the Sand Dunes. Division of Parks and Trails staff (Rich Bruns, Tim Edgeton, Virginia Loso) provided an overview of opportunities and activities overseen by Parks and Trails, such as camping, horse camping, and maintenance of 29 miles of recreational trails. They also provided an overview of the Resource Program's plan for tree management in the Ann Lake campground. Following these presentations, Jami Markle from the Div. of Fish and Wildlife provided an overview of hunting opportunities in the SDSF, and Liz Harper from the Div. of Ecological and Water Resources provided an overview of recreational opportunities in the Uncas Dunes Scientific and Natural Area. Finally, Ron Denn of the Minnesota Trail Riders Association and Dean Thompson of the Minnesota United Snowmobilers Association provided their perspectives as trail users in SDSF.

Presentations were followed by individual reflections and small-group discussions on the questions provided. Afterwards, the large group came together to discuss challenges and emerging opportunities for recreation in the SDSF (see summary below and detailed feedback in Appendices B and C). The meeting ended with closing remarks from Director of the Division of Forestry, Forrest Boe.

Summary of Participant Responses and Small Group Ideas

Individuals and the small groups offered a wide range of ideas in response to the discussion questions. Their detailed responses are compiled in Appendices B and C. What follows here is a summary of all the responses:

Recreational activities that attendees and other people they know participate in at SDSF:

- Hiking/walking
- Wildlife viewing and nature observation
- Hunting (e.g. deer, grouse)
- Horseback riding and other equine use/horse camping
- Snowmobiling
- Swimming
- Birdwatching
- Wildlife and nature photography
- Camping
- Cross-country skiing
- Fishing
- Citizen science
- Riding bikes
- Canoeing/kayaking
- Picnics and Bob Dunn
- 'Herping' (searching for amphibians and reptiles)
- Dog walking
- Dog sledding
- Shooting practice
- Picking raspberries
- Enjoying the view from the backyard

Attendees were asked to rate their recreational experiences within SDSF. Attendee average ratings, on a scale of 1-7, with 1 being poor, 4 being okay, and 7 being excellent were: Mean = 5.63; Mode = 6

Summary of reasons why attendees chose their rating:

Positive:

- Beautiful, peaceful nature/forest experience
- Abundance of wildlife
- Rustic and wild
- Diverse scenery
- Away from the city
- Excellent, diverse trails; well-kept riding areas; one-way trails
- "Up north" experience without the travel
- Rare area near metro with oak savanna plant and dune communities
- Can do many of the activities you enjoy

Negative:

- Too much trash
- Hard to walk on trails post-harvest
- Fewer wildlife sightings post-harvest
- Better grooming needed
- Open areas are boring
- Beautiful forest, but crowded, almost urban
- More shade trees needed in the horse camp
- Unable to find trail maps easily, or identify where one is allowed to hike
- Experience could be improved with more conversion of pine forest to oak savanna as planned
- Horses should be kept out of the SNA (due to erosion, invasive species spread)
- Physical limitations make accessing SDSF recreation difficult
- That it is illegal to make a trail
- High firearm hunter density during season, low deer number
- Off road vehicles are being used on restricted roads
- Target shooting

Suggestions for the DNR to improve high quality recreation in the SDSF:

- Post the rules in more areas
- Directional signs along walking trails
- Improve walking trails - Assist user groups/"friends" groups/volunteers in working together to improve trails, clear litter
- Manage poison ivy along trails
- Remove 50% of slash to make hunting/walking easier
- Don't clearcut
- Keep the pine trees to look at
- Keep the trees – don't convert to prairie – keep forest as forest
- Keep pines in the campground
- Implement plans to expand/enhance oak savanna plant and dune communities, in order to expand rare species habitat
- Prepare landscape for impacts of climate change
- Penalize those who abuse recreational privileges in SDSF
- Enforce rules of SNA (i.e. no horses, motorized vehicles, target shooting)
- Improve gates/barriers to stop illegal ORV use
- Stop hiking on non-designated trails
- More DNR staff in the SDSF
- Don't let "rider" groups be dominant
- Restrict horses to trails only, and restrict in areas with rare species, to reduce invasive species/erosion
- Ask horse riders to dispose of manure
- DNR should be minimally involved in managing SDSF
- No change needed – recreation is already high-quality – sustain it

Other thoughts on recreation in the SDSF:

Challenges:

- Trash and vandalism – how to reduce?
- Enforcement of rules in the SDSF – who does it?
- No input from campground users about shift from pine to oak
- Keeping trees for recreation and income – making sure there is a forest here
- Hard to understand what the changes will actually look like (e.g. pine removal in campground)
- How will improvements/management be paid for?
- Concern that outdoor recreation is not as important to legislators as it used to be
- Relationship between horses and invasive species – horse riders and DNR need to work together on this
- Timing of forest recreation work and recreation – should not clash (e.g. harvesting right before deer opener)
- Concern about impacts of pesticides on water quality/aquifer; how will pesticides be used? Broadcast or painted on?
- Scheduling of upcoming controlled burns – need to inform locals and manage timing
- Concerns about deer population/hunting in oak savanna ecosystem

Opportunities

- Consider how to attract more wildlife observers – e.g., wildlife lists on hikes
- More interpretive signage about rare habitat and species
- More signs about rules – no garbage dumping, horses/ORV users in SNA
- More signage for safety of trail users
- Equine winter trail riding
- Engage youth – youth corps, Scouts/schools ‘adopt’ SDSF, demonstrations, ‘forest in the classroom’ (like ‘ag in the classroom’)
- Work with County trail plan, Big Lake to SNWR; connect north and south units with a bridge over the St. Francis river
- Educate people about methods of forest production/replanting
- Open the horse campground earlier/later in spring/fall – no bugs
- Recreational opportunities close to home
- Doing things more for the appreciation of nature
- Horse camp could become ‘destination location’ for out-of-state users
- Can DNR purchase 40 acres next to horse camp?
- Wildlife viewers/photographers can stimulate local economy
- Geo-cache opportunities; other opportunities like Pokemon Go
- Protection of a variety of rare species
- Boat landing on Ann Lake for canoe/kayak use
- “Fat bikes”
- Manage forest after clearcut so it can ‘blossom’ to area people can enjoy

Appendix A: Meeting Agenda

SAND DUNES STATE FOREST – STAKEHOLDER ADVISORY GROUP MEETING AGENDA

August 29, 2016

Lions Park Center
1104 Lions Park Drive
Elk River, MN 55330

5:30 Doors Open

6:00 Welcome and Introductions

6:15 DNR Report Back – What we heard at last meeting

6:45 Main Discussion Topic: Recreation Opportunities in the Sand Dunes SF

7:30 Break

7:45 Resume Discussion Topic

8:30 Topics/themes for upcoming SAG meetings

8:40 Re-cap of meeting, closing remarks

9:00 Adjourn

9:30 Doors Close

Appendix B: Compilation of large and small group feedback (flipchart)

Key Points from July meeting:

- Diversity in the use of the forest
- Monitoring Legislative Auditor recommendations
- Creation of buffer areas
- The diverse opinions on what to do with the forest
- How diverse the state forest is
- DNR's desire to keep the forest versus other options – which is it? Unclear.
- People care about the forest
- The value and need for good communication and education of the people
- Borders of the forest
- The need to clarify terms, definitions (e.g. 'biodiversity', 'clear-cutting')
- There is not agreement on a variety of ideas on what to do with/in the forest
- Intense feeling involved with the forest
- When trees are cut, new trees are planted right away
- Ann Lake area; whether to cut the trees
- Limited clarity in what needs/can be done
- Neither side is happy and there needs to be compromise on steps to take
- The value of aesthetics of the forest
- We are having difficulty now and we have not really hit the areas of major concern
- The small group conversations have been valuable, many opinions to understand
- Deep connection with the forest and sustainability
- This is a work in progress, how we come to a resolution
- Sharing of information, especially what will happen with the forest
- How the change will impact wildlife in the forest

What are essential challenges/emerging opportunities for recreation in the SDSF?

Challenges:

- Reducing the incidences of vandalism and trash caused by people recreating in the forest
- Enforcement of rules as more people use the forest for a variety of purposes
- Ability to keep the trees for: 1) recreational use/purpose, and 2) for income from sale of timber
- It is hard to understand what change will look like in the forest
- Where will the money come from for improvements?
- Signs for safety of horseback riders and snowmobilers
- Concerns with removal of pines in camping area, what will it look like?
- Better understand whether the campers want changes to the camping area, use of survey to determine
- Enforcement of existing and new rules, who does?
- Better signage for education purposes in the forest, people can learn as they hike, camp, etc.
- Not a top priority for policy makers/legislators; hunting, fishing, camping are not as important as they used to be

- Management of exotic species; horse riders work with DNR to better manage bring in exotic species to forest
- The timing of forest work/cutting with recreation activities so they do not clash with each other
- What impact will use of chemicals (insecticides, herbicides) in the forest have on water/aquafer?
- With changes coming, how to manage forest user expectations. Survey of users to determine
- Getting more youth interested/involved in using, valuing the state forest
- Scheduling of controlled burns for 2016/2017, inform, manage, timing

Opportunities:

- Recreation opportunities close to home
- Doing things for the appreciation of nature
- Tie in with the Sherburne Trail
- Option to connect upper and lower trail
- There is 40 acres next to horse camp, will DNR purchase for recreation use
- The horse camp is a destination for out of state users; brings in out of state money to area
- Local economy is stimulated by those coming to the forest for birding, camping, and herping
- Education and interpreting signs in the forest to educate visitors; signage for education
- Geo-cash potential
- Protection of a variety of rare species
- Winter use for horses
- Photography of rare species, economic value
- Potential to extend the season in campground in both spring and fall; destination camping area in these shoulder times
- “Forest in the class room” option; help education youth on the value of the forest; boy scouts and girl scouts
- Better user experience, use of trail markers
- Boat landing on Ann Lake for canoes and kayaks
- Option for “fat tire” bikes on trails, more people to the forest, more money in local economy
- Ability to manage the forest after clear cut, have it “blossom” to an area where more people can enjoy and walk through the forest.

Appendix C Discussion Questions and Responses - Full Version

DNR asked each individual advisor to respond in writing to discussion questions provided on a handout. What follows is a transcription of all the responses we received. We also gave audience members an opportunity to share their thoughts, and their comments are presented as well.

Q1: What recreation activities do you, and others you know, participate in within the Sand Dunes State Forest?

Stakeholder Advisory Group + State Representatives:

Comment 1:

- Have used the day use area to take my nephews swimming.
- Planning to herp' the SNA and hike as well and am very excited about spending additional time in this beautiful area!

Comment 2:

- Hiking
- Wildlife viewing/photography
- Hunting
- Others: Horse

Comment 3:

- Snowmobiling
- Hiking
- Hunting
- Horseback Riding

Comment 4:

- Hiking
- Bird watching
- Wildlife viewing

Comment 5:

- Camping
- Equine use
- Hiking
- Swimming

Comment 6:

- Walking
- Horseback riding
- Snowmobile

Comment 7:

- Walking on trails
- Deer hunting

Comment 8:

- Snowmobiling
- Hiking
- Sitting in the backyard, drinking a beer and looking at the pine trees
- Seeing wildlife in the backyard coming from the forest

Comment 9:

- Watching deer, birds, turkeys walking on the trails

Comment 10:

- Snowmobile
- Hike
- Wildlife observation

Comment 11:

- Walking
- Swimming when my kids were small
- Riding bike
- canoing

Comment 12:

- hiking
- watching animals

Comment 13:

- hiking

Comment 14:

- Trails
- Nature observation
- Picnics at Dunn

Comment 15:

- Snowmobiling
- Hunting
- Dog sledding
- Shooting practice
- Bird watching
- fishing

Comment 16:

- Nature observation
- Bird watching
- Photography
- Cross-country skiing

Comment 17:

- walking

Comment 18:

- ski
- hike
- hunt

Comment 19:

- horse riding
- walking
- hunting
- horse camp
- fishing Ann Lake

Audience:

Comment 1:

- Hiking
- Snowmobiling...it's been a few years due to snow conditions

Comment 2 [Tim Johnson]:

- Walking, wildflower observation, birding

Comment 3:

- At one time grouse hunting
- Forest observation by IWLA on small area of planted white pines supposedly (hopefully) immune to blister rust. This was about 20-25 years ago.

Comment 4:

- Walking, photography, nature observation

Comment 5:

- Hiking, birdwatching

Comment 6:

- Wildlife, birdwatching

Comment 7:

- Walking dogs, walking, tracking species populations diets, bird watching, hiking, camping, hunting, canoe, kayak

Comment 8:

- Trail riding
- Dog walking
- Maybe hunting in the future

Comment 9:

- Horse riding and camping
- hiking

Comment 10:

- Hunting

Comment 11:

- 5; I don't hunt.

Comment 12:

- 6; SDSF as it exists today provides the same experience that most people travel "up north" to experience – woods.

Comment 13:

- There is always room for improvement

Comment 14:

- 5; My other forest is Rum River in Mille Lacs County and it is not nearly as interesting or controversial

Comment 15:

- 7; All of the activities I love to do and share with others, I can do on my own property or adjacent to it on the Sand Dunes

Comment 16:

- 6; One of the few areas in the central state near metro with oak savanna plant and dune community

Comment 17:

- 5; it is a beautiful forest but pretty crowded and almost urban

Comment 18:

- 7

Comment 19:

- 6; horse camp needs more shade trees for the horses especially during bug season. We like the camp and use it.

Audience:

Mean: 5.19; Mode: 5

Comment 1:

- 3; Overall – sad to see so much trash/litter in the Ann Lake day use Area. Hiking – not able to find trail maps easily – not clear on where it's permissible to hike. 6; snowmobiling – great trails can get there from home in Elk River.

Comment 2:

- 5; Experience could be improved with more conversion of pine forests to oak savannah as planned. Would be good to keep horses out of SNA to prevent erosion and exotic plant introduction.

Comment 3:

- Have not been here for years

Comment 4:

- 5; no fault of the Sand Dunes. Due to back surgery things are not as accessible

Comment 5:

- 7; it's rustic, wild

Comment 6:

- 4; Clearing the land has adversely affected my experience. The volume and frequency of wildlife siting. The slash has made it almost unwalkable – and that it is illegal to make a trail.

Comment 7:

- 6; Nice views of the different trees in the fall. Well-kept riding areas.

Comment 8:

- 6; because of all the off trails to ride horses and hike

Comment 9:

- 4; Hunter density high during deer gun season and low deer number
- off road vehicle use on restricted roads and target shooting

Q3: What would you suggest the DNR do to sustain and improve high quality recreation in the Sand Dunes State Forest?

Stakeholder Advisory Group + State Representatives:

Comment 1:

- Manage the poison ivy along trail edges especially because of children. It was pretty abundant along trails near beach.

Comment 2:

- Rule should be posted in more areas
- Gates and barriers improved to stop illegal offroad vehicle traffic.
- Prevent loggers from staggling(?) in high-quality habitat

Comment 3:

- Assist different user group in working together to improve trails

Comment 4:

- Maintain that only on trails are horses allowed, to reduce invasive species to localized areas.

Comment 5:

- Listen to the ideas and needs of users

Comment 6:

- People come to the forest for its beauty and adventure. Don't clearcut.

Comment 7:

- Keep some slash to help to protect small animals, but remove the other 50%, so there is more ease for people to hunt and walk through there.

Comment 8:

- Keep the pines to look at

Comment 9:

- Leave it as it is. Keep the trees.

Comment 10:

- Scrap the plan to convert to prairie.

Comment 11:

- Better walking trails, and put up some signs, so we don't get lost.
- Drive slow around horses.

Comment 12:

- Continue to maintain the forest as a forest.

Comment 13:

- NA

Comment 14:

- Nothing!

Comment 15:

- Stiff penalties to those who abuse the privileges of using or damaging the SDSF.

Comment 16:

- Implement plans to expand and enhance oak savanna plant and dune communities in order to expand rare species habitat. Without management we will lose them.

Comment 17:

- Keep the forested setting of the forest

Comment 18:

- If it's not broke...

Comment 19:

- Show before and after – real pictures – of what you want to accomplish by removing trees, and other enhancements.

Audience:

Comment 1:

- Form volunteer or "friends" groups to help clear litter and clear trails

Comment 2:

- Restore oak savanna as much as possible but prepare for climate change which will change ecosystem to prairie

Comment 3:

- To me, recreation is not as important as restoring original prairie and savanna for preserving dwindling species
- Mostly interested in restoration
- Don't let "rider" groups be dominant

Comment 4:

- Ask horse riders to pick up and properly dispose of all manure, just like dog owners are asked to do.
- Greater enforcement of SNA (Uncas Dunes) regulations (i.e. no horses, motorized vehicles)
- Voluntary management
- Stop hiking on non-designated trails

Comment 5:

- Add staff – need the help of the Legislature

Comment 6:

- It's high enough quality for me – sustain present level and don't add anymore "amenities"

Comment 7:

- Keep your involvement to a minimum the trees seem to be doing a great job on their own.

Comment 8:

- Keep the slash clear more
- SA keep hunter out also

Comment 9:

- Enforce restrictions on off-road use of vehicles and target shooting

Q4: Any other thoughts on the Sand Dunes State Forest recreation topic?

Stakeholder Advisory Group + State Representatives:

Comment 1:

- Please consider how to make more opportunities/attract wildlife observers (herpers, birders, photographers) to SDSF – like wildlife lists on hikes.

Comment 2:

- More interpretive signage about rare habitat and species

Comment 3:

- Sand Dunes offers great opportunities as it is.

Comment 4:

- Equine winter trail riding is a fun past time but not addressed at meeting, however should be recreation reviewed.

Comment 5:

- Keep the forest a forest

Comment 6:

- Put up signs to keep people from dumping garbage, furniture, etc. Put up signs to keep out horseback riders and wheelers in SNAs.

Comment 7:

- I don't think deer hunting would be very good in an oak savanna.

Comment 8:

- Do not change anything

Comment 9:

- Leave the pine alone in the camping area

Comment 10:

- Plant white pine in camp ground, but don't [sic]

Comment 11:

- If it isn't broken...don't mess with it...leave the campground with pine trees.

Comment 12:

- Challenges/Opportunities for recreation: no public input from campground users pertaining to changing from pine to oak

Comment 14:

- Very interesting I learned so much, although I think we have deviated from the topic of forest plan in Sand Dunes

Comment 15:

- Horse use should be restricted in areas with rare species due to erosion and introduction of invasive species concern.
- Increase signage so forest users are aware of no horse, ATV, snowmobile use in SNA

Comment 16:

- There are a lot of users (campers, hunters, trail users). The conversion plan calls for some pretty major changes to what they are used to. What has their surveys shown as their acceptance to the changes?

Comment 17:

- Refer to above comment ["if it's not broke"]

Comment 18:

- Approach boy and girl Scouts to regularly use the areas. Put on demos in pioneering, compass, fire making...start up/promote a "youth corps"
- Approach local schools for ag in the classroom, forest in classroom.
- Can DNR work with the county trail plan from Big Lake to the Refuge
- Get DNR to actively go after schools and Scouts to adopt SDSF

Audience:

Comment 1:

- Keeping horses out of restored area (spread exotics)

Comment 2:

- How to involve more youth

Comment 3:

- Sorry – off rec. topic... I would be opposed to the DNR providing free trees to homeowners to plant as a buffer. Let them buy their own.

Comment 4:

- I am concerned you're not allowing land owners who live right on your doorstep enough representation. It feels as though our initial group has been whittled down and many other groups involved to dilute our concerns. Little or no input has been allowed or noted that I can see.
- I am very closely involved and have been from the start being excluded is wrong there is no legitimate reason I cannot be let in. The excuse that there's not enough room at the table is laughable.

Comment 5:

- Guide people through the styles of forest production/replanting

Comment 6:

- Open the horse campground sooner. Spring and fall are the best time to ride there. Summer is too buggy to camp there.

Appendix D: DRAFT DNR Responses to Suggestions from SDSF Stakeholder Advisory Group Meeting 2 - Tree and Timber Management

Suggestions that we can incorporate or already incorporate in our work, and will reflect in the operational plan...

- Leave 'urban buffers' when harvest is performed near private lands, roads, or recreational areas to preserve aesthetics; Perform site-visits with neighboring landowners before harvests and be open to feedback/compromise
 - While the DNR is responsible for managing all of its land up to the border, foresters can work with adjacent landowners to the Sand Dunes on buffers and other concerns as timber sale specifications are developed.
 - Private landowners are encouraged to also plant or preserve buffer strips on their own land, rather than clearing up to the edge up their property. DNR can provide technical advice on establishing buffers.
- Leave shelter areas for wildlife
 - The DNR leaves shelter areas on harvest sites as required by the [Voluntary Site Level Forest Management Guidelines](#) (which are not voluntary on state managed lands – DNR must follow them)
 - The desired future condition of SDSF identified in the operational plan provides a mosaic of pine forest, closed-canopy oak woodlands and oak savanna that will favor superb wildlife habitat. Disturbances needed for timber management and habitat restoration will impact small-scale parcels and will be phased in over many years (see timelines in operational plan).
- DNR should provide a site manager and follow-up inspections post-harvest to ensure compliance
 - The DNR has a number of site managers – foresters, ecologists, biologists – that ensure compliance. All DNR timber sales have a sale administrator responsible for overall contract compliance, including a post-harvest inspection to ensure compliance.
- Plant trees after harvest is performed
 - State law and our Forest Certification standards require that DNR regenerate forests (either through natural regrowth or planting) after we harvest. Exceptions are allowed when implementing a plan that calls for regenerating native landscapes (to wetland, savanna, prairie, etc.), as in the case of the proposed Operational Management Plan. However, in the majority of SDSF, DNR will still regenerate or plant trees after harvest. Tree species and density will vary based on the goals for each stand.
 - As discussed in Meeting #2, there is one stand of pine that was recently harvested in Sand Dunes where DNR had intended to plant pines again, but received concerns from landowners about the herbicides that would be used to do the necessary pre-treatment of buckthorn. DNR is seeking alternate site preparation methods at this time that will allow the site to be planted with tree seedlings.
- Use information displays, signage, maps, harvest schedules, local news releases, and announcements to town boards to communicate upcoming harvests to stakeholders

- The DNR uses several methods to communicate with the public and plans to expand these efforts. One of these tools includes the [SDSF public engagement effort webpage](#), where interested stakeholders can find more information about the process and submit comments.
- Provide more information about what kinds of herbicides will be used and where/when
 - The DNR notifies adjacent neighbors when pesticides are to be used, and posts notices.
 - Resources related to forest certification requirements of pesticides will be made available on the Sand Dunes public engagement website.
- Host an informational session on rare species in SDSF to inform public
 - Information on rare species was covered in the first meeting of the Stakeholder Advisory Group, and will be covered further in later meetings. This would be a good topic for future meetings as well once implementation of the plan begins.
- Host a field trip to SDSF to aid understanding
 - DNR is planning to host more field trips in the near future.
- Change the title of the “Operational Plan” to something more representative
 - This is something that the Stakeholder Advisory Group could advise on.
- Add a statement to plan about what won’t change or is addressed elsewhere (recreation, roads, etc.)
 - The Operational Plan revisions will include more information about the scope and purpose of the Plan.
- Add information about invasive insects/disease in plan
 - The Operational Plan revisions will include more information about the scope and purpose of the Plan.
- Use soil data to inform tree species choices
 - The DNR does use soil data in direct and indirect ways in species choices. These choices are made in the context of other information gained through our Native Plant Community and Ecological Classification System tools, which take a variety of other factors into account in addition to soils.
- Proceed with plan slowly
 - The plan is intended to be a slow transition. Even the “immediate rare features management zone” will only transition about 51 acres per year for 10 years. The “eventual rare features management zone” will be transitioned over a 50 year time period.

[Suggestions that require more discussion before decisions can be made about what to incorporate in the operational plan...](#)

- Perform smaller clearcuts, and/or use harvest methods such as ‘string of pearls’ or ‘tear drop’.
 - These harvest methods are among the tools that foresters can use to mimic natural disturbance regimes. There are pros and cons to using these methods.
 - These methods are largely used in lowland sites (where larger harvests may cause the site to “swamp” or flood) or in stands of shade tolerant or mid-tolerant tree species that can regenerate in the partially shaded openings. A one to three acre “pearl” (also called a “group harvest”) still has significant shading around the edges as the sun rises and sets. A “gap harvest” of ½ acre has much more shade and only shade tolerant species are likely to regenerate and thrive.

- A drawback of using these methods is that the number of entries must be increased for each stand. For example a 30-acre stand cut with 1-3 acre groups may take 3-5 entries every 3-5 years to accomplish the final harvest of a stand. Every entry increases the risk of invasive species introduction or movement (and therefore pesticide use) and disruptive impacts to native species.
- Bearing these considerations in mind, DNR is seeking opportunities to implement smaller cuts in some locations. One example of where this will be implemented is a 70-acre parcel of 70-year-old red pine on School Trust Land, which will be divided into 2-3 smaller sections and harvested over a longer period of time than originally planned.
- Use selective cutting rather than clearcutting as a harvest method; Use multi-age tree management, especially near private lands, roads, and recreational areas
 - Selective cutting is a tool that foresters most often use to prepare a stand for final harvest, or to manage for shade tolerant species (such as maple, basswood, and white pine). However, sun-loving tree species like oak, red pine, aspen, and birch need bigger openings to regenerate a new forest, similar to the results of a large wildfire or windstorm.
 - Selective cutting and thinning will be used in certain places in the SDSF to improve timber production in the timber management zone. The operational plan also identifies using selective cutting in the rare features management zone in a manner that removes pine and leaves native hardwoods such as bur oak, northern pin oak and black cherry.
- Clean up slash near trails and local residences to allow for walking through the forest
 - Cleaning up slash is not easy, it requires piling/burning or mulching, both of which can be harder on soils than leaving slash in place.
 - DNR's timber contracts include language about slash disposition and restrict scattering debris on designated trails.
 - Foresters can work with neighboring landowners to address site-specific slash concerns as new sales are developed.
- Do not clear-cut pines near Lake Ann campground - preserve current aesthetic
 - Clarification is needed around this issue. DNR is not planning to clearcut all pines by the campground and aesthetics are being considered. This will be discussed further at the Stakeholder Advisory Group meeting on recreation.
- Campground is in need of thinning
 - This will be discussed further at the Stakeholder Advisory Group meeting on recreation.
- Institute weight limit or repair schedule for logging roads; develop logging roads that exit on county roads
 - Weight limits are imposed during the frost-out period to minimize impact to roads. These can be found at:
http://dotapp7.dot.state.mn.us/research/seasonal_load_limits/sllindex.asp
 - The DNR is looking into developing new roads that exit on county roads. This, however, means more impacts to the site, more ground out of production, and more corridors for invasive species.
- Avoid planting non-native pine; plant native tree species
 - The Operational Plan includes movement toward more native tree species in SDSF. However, in the timber management zones pine will still be a component due to its value as a timber species and its ability to grow well in sandy soils.

- Plant white pine in planned rare species management areas
 - White pine is not known to be native in the Sand Dunes in great abundance. It can be an aggressive seeder and in areas being restored to oak savanna this could be problematic over time.
- Limit/reduce area planned for rare species management
 - This will be discussed further at future Stakeholder Advisory Group meetings
- Do not change current plan for rare species management – good as-is (or go further to restore native ecosystems)
 - This will be discussed further at future Stakeholder Advisory Group meetings
- No change – implement the plan as-is
 - This will be discussed further at future Stakeholder Advisory Group meetings
- Delay implementation of plan by 5-10 years
 - DNR views this as deferring important resource management work that should be a priority now. This will be discussed further at future Stakeholder Advisory Group meetings.

Suggestions that would be very difficult to implement in the operational plan...

- Cease all clearcutting in SDSF
 - Clearcutting, also known as a “regeneration harvest,” is a tool foresters use for very specific species that are intolerant to shade in their establishment and growth (such as aspen, oak, red pine). This method has the biggest immediate impact, but also has the least number of entries over a period of time, thus reducing risk of invasive plant introduction and movement, as well as disruption of native species. Further, clear cuts create blocks of different-aged forests; some wildlife species need young forest, some need older forest, and some require a mix. Finally, some clear-cutting will be needed to achieve restoration goals and desired future conditions outlined in the SDSF operational plan. For these reasons, a total ban on clear-cutting would not be practical in the SDSF.
- Harvest in the winter (concern that summer harvest impacts protected birds and bats)
 - SDSF have dry sandy soils that allow for less damaging summer harvest than in other parts of the state, making summer harvests in SDSF very valuable to timber harvesters. It would be very difficult to eliminate summer harvest in the Sand Dunes.
- Manage the entire forest for timber production
 - Minnesota’s State Forests were established to produce timber and other forest products, provide outdoor recreation, protect watersheds, and perpetuate rare and distinctive species of native flora and fauna. In certain parts of SDSF, some of these products and ecosystem services may be more valuable than timber and need to be emphasized.
 - The SDSF includes the Uncas Dunes SNA and the Bob Dunn Recreation Area, which are currently managed for other values over timber production.
- No bare sand dunes
 - Some of the rare species in the SDSF require bare sand dunes to survive.
- Don’t use pesticides at all, due to water quality concerns

- The pesticides the department uses follow very specific requirements and are not restricted by the Forest Stewardship Council (which prohibits the use of pesticides that are known to contaminate groundwater and cause cancer). Labels are always followed.
- Herbicides application is one of the most effective and cost-effective means of controlling invasive plants like buckthorn.
- Use grazing animals to remove buckthorn instead of pesticides
 - While grazing has been shown as an effective means of controlling invasive species in some instances, it can be expensive and difficult to manage. Grazing requires moveable energized fencing, corrals, water tanks, and contractors with the expertise and animal stock to accomplish results. Furthermore, grazing animals also eat native trees and shrubs, which may jeopardize rare species recovery in SDSF.
- Cease all prescribed burning
 - Prescribed burning is the single most effective means of native vegetation management and maintenance. The native flora community of SDSF is fire-dependent and burned historically every nine years on average. It would be nearly impossible to restore native ecosystems in SDSF without careful use of prescribed fire.
 - Prescribed fire can also reduce pesticide use and fire hazard in SDSF.

Misunderstandings and misinformation...

- The DNR is planning to clearcut 3,000 acres of forest in SDSF and replace it with prairie.
 - The operational plan divides the state's approximately 5800 acres in the Sand Dunes into five zones: 1) long-term forest management (~3,000 acres), 2) Uncas Scientific and Natural Area (~625 acres), 3) immediate rare features management (~500 acres), 4) eventual rare features management (~1350 acres), and 5) Bob Dunn Recreation Area, which will have a mix of long-term forest management, immediate rare features management, and eventual rare features management (~325 acres). Including the portion of the Recreation Area that will be managed for rare features, about 2000 acres of Sand Dunes are planned for transition to rare features management over the next 50 years.
 - However, much of the rare features zone is already dominated by oak trees, not conifer plantation, so only a portion of these acres will require big changes in land cover type. DNR will be using a variety of management techniques to restore native oak woodlands and savanna, and small amounts of prairie where appropriate. This will involve very little change in net acres of oak woodland, about 800 acres net increase in oak savanna (with small amounts of prairie), and about 700 acres net decrease in plantation forests, mostly in the south unit of SDSF.
 - The table below summarizes the *approximate net* proposed changes to the SDSF landscape (in acres) at the end of the 50-year implementation period (approx. year 2063)

Land Cover Type	North Unit (acres)	South Unit (acres)	Total (acres)
open water	0	0	0
wetland grass/brush	0	0	0
wetland forest (ash and tamarack)	0	0	0
non-oak dominated forest (aspen or other hardwood)	0	-35	-35
oak woodland/forest ¹	+57	-84	-27
Savanna/prairie ²	+96	+727	+823
plantation forests ³	-147	-584	-731

1) CURRENT acres calculated from DNR's Forest Inventory Module's 'oak dominant' type and FUTURE acres calculated from predicted 30m resolution Native Plant Community model (FDs37)

2) CURRENT acres calculated from DNR's Forest Inventory Module's 'offsite oak' type and FUTURE acres calculated from predicted 30m resolution Native Plant Community model (UPs14)

3) Plantation forests include the following covertypes: white pine, red pine, jack pine, scotch pine, white spruce, Norway spruce, upland tamarack, upland northern white cedar, hybrid poplar

- Plant a diversity of trees, not just oak
 - Oak woodlands and savannas are not monocultures. In addition to containing several native species of oak, they contain aspen, black cherry, ash, maple, basswood, and other trees, as well as a variety of native shrubs, grasses, and forbs (flowers).
- Managing a forest for rare species only does not encompass the DNR's whole mandate in state forest management. "Giving in" to environmental groups agenda excludes the rest of the management mandate.
 - The desired future condition of SDSF identified in the operational plan provides a mosaic of pine forest, closed-canopy oak woodlands and oak savanna that will continue to provide timber resources, wildlife habitat, and recreation opportunities. The Sand Dunes will not be managed exclusively for rare features once the plan is implemented, just as it is not managed exclusively for timber now.

Appendix E: Reference Information

Where to Find Information about the Sand Dunes State Forest:

1. Sand Dunes State Forest Stakeholder Advisory Group website:
<http://www.dnr.state.mn.us/forestry/sand-dunes/index.html>
2. Link to the Anoka Sandplains Subsection Plan and Appendix C - Operational Plan for the Sand Dunes State Forest:
<http://www.dnr.state.mn.us/forestry/subsection/anoka/plan.html>
3. Instructions on how to subscribe to the DNR GovDelivery service to receive information about recent and upcoming activities in the Sand Dunes State Forest:
 - Go to this address: <http://www.dnr.state.mn.us/emailupdates/index.html>
 - Fill in your email address in the white box (scroll down to the yellow area labeled "General Public"), then click on "GO"
 - If you are a new subscriber, you will be asked to confirm your email address first. Fill in the form and click "Submit" at the bottom of the page. You should receive an email confirming that you have signed up.
 - Next, under "destinations" check the box next to Sand Dunes State Forest.

Scroll to bottom of page and click on "submit."
 - You will automatically receive any future GovDelivery messages sent to the Sand Dunes list.
4. Link to DNR Website With Information About All Minnesota State Forests:
http://dnr.state.mn.us/state_forests/index.html
5. Link to DNR Website for the Sand Dunes State Forest:
http://dnr.state.mn.us/state_forests/sft00045/index.html
6. Lake Maria State Park phone: 763-878 2325
7. Little Falls Area Forestry phone: 320-616-2450