APPENDIX A

10-Year Stand Selection Project Direction

September 17, 2004

The North Shore Subsections SFRMP Team has developed the following directions for Area staff reference when completing the 10-year stand selection process for state timberlands in the North Shore Highlands, Toimi Uplands, and Laurentian Uplands Subsections. (Note: 1 year of the plan was previously selected for the FY2005 annual harvest plan, so the remaining 9 years will be selected in this project.)

The goal is to complete the Stand Selection and New Access Plan within 30 days of starting the project. See Attachment A, for estimated timelines and start and end dates. The project will be completed in 6 steps:

I. Pre-stand selection tasks
II. Select stands for the remaining 9-year field visit planning period
III. Assign a field visit year to each stand selected
IV. Final review of stand selection and field visit year portion of the project
V. Complete the new access plan portion of the project
VI. Send final stand selection and new access plan project data to Paul Olson

I. PRE-STAND SELECTION TASKS:

1. Review Chapters 3 and 4 of the Draft NS SFRMP Plan that will be provided to staff involved in stand selection. (e-mail version was sent out on Sept 14. Hard copies were distributed to staff that will be involved in the stand selection process.) (*Post on ftp site*)

2. Each forestry area will need to review NLTCSA2h and SFRMP-FIM to check on accuracy of ERF and EILC tagging. Make corrections in SFRMP-FIM if data transfer between NLTCSA and SFRMP-FIM did not end up selecting the correct stands for ERF or EILC. This will need to be done by each area in a short timeframe so the entire FIM database can be used for the stand selection project. Paul Olson will provide more direction on this task to the areas after he merges the CSA/FIM databases. **Paul e-mailed the erfcheck shapefile to Area staff and team members on 9-7.**
   - Provide time for interdisciplinary review of the adjustments to EILC and ERF, if needed.

3. Each forestry area (Tower, Hibbing, Cloquet and Two Harbors) will need to set up their own Arcview Project for stand selection. Areas will be notified by email when all the needed project information is posted on the SFRMP FTP Site. **See Attachment B: "Recommended Themes/Legends/Shapefiles for NS-SFRMP 9 Year Stand Selection Project"**

4. Areas will be provided an Excel spreadsheet that will list the acres to select for the 10-year period, by forestry area and cover type, and broken down by normal rotation and ERF stands and by age classes. These targets are based on the stand selection criteria and harvest levels agreed upon by the SFRMP. (*Post on ftp site*)

5. Forestry Areas will need to coordinate stand selection meeting dates with all divisions (wildlife, fisheries and ecological services). Staff from these divisions may or may not choose to attend but they need to be invited. It is likely that Doug Tillma, Region Timber Program Coordinator, will attend the first day of stand selection at each Area if scheduling allows.

II. SELECT STANDS FOR THE ENTIRE 10-YEAR STAND EXAMINATION PLANNING PERIOD

1. The following groups of stands have been query selected to create a draft list of selected stands because they meet established criteria or were determined by the SFRMP Planning Team as important to be considered in the final draft list. Paul Olson will do this query selection before the SFRMP-FIM file is posted on the FTP Site. These stands will have a preliminary prescription assigned to them. Stands selections or their preliminary prescriptions may be adjusted to meet assigned preliminary management objectives or other goals identified in the SFRMP Strategic Planning Document.
    a. All HRLV Stands (9101) – *do not adjust the HRLV prescription.*
    b. Stands meeting un-even aged management criteria (1300)
    c. Stands meeting the thinning criteria (1810)
    d. Those stands that the treatment model indicated would likely need to be treated because of their old age (e.g., within 10 years of maximum rotation age for even-aged managed species) (1111)

2. The rest of the stand selection would be stand by stand looking at age as well as trying to select stands and assign preliminary prescriptions to meet preliminary management objectives and other goals identified in the SFRMP Strategic Planning Document. Other goals include: patch management, MCBS Site management, and moving towards balanced age class structure. Selections may also need to be made to help ensure a balanced workload distribution for forestry staff working out of field offices. Areas will need to work out their own methodology to complete this portion of the stand selection project.
    a. If the Area has a list of potential stands for treatment based on current timber sales, access, etc., and they are in the stand selection pool, they could be considered for selection.
    b. If you know of stands that are not in the pool but are in need of treatment for some reason, these should be discussed during the stand selection process and may be selected provided all divisions reach agreement. Examples are: locations for new or expansion of a gravel pits or I&D problems.
    c. For Sx, select 5 stands (Cloquet and Two Harbors Areas) for potential decorative tree harvest in FY06. Stands must meet the stand selection criteria included in Chapter 4. (*No EILC, No MCBS=1, 2, or 5), Cdense >2, and Csize<4.*) The Sx stands meeting the criteria have been tagged with DECORATIVE TOPS in the Criteria Field. Stand selections for future FYs should be based on annual targets from the Region. Stands to evaluate for treatment will be included in annual harvest plans or added as annual plan additions. Follow the established process for other division's review of proposed stands as future FY selections are made.

3. Enter appropriate codes into the following fields. Each Area will need to determine if codes should be entered into these fields as stands or groups of stands are selected or if the required data can be entered more efficiently after the entire stand selection process is completed.

    a. PRESCRIP Field: Assign a preliminary prescription to any stand that does not have one already assigned to it, making adjustments to preliminary prescriptions as needed to meet strategies identified in the NS SFRMP Plan and other DNR direction. *Do not adjust the **HRLV (9101)** prescription code in the* PRESCRIP *field, if an adjustment is desired, include the revised prescription in the* COMMENT *Field.* Choices come from the list of options in the project.
        i. When determining preliminary prescription be sure to consider the preliminary management objective assigned, if the stand has been assigned one. Most stands in MCBS Sites of outstanding (1), high (2) or high prime (5) should have a preliminary management objective assigned to it. Stands outside MCBS Sites likely will not.
        ii. Don't use the On Site Visit (9100) prescription code.
        iii. Use OFMC plans during stand selection for obtaining information on SMZ's and recommended treatments in the SMZ and OFMC during this planning period.

    b. OBJECTIVE Field: Assign a preliminary management object code(s) to all stands selected in MCBS Sites ranked outstanding, high or high prime that do not have a code assigned to it already.

    c. JT_VISIT Field: The joint field visit field may be filled in for some stands during stand selection, if the Division representative has enough information at the time. Otherwise, this field will be filled in during annual plan review.
        - FSH = All stands on fisheries lands will receive a field visit designation of FSH, other stands that fisheries staff want to field visit will be tagged during the 10-year selection or annual reviews.
        - ECO = Eco Services staff will tag stands with ECO that they want to do a joint site visit, either during the 10-year selection or annual reviews.
        - WLD = Wildlife staff will tag stands with WLD that they want to do a joint site visit.

        The 2-week review for the FY06 harvest plan will occur immediately after FY's are assigned (estimate October 15-30, 2004).

4. Adjust stand selections and general prescriptions as needed to meet strategies identified in the NS SFRMP Plan and other DNR direction.

5. If agreement can't be reached, tag the stand in the *Prescrip* Field with 6666 where lack of agreement on whether or not the stand should be selected for treatment, or with 7777 where the prescription can't be agreed upon during the stand selection process, for later review and a decision by the Core Team.
    a. For each stand, provide a brief description of the disagreement for the Core Team review.

b. Don't assign any of these stands to FY06.

III. ASSIGN A FIELD VISIT YEAR TO EACH STAND SELECTED

1. In the SE_YEAR field, enter the 4-digit fiscal year the stand will likely be field visited.

2. For HRLV stands assign a proportionate amount of HRLV each year remaining. This does not mean you will need to actual treat HRLV equally each year but it is a good planning tool to use at this time and until all HRLV stands are field visited to determine which years treatment should really occur in.
3. Schedule NP, WP, and WS thinning based on their current age or past thinning year.
    a. Current age
        i. NP and WP stands that are 15 years and older have been tagged with a THIN prescription, so schedule 15 year old stands for the last year of the plan, 16 year old for next to last, etc.
        ii. WS stands 20 years and older have been tagged with a THIN prescription, so schedule 20 year old stands for the last year, 21 year old for the next to last, etc.
    b. Past thinning: use SRM records of past thinning or next scheduled thinning (or other records) for determining SE_YEAR.
    c. For stands not covered under a or b, use staff knowledge and proportion the remaining THIN stands out over the 9-year planning period so that there is approximately the same THIN acreage per year.

IV. FINAL REVIEW OF STAND SELECTION/FIELD VISIT PORTION OF THE PROJECT

1. Ensure each stand that has a preliminary prescription code assigned to it (PRESCRIP Field) has a field visit year identified in the SE_YEAR Field.
2. Check to ensure that each stand selected in an MCBS outstanding (1), high (2), or high prime (5) Site has a preliminary management objective assigned to it and that the preliminary management objective and the preliminary prescription code assign is consistent with each other.
3. Check to see if you have selected any isolated stands that might likely not be treated over the next nine years due to access issues. If you selected any such stands it may be good to select different stands that will most likely be treated. Coordinate changes with other divisions.
4. Are there any changes needed in respect to stands you think should be added or removed before the 9-year field visit list is finalized? If so, discuss with other divisions for agreement to make changes.
5. Summarize your stand selection acres by cover type and by criteria to ensure assigned targets were met (+/- a small amount). A table will be provided by Doug Tillma to enter the summarized data. Send this summary report to Doug Tillma when the stand selection is completed (Doug will forward a copy to the team members including any recommendations.)

V. COMPLETE THE NEW ACCESS PLAN PORTION OF PROJECT

The new access plan will be completed after the remaining 9-year stand selection and field visit year assignments are completed. Core Team is currently working on directions for the new access plan and will be sending that out to areas for review prior to the start of the stand selection process.

VI. SEND THE FINAL STAND SELECTION AND NEW ACCESS PLAN PROJECT TO PAUL OLSON.

ATTACHMENTS FOR STAND SELECTION/FIELD VISIT YEAR PORTION OF PROJECT:

- Attachment A: Estimated Timelines for the 9–Year NS-SFRMP Stand Selection and New Access Plan
- Attachment B: Recommended Themes/Legends/Shapefiles for NS-SFRMP 9-Year Stand Selection Project
- Attachment C: Fields added to the FIM Database in the SFRMP Arcview Shapefile
- Attachment D: SFRMP Codes used in the North Shore Subsections Arcview shapefile.
- Attachment E**:** DNR staff that will be involved in the stand selection process at the Areas will be provided with Chapters 3 and 4 of the Strategic Direction Document prior to stand selection *(distributed).*
- Attachment F: DNR Forest Policies, Guidelines and Recommendations

APPENDIX B

Prescription Codes and Definitions

Prescription Code Definitions for Stand Treatments Prescribed in Subsection Forest Resource Management Planning (SFRMP) and Timber Harvest Plans and for Accomplishment Reporting (Revised 4-5-2006)

A stand prescription is a planned treatment of a forest site designed to change current stand structure or condition to one that meets management goals. Prescription codes are arranged hierarchically within categories. As an example, all clearcut harvest systems are coded 1110 through 1119 with the most general prescription, clearcut, listed first. Even-aged Regeneration Harvest is a general category, with Clearcut being one method within this category. Under Clearcut are further defined different types of clearcut harvest. General prescriptions are commonly used at the planning stage, and after a stand has been examined in the field a more specific prescription is usually assigned. MFRC voluntary site-level forest management guidelines for leave trees are incorporated into prescriptions and definitions.

CODE	PRESCRIPTION	DEFINITION
0000	**NO ACTION-FREE TO GROW**	No management activity is planned or required during current stage of stand development or before next scheduled site visit.
0100	Reserve, Designated	Stand is reserved for a designated purpose (e.g., the stand is a designated SNA).
0110	Reserve, Old Growth	Stand is reserved because it is a designated old-growth stand.
0120	Reserve, Future Old Growth	Stand is reserved because it is a designated future old-growth stand.
1000	**REGENERATION HARVEST**	General category for timber harvest methods that are designed to prepare a stand for natural (natural seeding/sprouting) or artificial (planting/seeding) regeneration.[1]
1100	**EVEN-AGED REGEN HARVEST**	General category for harvest methods designed to regenerate a stand with a single age class.[1] The result is a stand of trees containing a single age class in which the range of tree ages is usually less than 20 percent of rotation.
1110	Clearcut	Removal or felling, in a single cutting, of essentially all trees in the stand.[1]
1111	Clearcut- with Reserves	Same as above, but leave trees in clumps, strips, or islands occupy a minimum of 5% of the clearcut harvest unit, or greater than five leave trees per acre are left scattered throughout the site.
1112	Clearcut-Sprouting	Removal or felling of essentially all trees to prepare site for natural regeneration by root or stump sprouting of harvested trees.
1113	Clearcut-w/Rsrv - Sprouting	Same as above, but leave trees in clumps, strips, or islands occupy a minimum of 5% of the clearcut harvest unit, or greater than five leave trees per acre are left scattered throughout the site.
1116	Clearcut-Natural Seeding	Removal or felling of essentially all trees in the stand to prepare site for natural seeding. Additional site preparation may or may not follow harvest.
1117	Clearcut-w/Rsrv - Natural Seeding	Same as above, but leave trees in clumps, strips, or islands occupy a minimum of 5% of the clearcut harvest unit, or greater than five leave trees per acre are left scattered throughout the site.
1118	Clearcut-Artificial Regen	Removal or felling of essentially all trees in the stand to prepare site for planting or seeding. Additional site preparation may or may not follow harvest.

1119	Clearcut-w/Rsrv - Artificial Regen	Same as above, but leave trees in clumps, strips, or islands occupy a minimum of 5% of the clearcut harvest unit, or greater than five leave trees per acre are left scattered throughout the site.
1120	Seed Tree	An even-aged regeneration method in which an area is clearcut except that certain trees, called seed trees, are left standing singly or in groups for the purpose of furnishing seed to restock the cleared area. Seed trees are removed after regeneration is established.[1, 2]
1121	Seed Tree- with Reserves	Same as above, but leave trees in clumps, strips, or islands occupy a minimum of 5% of the clearcut harvest unit, or greater than five leave trees per acre are left scattered throughout the site.
1122	Seed Tree-Intermediate Cut	The initial harvest(s) from which seed trees are left standing.
1123	Seed Tree-w/Rsrv-Interm Cut	Same as above, but leave trees in clumps, strips, or islands occupy a minimum of 5% of the clearcut harvest unit, or greater than five leave trees per acre are left scattered throughout the site.
1124	Seed Tree-Final Harvest	The final harvest of the standing seed trees after regeneration is established.
1125	Seed Tree-w/Rsrv-Final Harvest	Same as above, but leave trees in clumps, strips, or islands occupy a minimum of 5% of the clearcut harvest unit, or greater than five leave trees per acre are left scattered throughout the site.
1130	Shelterwood	A method of regenerating an even-aged stand by a series of partial cuttings, resembling thinnings, that extend over a small fraction of the rotation and provide protected seedbeds for regeneration. The sequence of treatments can include three distinct types of cuttings: 1) an optional preparatory cut to enhance seed production, 2) an establishment cut to prepare the seed bed and to create a new age class, or 3) a final removal cut to release established regeneration.[1,2]
1131	Shelterwood-with Reserves	Same as above, but leave trees in clumps, strips, or islands occupy a minimum of 5% of the clearcut harvest unit, or greater than five leave trees per acre are left scattered throughout the site.
1132	Shelterwood-Interm Cut	The harvest(s) prior to final removal of the original overstory.
1133	Shelterwood-w/Rsrv-Interm Cut	Same as above, but leave trees in clumps, strips, or islands occupy a minimum of 5% of the clearcut harvest unit, or greater than five leave trees per acre are left scattered throughout the site.
1134	Shelterwood-Final Harvest	Final removal cut to release established regeneration.
1135	Shelterwood-w/Rsrv-Final Harvest	Same as above, but leave trees in clumps, strips, or islands occupy a minimum of 5% of the clearcut harvest unit, or greater than five leave trees per acre are left scattered throughout the site.
1140	Salvage - Clearcut	Removal or felling of essentially all trees from a stand after a windstorm, wildfire, insect and disease damage, or other environmental factors.
1141	Salvage-w/Rsrv-Clearcut	Same as above, but leave trees in clumps, strips, or islands occupy a minimum of 5% of the clearcut harvest unit, or greater than five leave trees per acre are left scattered throughout the site.
1142	Salvage - Clearcut - Windstorm	Removal or felling of essentially all trees from a stand after a windstorm.
1143	Salvage-w/Rsrv-Clearcut-Windstorm	Same as above, but leave trees in clumps, strips, or islands occupy a minimum of 5% of the clearcut harvest unit, or greater than five leave trees per acre are left scattered throughout the site.
1144	Salvage - Clearcut - Wildfire	Removal or felling of essentially all trees from a stand after a wildfire.
1145	Salvage-w/Rsvr-Clearcut-Wildfire	Same as above, but leave trees in clumps, strips, or islands occupy a minimum of 5% of the clearcut harvest unit, or greater than five leave trees per acre are left scattered throughout the site.
1146	Salvage - Clearcut - I & D	Removal or felling of essentially all trees from a stand because of insect and disease damage.

1147	Salvage-w/Rsvr-Clearcut-I & D	Same as above, but leave trees in clumps, strips, or islands occupy a minimum of 5% of the clearcut harvest unit, or greater than five leave trees per acre are left scattered throughout the site.
1148	Salvage - Clearcut - Environmental	Removal or felling of essentially all trees from a stand because of environmental factors such as beaver flooding.
1149	Salvage-w/Rsvr-Clearcut- Environment	Same as above, but leave trees in clumps, strips, or islands occupy a minimum of 5% of the clearcut harvest unit, or greater than five leave trees per acre are left scattered throughout the site.
1150	Sanitation - Clearcut	Removal or felling of essentially all trees from a stand to stop or reduce actual or anticipated spread of insects and disease.
1151	Sanitation-w/Rsvr-Clearcut	Same as above, but leave trees in clumps, strips, or islands occupy a minimum of 5% of the clearcut harvest unit, or greater than five leave trees per acre are left scattered throughout the site.
1200	**TWO-AGED REGEN HARVEST**	Harvest designed to maintain and regenerate a stand with two age classes. The resulting stand may be two-aged or tend towards an uneven-aged condition as a consequence of both extended period of regeneration establishment and the retention of reserve trees that may represent one or more age classes.[1] The result is a stand composed of two distinct age classes that are separated in age by more than 20 percent of rotation.
1210	Clearcut-With Reserves	A clearcutting method (as above) in which varying numbers of trees, or groups of trees, are not harvested to attain goals other than regeneration.[1]
1212	Clearcut-w/Rsrv-Sprouting	Clearcutting with reserves (as above) to regenerate the stand by sprouting of the harvested trees.
1216	Clearcut-w/Rsrv-Nat Seeding	Clearcutting with reserves (as above) to regenerate a stand by natural seeding.
1218	Clearcut-w/Rsrv-Atfl Regn	Clearcutting with reserves (as above) to regenerate a stand by planting or artificial seeding.
1220	Seed Tree-With Reserves	A seed tree method in which some or all of the seed trees are retained after regeneration has been established to attain goals other than regeneration.[1]
1222	Seed Tree-w/Rsrv-Interm Cut	The intermediate harvest(s) of a seed tree with reserves system.
1224	Seed Tree-w/Rsrv-Final Cut	Final harvest of non-reserved trees in a seed tree with reserves system.
1230	Shelterwood-With Reserves	Some or all of the shelter trees are retained well beyond the normal period of retention to attain goals other than regeneration.[1]
1232	Shelterwd-w/Rsrv-Intrm Cut	The intermediate harvest(s) of a shelterwood with reserves system.
1234	Shelterwd-w/Rsrv-Final Cut	Final harvest of non-reserved trees in a shelterwood with reserves system.
1300	**UNEVEN-AGED HARVEST**	Methods of regenerating a stand, and maintaining an uneven-aged structure, by removing some trees in all size classes either singly, in small groups, or in strips.[1] The result is a stand of trees of three or more distinct age classes, either intimately mixed or in small groups.
1310	Group Selection	A method of regenerating uneven-aged stands in which trees are removed, and new age classes are established, in small groups. The maximum width of the groups is approximately twice the height of the mature trees.[1]
1315	Group Selection-w/Reserve	A variant of the group selection system in which some trees within the group are not cut to attain goals other than regeneration within the group.[1] The remaining stand should include a minimum of six cavity trees, potential cavity trees, and/or snags per acre.
1320	Group Selection - Salvage	Salvage harvest in a stand where small groups of trees are harvested because of windstorm, wildfire, or insects,disease, or animal damage and an uneven-aged stand structure is to be maintained.

1330	Single Tree Selection	A method of creating new age classes in uneven-aged stands in which individual trees of all size classes are removed more or less uniformly throughout the stand to achieve desired stand structure.[1]
1800	**INTERMEDIATE HARVEST**	Harvest designed to enhance growth, quality, vigor, and composition of the stand after establishment or regeneration and prior to final harvest.[1]
1810	Commercial Thinning	Timber thinning harvest that will generate revenue from sale of wood products.
1814	Row Thinning-Commercial	Commercial harvest of selected rows of a plantation. Generally done to reduce stand density and increase future tree growth.
1816	Strip Thinning-Commercial	Commercial harvest of strips in a natural stand. Generally done to reduce stand density and increase future tree growth.
1820	Selective Thinning-Commercial	Commercial harvest of selected trees in a stand. Often the harvest trees are marked. Generally done to: 1) remove less desirable trees (species or form) from a stand, or 2) decrease stand density and increase future growth of the more desirable trees left.
1840	Salvage Cut - Selective Harvest	The selective removal of dead trees or trees being damaged or dying due to injurious agents other than competition, to recover value that would otherwise be lost.[1,2]
1850	Sanitation Cut - Selective Harvest	The selective removal of trees to improve stand health by stopping or reducing actual or anticipated spread of insects and disease.[1,2]
1900	**NON-TIMBER HARVEST**	Harvest of plant products that do not require removal of live trees (example: maple syrup, herbs).
1910 - 1930		Do not use these codes, added in 1100 and 1200 series.
1940	Manage for Understory	The management prescription is to not harvest this stand but to manage it for the understory species. The stand typically has a very low volume of merchantable timber but it has adequate desirable regeneration established. The stand will be allowed to naturally regenerate to the understory tree species without timber harvest. An inventory alteration will be made to update the stand data.
1950	**NON-TIMBER PRODUCTS**	
1951	Boughs	Bough harvest.
1952	Decorative Trees	Christmas or ornamental tree harvest.
9100	**On-site Visit**	The planning process specifies that the stand needs a site visit to accurately determine stand condition in order to make a management prescription. As an example, a mature birch stand in a birch decline area inventoried 10 years ago may yet be a birch type but may not have enough vigor to regenerate to birch. Such a stand may require an on-site visit to accurately prescribe management.
9101	**High-Risk, Low-Volume**	The Subsection Forest Resource Management Plan (SFRMP) identified this stand as one requiring a field visit to determine the detailed management prescription. Stands with this prescription may have been identified as HRLV in the SFRMP based on one or more of the following: 1) stands coded as high risk in CSA forest inventory; 2) significant insect or disease damage to the main species in the stand; 3) stands over rotation age at time of survey with total stand volume less than eight cords per acre (i.e., low volume); or 4) or a very old stand (e.g., aspen over 80 years old). Also, referred to as a low-density stand pool, which includes stands with very low stocking or volume per acre. The stand will be field visited to determine if it will be appraised and sold on a timber sale; managed for the regenerating species; regenerated through the use of forest development practices such as site preparation and planting; or updated through re-inventory of the stand. SFRMP plans provide guidance on the management of stands assigned this prescription.
9105	**Defer**	Stand was field visited, inventory was OK, but the stand is not suitable for a timber sale yet. Defer treatment to a future year.

9110	**Re-Inventory**	Stand attribute data are determined to be so inaccurate that re-inventory is required.

Other Codes for SFRMP Use:

2600 Site Preparation-Prescribed Burn

6325 Wildlife Habitat-Prescribed Burn

6330 Wildlife Habitat-Lowland Brush Shearing

1. Silviculture Terminology with Appendix of Draft Ecosystem Management Terms, Society of American Foresters, Sept. 1994.
2. Forest Development Manual, DNR Forestry, 1994.
3. The Dictionary of Forestry, Society of American Foresters, 1998.

APPENDIX C

North Shore Subsections SFRMP
Directions for New Access Needs Step

1. It is recommended that Forestry Areas complete their stand exam fiscal year assignments (SE_YEAR Field) for all stands selected for treatment in the 10-year plan prior to starting the road access plan. This should make it easier to then determine access needs for each block or individual stands.
    a. Attempt to have a proportionate amount of each cover type scheduled for stand exams each year.
    b. Pay attention spatially so selections and stand exam years are spread out over the forestry area while considering access, patch management, and workload efficiency.
    c. Forestry staff will independently assign stand exam FY. Check for stand exam year recommendations from other divisions in the comment fields. Other divisions will review the stand exam year assignments after forestry completes the initial assignments.
2. Forestry staff will coordinate with wildlife staff to ensure both divisions are present when the timber access needs decisions are being made. Ecological Services staff will not attend the meetings, but will review the access needs information after it is completed.
3. Set up your ArcView project to include the following:
    a. Use the stand selection shapefile for your Area (e.g., *nltfim1d_thbaccessprep*) from the ftp site: *ftp://ftp.dnr.state.mn.us/pub/SFRMPDATA/NShore_group/Mar05RoadAccess/.*
    b. Use the timber planning extension (*TMP.avx*) sent out by Paul on 3-4-05.
    c. Stands already sold on permits (TMBR_CD = 9).
    d. Any roads/routes/trails layers that are available, such as:
        i. Superior National Forest roads layer
        ii. Forest Access Trail Inventory shapefile
        iii. Your area roads shapefile
        iv. All roads from DRS
        v. MFRC NE Landscape IIC forest roads layer. For more information, see: *http://www.iic.state.mn.us/finfo/roads/forest2.htm*
        vi. Recreational trail maps
        vii. County land department roads
    e. Aerial photos (FSA, CIR, DOQ, etc.)
    f. NWI wetlands shapefile – may help determine winter or summer access
    g. Topographic maps - may help determine winter or summer access
    h. Visual quality ratings for roads: http://www.dnr.state.mn.us/forestry/visual_sensitivity/index.html
    i. Old growth shapefile
    j. Rare Features shapefile
    k. MCBS Sites shapefile
    l. Streams and Rivers shapefiles (trout, etc)

m. EILC shapefile
n. Ownership shapefile and hard copy maps
o. cRNA shapefile

4. Review the following direction: *Identifying New Access Needs in SFRMP (Draft 2-25-05).* **Attachment A**
5. Review: *Flow Chart Identifying New Access Needs in SFRMP*. **Attachment B**
6. Review information from Al Jones (*Forest Access Concept Document, 12/20/04)* on what the types of road/routes are and criteria for each type of access. **Attachment C**
7. Begin Project by reviewing each stand or groups of stands to determine the necessary access needs. Record decisions using the Stand Access Form in the Timber Planning Extension. Be sure to record all pertinent information asked for in the extension.
8. Disputes: If there is a dispute on what type of access a new access should be called, use the "Dispute" field in your nltfim1d shapefile to document what the dispute is. Start all dispute comments with the word "Roads" and then describe the dispute. For example, disagreement on type of access such as a minimum maintenance road that will remain open or a resource management access route that can be closed. Do not spend time debating, just enter why there is a dispute and move on. The Core Team will resolve all disputes.
9. This New Access Needs step, and the assignment of all fiscal years to stands must be completed and emailed to Paul Olson **by April 15, 2005.**

The following provides clarification for recording new access needs miles for the North Shore SFRMP (E-mail to Team on 4-11-05):

When completing the new access needs for your Area's portion of the North Shore SFRMP, include the total distance of the *estimated* route for new access across all ownerships (including USFS, county, private, etc.) to reach a stand selected for treatment on state lands. The *actual* route will be determined at the time of the on-the-ground stand examination and/or as the timber sale/development work is set up. Use your best estimate of type of new access and post-harvest/treatment that will be needed, this is subject to change when crossing other ownerships (e.g., other landowner approval) or based on the on-the-ground assessment.

Remember if multiple stands are accessed by the same road/route, record the mileage only for the stand at the end of the road/route. "*If more than one stand is to be served by an identified new road or temporary access, record all new access information to and for the stand furthest from the nearest existing useable access. Other stands served by the identified new access should be tagged with a code "Z" in the RD_PERMIT field."*

APPENDIX D

Identifying New Access Needs in SFRMP

From: DNR SFRMP Guidebook (draft 2/25/2005)

PURPOSE

- Provide a rough estimate of miles of new access needed to implement the 7- or 10-year plan.
- Provide a rough assessment of new state forest road construction needs for budget development; and
- Identify access that will require a USDA Forest Service special use permit
- Address access/fragmentation/density concerns via post-sale access management intentions on estimated new access/new temporary access.

SCOPE OF IDENTIFYING ACCESS NEEDS IN SFRMP

- Estimate the miles of new state forest road and new temporary access needed to access stands identified in SFRMP for field visit and/or treatment.
- Identify (tag) stands for which new access is needed.

Note: The SFRMP process should not attempt to identify/map/digitize preliminary routes for identified new access. Route layout should occur on the ground at the time of project implementation. Interdisciplinary involvement in on-the-ground layout of access routes will be described in the Coordination Policy (currently being revised).

SPECIFIC QUESTIONS TO BE ANSWERED:

- Is a new access needed for management of stands identified for treatment in the plan?
  - If the stand(s) within 0.1 mile of an existing usable access (see definition below), NO
  - If the stand is not within 0.1 mile of existing usable access, YES.
- Type of new access needed (see "Designating an Access Route" below)
  - New state forest road
    - System road (see definition below)
    - Minimum maintenance road (see definition below)
  - New resource management access route (see definition below)
  - New temporary access route (see definition below)
- Rough estimated distance of proposed new forest road. Any new access proposed to be added to the state forest road inventory as a system road or minimum maintenance road is a NEW STATE FOREST ROAD, regardless of length. However, remember that we are not seeking great precision in estimating the length of new state forest road in SFRMP. Round estimates to the nearest one-tenth mile.
- Rough estimated distance for proposed new resource management access routes or new temporary access routes. Round estimates to the nearest one-tenth mile.
- Identify if the proposed access is primarily a summer or winter route. (S=Summer, W=Winter).

- Identify what the intended management of the proposed access will be following use for harvest/treatment:
  - New state forest road – "system roads"
    - Maintain open. Enter code "M" in NA_POST field.
    - The department expectation is that all state forest roads designated as "system roads" will remain open to all vehicle traffic.
  - New state forest road – "minimum maintenance road"
    - Leave open/minimal maintenance. Enter code "L" in NA_POST field.
    - The department expectation is that all state forest roads designated as "minimum maintenance roads" will remain open to all vehicle traffic.
  - New Resource Management Access Route
    - Close with barrier; open only for management. Enter code "C" in NA_POST field.
    - SFRMP teams should not debate methods of closure for identified new resource management access routes. This will be determined by Area teams during site/project planning according to the Coordination Policy (currently being revised).
  - New temporary access route
    - Abandon (applies to all new temporary access routes). Enter code "A" in NA_POST field.
    - SFRMP teams should not debate reclamation needs for identified new temporary access routes. This will be determined by Area teams during site/project planning according to the Coordination Policy (currently being revised).
- Does the proposed route cross National Forest land or an SNA, or access more than one stand on the list?
  - If the route is likely to use an existing National Forest system road, enter code "F" in the RD_PERMIT field.
  - If the route is likely to use an existing non-National Forest system road/corridor, enter code "G" in the RD_PERMIT field.
  - If the route is likely to require a new route/corridor across National Forest land, enter code "G" in the RD_PERMIT field.
  - If the route involves a winter access across an SNA, enter code "S" in the RD__PERMIT field.
  - If more than one stand is to be served by an identified new road or temporary access, record all new access information to and for the stand furthest from the nearest existing useable access. Other stands served by the identified new access should be tagged with a code "Z" in the RD_PERMIT field

Note: SFRMP will not be addressing the management (i.e., gating, abandonment) of existing state forest roads or designated recreational trails.

Note: SFRMP Teams will not be identifying which new forest roads or temporary accesses should be added to or designated as recreational trails. The SFRMP access needs product will be available to Area teams (or other teams) who have responsibility for OHV and other recreational trails evaluations/designations.

MINIMUM ACCESS LENGTH TO IDENTIFY/CONSIDER IN SFRMP

- Minimum length is not an issue for "New Road." See above, a new road is a new road regardless of length. Estimate to the nearest one-tenth mile.
- For new resource management access routes and temporary access routes:
  - The intent is not to measure every last 100' temporary spur that may be punched into lands for individual stands.
  - The intent within the SFRMP process is to estimate general/rough numbers of the amount of new resource management access routes and new temporary access routes needed (e.g., to get from the nearest existing usable access to this/these stand(s), we'll need about X.X miles of new resource management access or temporary access).
  - SFRMP teams should use one-tenth of a mile as the minimum length for identifying new resource management access routes and new temporary access routes.
  - Shorter temporary segments that will be needed can be handled with a blanket statement (i.e., there may be the need for short segments of temporary access to access individual stands off of identified routes . . . as temporary access, these will be abandoned/reclaimed after use).

DEFINITIONS

System roads - These roads are the major roads in the forest that provide forest management access, recreational access and may be connected to the state, county, or township public road systems. These roads are used at least on a weekly basis and often used on a daily basis. The roads should be graveled and maintained to allow travel by highway vehicles, and road bonding money can be used to fund construction and reconstruction of these types of roads. The level and frequency of maintenance will be at the discretion of the Area Forester and as budgets allow.

Minimum maintenance roads - These roads are used for forest management access on an intermittent, as-need basis. Recreational users may use them, but the roads are not promoted or maintained for recreation. The roads will be open to all motorized vehicles but not maintained to the level where low clearance licensed highway vehicles can travel routinely on them. The roads will be graded and graveled as needed for forest management purposes. Major damage such as culvert washouts or other conditions that may pose a safety hazard to the public will be repaired as reported and budgets allow.

Resource management access route –These routes are not immediately needed after the cessation of the management activity, but may be needed in the future for management activity and the corridor needs to be preserved. These routes will be closed to all motorized recreation users. Closure methods will be determined at the time the route in established and can include gates, berms, rocks and felled timber. These routes will be added to the state forest road inventory, but a designation order from the Commissioner is not needed.

Temporary access route – If the access route does not fit into one of the first three options, the access route has to be abandoned and the site reclaimed so that evidence of a travel route is minimized. The level of effort to effectively abandon temporary accesses will vary from site to

site depending on location of the access (e.g., swamp/winter vs. upland route), remoteness, and existing recreational use pressures.

Existing Usable Access – Existing usable access means:

- An existing maintained or minimum-maintenance road (e.g., state forest road, county road/highway, township road, Forest Service road, industry road, etc.);
- An existing recreational trail that can be used without additional clearing of R.O.W.; or,
- An existing temporary access where the corridor is readily visible and requires minimal work to open (e.g., light shrub removal and roughly the same corridor width).

IDENTIFYING THE TYPE OF ACCESS NEEDED

Identifying the type of new access that is needed should be done during the SFRMP stand examination/new access needs identification stage. Consider the following when identifying the desired type of new access:

Option 1: System Road

a. Access route will be needed for future forest management activities; AND
b. Access route will be traveled or used for access multiple times during the year; OR
c. Access route will connect to other roads; OR
d. Access route will be a logical addition to the system road network in the Area.

Option 2: Minimum Maintenance Road

a. Access route will be needed for future forest management activities; AND
b. Access route will not be used on any regular basis after the completion of the forest management activity; OR
c. Access route will lead to nowhere or will dead-end in the area of the forest management activity.

Option 3: Resource Management Access Route

a. Access route will be needed for future forest management activities; AND
b. Access route will not be used on any regular basis after the completion of the forest management activity; AND
c. Access route will allow public access to critical habitat or other areas where continual motorized use is not desired or sustainable. If critical habitat is involved, mitigation strategies should be developed with the appropriate discipline to reduce potential impacts.

Option 4: Temporary Access Route

a. Access route will NOT be needed for foreseeable future forest management activities.
b. Access route is short, temporary, and dead-ends at a landing and there are no plans to use it for future activities.

Access route will allow public to access critical habitat.

ROADS IN ECOLOGICALLY IMPORTANT LOWLAND CONIFERS (EILC)

The Forest Resources Issues Team (FRIT) did not feel a blanket prohibition of access roads in EILC was appropriate. Field staff should consider road access and EILC on a case-by-case basis, applying the following principles (in order):

1. Try to avoid the EILC areas if possible. Use other reasonable access routes that don't involve EILC stands if they are available. Or, go around the EILC area if it is small.
2. If the only reasonable access to stands that the team agrees need to be field visited and potentially treated is across EILC areas, then strive to minimize impacts. For example:
    - Seasonal/temporary access versus permanent road (FRIT assumes that since EILC are lowlands, that most of the road access needed across EILC would be seasonal winter roads),
    - Keep corridors narrow
    - Select routes that cause the least disturbance.

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