

**MEETING SUMMARY
NE REGIONAL LANDSCAPE COMMITTEE
DEWITT-SEITZ
February 12, 2002**

Members Present: Clyde Hanson, Mark Reed, Bob Kirsch, Dave Anderson, Jim Larson, Dick Olson, Duane Kick, John Kohlstedt, Tim O'Hara, Don Ferguson, Jan Green, Tom Duffus, Meredith Cornett, Kara Dunning, Forrest Johnson, Jim Hart and Tom Martinson

Staff: Chad Skally, Dave Miller, Dave Zumeta

Guests: Gaylord Paulson, Steve Wilson and Matt Norton

Introduction

Dave welcomed the guests and urged them to participate fully in the meeting. The meeting objectives are:

- To review, discuss and agree on the Coordination Work Groups recommendations for the draft landscape ecological goals.
- Discuss the next steps and the economic impact analysis.

Coordination Work Group Recommendations

The coordination work group completed their recommendations on draft landscape ecological goals for the four ecosystem types. Dave Miller also completed an effects analysis on these recommendations. Each of the recommendations and effects were reviewed, clarified, modified and agreed to move forward to conduct the economic impacts analysis.

Discussion

Committee discussion and modifications are incorporated into the revised recommendations attached. In addition the following was agreed on:

- Rather than call the recommendations goals they will be called “ecological scenarios” to indicate that landscape goals are not goals until economic and social impacts are analyzed.
- Need to do a “sensitivity analysis” or range around each scenario so comparisons can be made.
- Need to get a better handle on current harvest rates by acres and volume by species and ownership class.

Next steps:

A draft economic impact analysis proposal was handed out and a copy is attached. The contract is currently being processed and is targeted to be effective March 1. Details on information needs and methods must be discussed in detail with Lichy. The next steps are as follows:

- Clean up the scenarios and analysis package and send to the Regional Committee (Dave Miller by March 1).

- Meet with Lichty and define technical information needs to do economic analysis (Dave and Chad by Feb. 21).
- Coordination work group meet in March to assist in gathering technical information needed.
- Regional Committee meet in June to review economic analysis, decide on scenarios and next steps.

The next meeting will be scheduled for mid-June when we have a better idea of how the economic analysis is progressing.

REVISED*
RECOMMENDATIONS
NE REGIONAL LANDSCAPE COMMITTEE MEETING
February 12, 2002

* Modifications based on Committee discussion are highlighted in red.

Mesic white pine – red ecosystem type (555,750 acres)

Recommendation – Long Term (100 yrs)	Current ac	Desired Outcome	Change (effects)
<u>Growth Stage Structure: Manage 130,000 ac/decade or 2% of ecosystem type moving toward older (120+) successional stages</u>	Refer to growth stage graph	Refer to growth stage graph	Meets min RNV (refer to growth stage graph)
<u>Composition:*</u> 1) Establish white pine and red pine as major components on 10 % of the ecosystem type	38,300 (7%)	55,600	+17,300
2) Maintain aspen (aspen, aspen-spruce-fir, aspen-birch-spruce-fir) for intensive management on 33% of the ecosystem type by harvesting 37,000 ac aspen/decade.	265,000 (48%)	185,000	-80,000 aspen
3) Establish spruce-fir on 27% of ecosystem type	85,000 (15%)	147,700	+62,700

***Current Species Composition by Growth Stage**

Growth Stage	Red/White Pine	Jack Pine	Spruce - fir	Aspen-birch	Aspen-birch-spruce-fir
Sapling-birch (1-10 yrs)	9%	4%	0	43%	25%
Pole-mature birch (11-50 yrs)	7%	3%	0	52%	14%
Mature-birch pine (51-80 yrs)	2%	2%	0	34%	39%
Mature white pine (81-100 yrs)	11%	2%	6%	18%	34%
Multi-age pine spruce fir (121-200 yrs)	24%	2%	0	0	13%
Multi age white pine (121+ yrs)	26%	3%	13%	0	11%

Mesic pine (con't)

Recommendation – Short Term (1-10 yrs)	Treatment ac/decade	Effects ac/decade												
1) Encourage white pine by discouraging aspen in the mature pine (81-120) growth stage.	Treat 33000 ac with combination of partial cuts (leaving all residual pine and super- canopy white pine ; spruce regeneration primarily natural regeneration) and clearcuts for other species regeneration.	+2000 ac pine +9000 ac spruce-fir , -11000 ac aspen-birch types 11,000 ac remaining same as current												
2) Encourage white pine on mature birch-pine (51-80) growth stage and mature white pine (81-120) growth stage	Treat 16,700 acres as per above in the 30-70 yr age class; regenerate white/red pine through artificial and natural methods	+3000 ac pine +3000 ac spruce fir -6000 ac aspen birch types 4700 ac remain same												
3) Encourage white pine on mature birch-pine (51-80) growth stage and mature white pine (81-120) growth stage	Treat 11,700 ac per above in the 70-100 yr ages class and regenerate white/red pine through artificial and natural methods	+1000 ac pine +4000 ac spruce-fir -5000 ac aspen-birch types 1700 ac remain same												
4) Harvest 5000 ac/decade of the multi-age pine-spruce fir and multi aged white pine growth stages and revert back to sapling pole growth stages	Harvest the 70-100 yr age class through partial and over-story removal cuts.	?												
<p>Total for next 10 yrs:</p> <table border="0"> <thead> <tr> <th data-bbox="232 1440 467 1472"><u>Current</u></th> <th data-bbox="472 1440 683 1472"><u>Treatment</u></th> <th data-bbox="688 1440 800 1472"><u>Desired</u></th> </tr> </thead> <tbody> <tr> <td data-bbox="232 1478 467 1509">Pine: 7%</td> <td data-bbox="472 1478 683 1509">9%</td> <td data-bbox="688 1478 800 1509">10%</td> </tr> <tr> <td data-bbox="232 1516 467 1547">Spruce/fir: 15%</td> <td data-bbox="472 1516 683 1547">18%</td> <td data-bbox="688 1516 800 1547">27%</td> </tr> <tr> <td data-bbox="232 1554 467 1585">Aspen/birch: 48%</td> <td data-bbox="472 1554 683 1585">44%</td> <td data-bbox="688 1554 800 1585">33%</td> </tr> </tbody> </table>	<u>Current</u>	<u>Treatment</u>	<u>Desired</u>	Pine: 7%	9%	10%	Spruce/fir: 15%	18%	27%	Aspen/birch: 48%	44%	33%		+6,000 ac pine +16,000 ac spruce-fir - 22,000 ac aspen birch
<u>Current</u>	<u>Treatment</u>	<u>Desired</u>												
Pine: 7%	9%	10%												
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Aspen/birch: 48%	44%	33%												

Dry-mesic pine white pine-red pine ecosystem type (638,000 acres)

Recommendation – Long term (130 yrs)	Current ac	Desired Outcomes	Change (effects)
1) Regenerate 6% of the ecosystem type per decade concentrating harvest activities in the mature birch-pine growth stage with emphasis on restoring pine on those stands currently dominated by deciduous species, particularly aspen.	638,000 acs total -335,400 (53%) aspen/mixed -75,200 (12%) pine	Refer to growth stage chart	Moves toward min RNV

Recommendation – Short term (1-10yrs)	Treatment acres/decade	Effects ac/decade
1) Identify 275,000 acres that will be managed to enhance the mature white pine, multi-aged pine-spruce-fir and multi –aged spruce-fir growth stages	Move 82,000 acres toward the older growth stages as follows: >mature white pine 76,700 >Multi aged pine-spruce-fir 10,600	Increase older growth stages by 82,000 acres
2) Regenerate 38,000 acres in mature birch-pine growth stage with an emphasis of restoring pine	Harvest through seedtree /shelterwood systems and/or planting and seeding Identify 8000 ac for jack pine reintroduction and restore jack pine on 3000 acres by planting or seeding	+10,000acres wp/rp -10,000 acres aspen, birch or fir +3000 acres jack pine -3000 acres aspen, birch or fir
3) Emphasize maintenance of lands that are currently dominated by white and red pine	Maintain existing red and white pine	maintain 32,900 acres of red and white pine
4) Underplant 40,000 ac with red and white pine	Underplant red and white pine toward the older end of the pole-mature birch stage	+40,000 red and white pine -40,000 aspen
5) Identify 15,000 acres of pole mature birch forest in which white spruce can be	Underplant white spruce	+15,000 acres of white

restored		spruce -15,000 acres of aspen, birch, fir, mix
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Jack pine-black spruce ecosystem type (1,180,000 acres)

Recommendations-Long term (100 yrs)	Current acres	Desired outcomes	Change (effects)
1) Manage to bring the entire ecosystem type within or very close to RNV. .	673,000 -71+ growth stages total (57%)	535,600 ac total 71+ (45%)	470,700 ac 71 + in BWCA (40%) 64,800 ac 71+ outside BWCA (5%)
2) Increase jack pine composition throughout the entire ecosystem type.	11% jack pine stems	27% jack pine stems	+16% jack pine stems

Short term – next 10 yrs (alternative 2)	Treatment ac/decade	Effects ac/decade
1) Treat 88,000 acres/decade from large jack pine, mature jack pine and pole jack pine growth stages (note current species composition in these growth stages lacks jack pine, refer to growth stage composition, in gray book) and move them back to seedling jack pine outside BWCA.	Combination of 1) regeneration harvests followed by seeding and mechanical site prep; and 2) prescribed fire followed by planting.	+2,500 ac jack pine -2,500 aspen-birch-fir types
◆ Maintain jack pine type and jack pine composition where it currently exists in areas being treated.	Burning, seeding, planting or natural regeneration depending on site.	Maintain the 200,000 ac of jack pine type in these 3 growth stages
◆ Increase jack pine outside BWCA by re-establishing jack pine as a major component on 5000 ac where jack pine is no currently present or where it is a minor component of treated stands.	Regeneration harvest followed by site preparation and planting; could use burning and seeding depending on site.	+5000 acres of jack pine -5000 acres of aspen type

Notes:

- **Short term objective is to increase younger growth stages and jack pine composition; must re-evaluate and amend as necessary these harvest and treatment recommendations after the first 10 yrs to meet long term landscape goals.**
- Spatial issues with alternative by having older growth stages concentrated inside the BWCA and younger growth stages concentrated outside the BWCA.

- Recommend that ecological goals be accomplished in BWCA through natural fire **if policy allows.**

Mesic-birch-aspen-spruce-fir ecosystem type (874,400 acres)

Recommendations – Long term (100yrs)*	Current ac	Desired outcomes	Change (effects)
1. Increase the 81+ growth stages by 5-8% (refer to figures 1 and 2 in write up); manage for longer lived species (pine, spruce etc)*	192,400 ac 81+ (22%)	232,400 – 272,300 ac 81+ (27-30%)	+40-80,000 acres 81+
2. Identify 17-23% of ecosystem type (approximately half of the 51-80 growth stage) and manage for structural features found in 81+ growth stage**	874,400ac	148,600 – 201,100ac managed for 81+ character	additional older growth stage characteristics
3. Move toward 4-8% of white pine stems within the ecological type	.5% stems	4-8% stems	+3.5 - 7.5% stems
4. Move toward 3-7% of tamarack stems within the ecological type	.4% stems	3-7% stems	+2.6 – 6.6% stems
5. Move toward 5-9% of white spruce stems within the ecological type	3.1% stems	5-9% stems	+1.9 – 7.1% stems

*Note: concern that in growth stage 4 too few acres are moving toward min RNV in long term; need to do a sensitivity analysis as part of economic impact analysis.

**Note: Need to further evaluate the advisability and feasibility of managing young to mature growth stages to mimic older growth stages as recommended in #2.

Recommendation – Short term (10 yrs)	Treatment ac/decade	Effects ac/decade
1) Move toward RNV growth stage age structure by harvesting between 115,000 acres/decade and 200,000 acres/decade in aspen, birch, spruce-fir types. (model based on 115,000 ac/decade)	Harvest by mimicing natural patterns of disturbance; clearcutting is primary method with some intermediate cutting as well; majority of harvesting will be in the 40-60 decadal age class	Refer to figures 1 and 3.
2) Identify additional acres for white pine reintroduction.	Seed-tree cuts from non white pine stands that have an existing mature white pine component	+11,100 acres of stands with white pine regeneration

<p>3) Identify additional acres for tamarack reintroduction.</p> <p>4) Identify lands for encouraging white spruce regeneration and recruitment within mixed stands</p>	<p>allowing for white pine regeneration on 20,000ac; encourage spruce/fir regeneration to protect pine. Identify an additional 15,000 acres in growth stage 3 and underplant white pine consistent with composition for growth stage (4-8% of all stems)</p> <p>Select 10,000 acres on harvested areas with good potential for upland tamarack and encourage tamarack . (need to determine silvicultural perscription)</p> <p>Select 10,000 acres in growth stage 2 and 3 for underplanting white spruce at rates that are representative of it's natural range (5-9% of all stems</p>	<p>-11,100 acres of aspen, birch, fir or mixed aspen/birch/fir no short term effect on species composition</p> <p>+10,000 acres of tamarack -10,000 acres of aspen, birch, fir or mixed aspen/birch/fir</p> <p>+10,000 acres of white spruce -10,000 acres of mixed aspen, fir stands</p>
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SUMMARY
CUMULATIVE EFFECTS
ALL RECOMMENDATIONS FOR 4 ECOSYSTEM TYPES

Growth Stages: Long term, four ecosystem types (3,233,000 acres)

Growth Stage	Current %	Proposed %	Min RNV %	% proposed in BWCA
Sapling (1-10 yrs)	6%	8%	7%	3%
Pole (10-50 yrs)	26%	24%	20%	3%
Mature (50-80 yrs)	27%	17%	12%	11%
Older (81+)	35%	50%	46%	29%

Long Term (100-130 yrs)

Forest Composition (3,233,000 acres for 4 ecosystem types; 3,019,000 upland ac)

Species	Current Composition		Proposed Composition	
	Acres	% upland	Acres	% upland
Aspen, birch, fir, mixed*	1,950,000	65%	1,609,000 -1,504,300	53 – 50%
Red/ White Pine. mixed pine/hardwood)	202,700	7%	403,000 – 438,000	13 – 15%
Jack pine (jack pine, mixed jp hardwood)	408,600	14%	436,600	14%
Tamarack	11,300	Less than 1	37,300 – 72,300	1 – 2%
White spruce, spruce-fir mix	233,500	8%	277,500	9%
Lowland	214,000	7%		

*** Breakdown of aspen species current composition (1,950,000 total acres):**

Aspen	668,700 ac	34%
Birch	304,100 ac	16%
Aspen/Birch	344,400 ac	18%
Balsam Fir	114,500 ac	6%
Mix aspen/spruce/fir/birch	509, 200 ac	26%

Short term Composition: (10-20 yrs using upland acres)

Species	Current acres	Proposed Change ac	% of upland	Costs**
Aspen (same as long term)	1,950,000	1,837,400	61%	
Red/White Pine	202,700	265,700	9%	63,000 ac @ \$3-500/ac
Jack pine	408,600	414,000	14%	5,400 ac @ \$2-300/ac
Tamarack	11,300	21,300	Less than one	10,000 ac @ \$300/ac
White spruce	233,500	258,500	9%	15,000 ac @ \$3-400/ac

**refer "Average costs for white pine regeneration projects" for more detail; costs here are ranges to give general idea of investments required.