

This form, which is periodically updated to address new opportunities, is available in PDF and MS Word at the following addresses:
<http://www.cfc.umd.edu/extensionforestry> or www.mttreefarm.org

Owner's Name _____

Plan Author (if not owner) _____

Forest Stewardship Plan

Tree Farm Plan

This management plan outlines sustainable forestry guidelines for the conservation of natural resources within this forest and addresses immediate needs (next 5 years) as well as long term (50+ years) objectives and actions. It is endorsed as a certifiable sustainable forest management plan by the American Forest Foundation Family Forestry Program, U.S. Forest Service, U.S. Natural Resources and Conservation Service, Montana Department of Natural Resources and Conservation, Montana Association of Conservation Districts, and Montana State University Extension Forestry



Property Ownership

Landowner(s) _____
(and representative, if different)

Mailing Address _____

Phone _____ E-Mail _____

Date of Original Plan Completion _____ Revision dates _____

Property Description

Legal property description _____

Nearest city or town _____ County _____

Total ownership acreage _____ Total forested acreage _____

Is there a home on the property? Yes No

Do you reside on the property? Yes No

Record of Verification

Reviewed by a Professional Forest Advisor

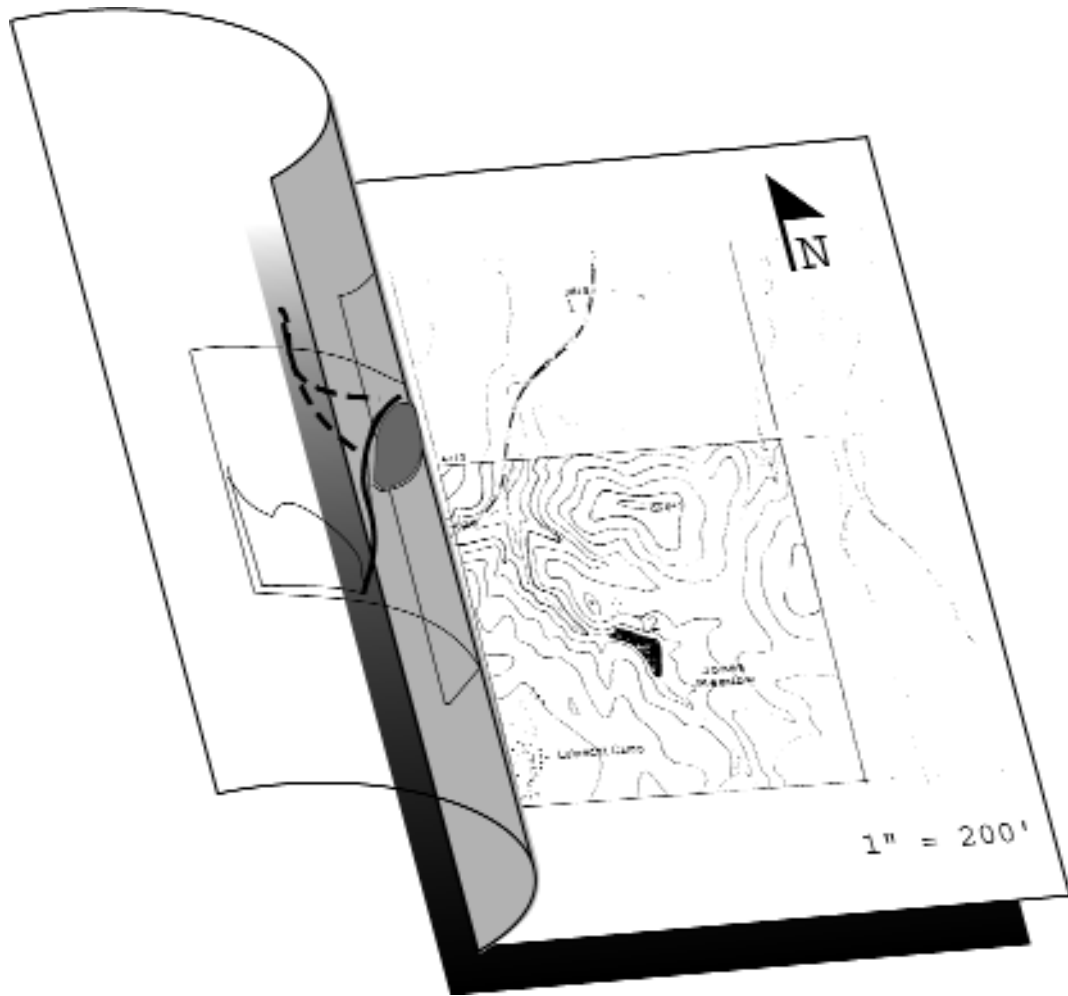
Advisor Name _____ Phone _____

Date of Property Visit _____ MU's Verified _____ # of Acres Verified _____

Approved By _____
(Stewardship Advisor or Tree Farm Inspector Signature)

Forest Landowner(s) Signature(s) _____

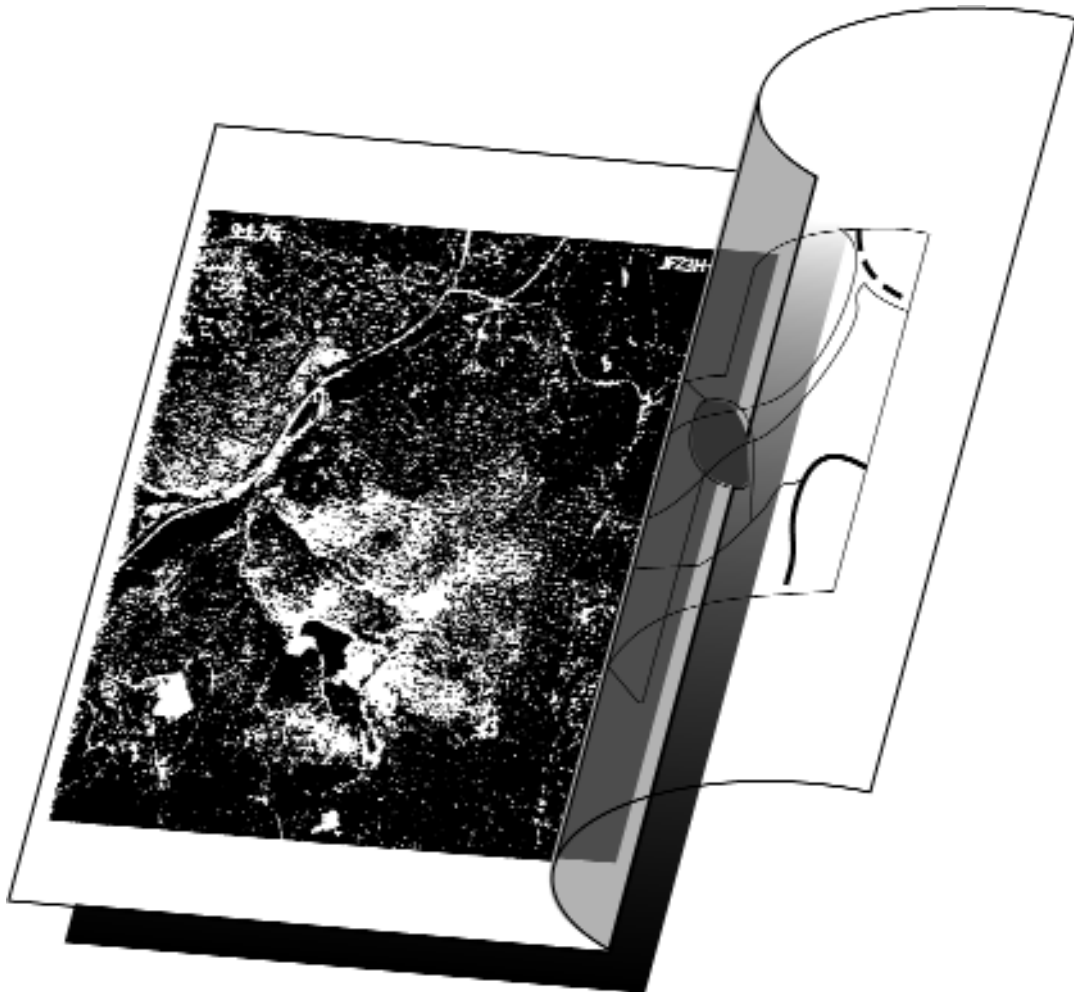
CONTOUR MAP



Attach property map (topographic) here.

Identify
Property Boundaries and Management Units
on transparency.

Include scale (e.g. 1" = 200')
and
Directional arrow
on map.



Attach aerial photograph here.

Identify
Property Boundaries and Management Units
on transparency.

Include directional arrow
on photo.

For free aerial photo downloads
<http://earth.google.com/>

Basic Property Description

Average aspect (check): N S E W Average elevation _____

Basic topography (estimate percent of total acreage that is)

Complex topography (many steep ravines and aspects) _____

Simple topography (few ravines and changes of aspect) _____

Percent of land that is Flat (<5% grade) _____ Gentle Slope (< 20% grade) _____

Steep Slope (> 20% grade) _____

Forest Access to vehicles (check): Excellent (80% accessible) Good (at least 50%)

Fair (at least 25%)

Poor (less than 10%)

Estimated improved road length (bulldozed with graveled surface) _____

Estimated unimproved road length (bulldozed with but original parent material) _____

Estimated total permanent skid trail length (drivable but no earthwork) _____

Estimated cumulative stream length class I _____ class II _____ class III _____

Are any streams on Montana's Impaired Stream List? Yes No Unknown

Check website: <http://www.deq.mt.gov>

Number of unique stands of trees, or management units _____

For each stand or management unit, write what your management objectives are and a brief description of the forest management unit and its condition. Use the Management Unit Analysis Form or plot form summary to help with this section.

Unit 1 _____ Acres _____

Objectives: _____

Description: _____

Unit 2 _____ Acres _____

Objectives: _____

Description: _____

Unit 3 _____ Acres _____

Objectives: _____

Description: _____

Unit 4 _____ Acres _____

Objectives: _____

Description: _____

Unit 5 _____ Acres _____

Objectives: _____

Description: _____

Add more pages as needed (additional pages at end)

Forest Natural Resources Enhancement and Protection

All of the following treatments may qualify for Natural Resources and Conservation cost-share programs. For this section, work with Stewardship Plan Implementation Schedule and a map. Complete the Implementation Schedule and draw and label the areas of management on your map if you wish to use this plan as part of your cost-share application.

Consider: *What treatments/monitoring/protection do you plan on completing?*
 When will you implement treatments (season, year), follow-up activities, etc?
 Where will the management take place; entire unit(s), part of a unit, acres?
Do you have applicable permits, professional help, and applications for cost share?

SOCIAL & RECREATION CONSIDERATIONS

Draw impacted areas on your map

Adjacent stand or ownership concerns (how does surrounding management affect your forest and how do your actions impact your neighbors? Consider aesthetic quality, wildfire concerns, privacy, wildlife movement and habitat, noxious weeds)

Access (Does your property restrict access to public lands, will you allow access across or to your lands, are the boundaries posted with appropriate contact information, have you considered Block Management with Montana Fish Wildlife and Parks)

Archeological, cultural and historic sites (are there historical sites on your property that you wish to delineate, protect or contact anyone - universities etc. about)

ROADS, SOIL AND WATER RESOURCES

What goals do you have, or steps will you take to conserve and enhance your forest's roads, soil and water resources?

Soil protection (steep slopes, woody debris retention, nutrient cycling, vehicle travel, soil compaction, flood runoff, livestock issues)

Access (general maintenance, erosion potential, Best Management Practices, road surface condition, road runoff, drain-dips, culverts, stream crossings, weed control, time-of-year use)

Streams, wetlands, ponds, lakeshore (Streamside Management Zone, 310 permits, riparian habitat, wildlife, road crossings, general access)

WILDLIFE HABITAT AND THREATENED & ENDANGERED SPECIES

Draw impacted areas on your map

Fish & Wildlife (species lists, habitat improvement or creation, animal control, den sites, nest boxes, snag retention, access, hunting)

Threatened, endangered, or sensitive species - plants or animals (to request site specific information <http://mtnhp.org/requests/index.asp>)

RANGE RESOURCE

Draw impacted areas on your map

Range management (grasses, forbs, brush, exotics, animal types and sustainable grazing guidelines, # pastures and animal rotation, water sources, salt block placement)

Weed management (inventory, control, monitoring, prevention guidelines)

MANAGEMENT OF TREE RESOURCE

Draw impacted areas on your map

Protection from Insects & Diseases

Tree non-commercial thinning treatments

Reforestation (natural seedling recruitment, planting, site preparation)

Wildfire Hazard Reduction and Fire Resilience (away from home site)

Home Firewise Safety (defensible space, near home site)

Management Plan Implementation Constraints

Carbon sequestration (current estimated tons of standing carbon per acre plus growth rate–sequestration per year). Estimated tons sequestered carbon = 50% dry tons of wood

Other

Desired Future Condition - Timber

MU

Desired mature tree species (% of forested area) and expected longevity (maximum age you expect trees to reach before they die of natural causes or are harvested)

Species	% of Forested Area	Age
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____

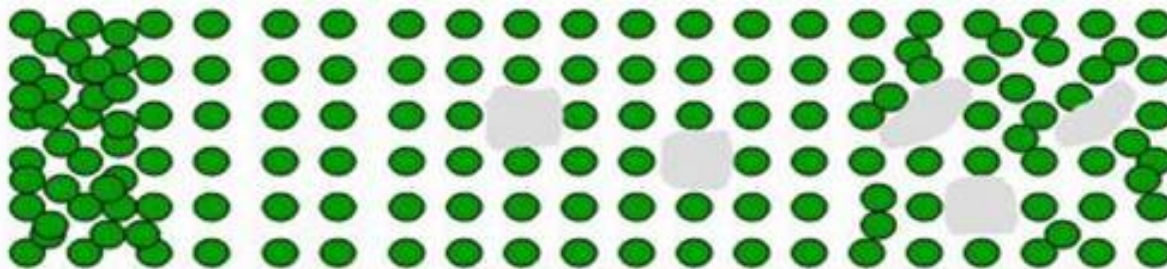
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- ES Engelmann spruce
- WRC W. Red cedar
- WH Western hemlock
- WP White pine
- SAF Sub-alpine fir
- LP Limber pine
- RMJ rocky mtn. juniper
- QA Aspen
- CW Cottonwood Green ash

Desired species to naturally regenerate _____

Desired species to plant _____

Bird's-eye view of forest (check one)

- Wild stand
 Evenly spaced
 Evenly spaced with openings
 Variable density spaced with openings



- Some wildlife
 Maximizes growth
 Growth + regeneration
 Some growth + regeneration + wildlife

Desired spacing (in feet) Large (>9"DBH) _____ (ft)
 Pole (5-8"DBH) _____ (ft) Seedling (<5"DBH) _____ (ft)
 Size and shape of openings _____

Desired structure:



- One canopy layer
 Two canopy layer
 Three canopy

Spacing (feet)	Trees/acre
3x3	4,840
5x5	1,742
7x7	889
10x10	436
12x12	302
14x14	222
16x16	170
18x18	134
20x20	87
25x25	70
30x30	48
40x40	27

Forest Harvesting Activities

Identify for which MU's you are describing your activities.

Draw impacted areas on your map

Harvesting: Describe type of treatment: Even-aged: clearcut, thinning; Uneven-aged: group select, single tree select, overstory removal, understory removal, etc. Treatment methods: ground based or skyline, time of year, type of harvest; seed tree, multiage, sanitation, etc.

Slash management (leave slash at the stump, jackpot pile, whole tree skid, chipping, pulp, post & pole, large woody debris, nutrient cycling)

Post harvest activities (burning landings, piles, or broadcast, seeding roads and landings, weed spray roadsides)

Permits (slash hazard reduction agreement, 310 permit for stream crossings)

Streamside Management Zone (is there a wetland or stream within your harvest area, is it properly marked and are the appropriate laws being followed?)

Monitoring (how often do you plan on evaluating harvest units to ensure your overall forest management goals are being met?)

Stewardship Plan Implementation Schedule

(MU or all MU's combined) _____

(Copy additional pages if needed)

*NRCS Practice Code needed if practice will be submitted for cost share, otherwise leave blank.

	Treatment Date (Season/Year)	Treatment Activity Short Description	NRCS Practice Code*	MU#	Treatment (Acres, Feet)	Net Cash Flow	
						Cost	Income
Years 1-2							
					subtotal		
Years 3-4							
					subtotal		
Years 5-6							
					subtotal		
Years 7-8							
					subtotal		
Years 9-10							
					subtotal		
					TOTAL		

Timber Sale Contract Checklist for Private Landowners and Loggers

Unless a private landowner has the ability to personally harvest trees and transport them to a sawmill or other wood processing facility, the act of logging and transporting trees will be conducted by a contracted professional. The following is a checklist of issues a private landowner and logging contractor may wish to consider on a logging contract. Each of the items should be addressed in a contract to allow for a minimum probability of a dispute. Issues can be as detailed as both parties find acceptable and economically feasible.

- ___ Property location and legal description are clearly defined
- ___ Property boundaries and harvest units are clearly and accurately marked
(logging trespass results in a minimum cost of 3x value of trees)
- ___ Property ownership is documented and type of ownership is specified *(Individual, partnerships, corporations, etc.)*
- ___ Insurance is documented *(Any contractor working for a landowner must have Commercial General Liability \$1 –million, Loggers Broad Form Property Damage Liability \$1-million, Workers' Compensation \$100,000 or an Independent Contractor Exemption, and Automobile Liability \$1-million. If they do not have these, the landowner will be held liable for any damage or personnel injury that may occur. Logging is a hazardous activity!)*
- ___ Access to the property/harvest unit are specified and documented *(To avoid trespass or the disturbance of sensitive areas access routes should be clearly delineated. If access across other ownerships is required, written and notarized documentation of access permission should be obtained) Insurance can be written to include owner and consulting forester.*
- ___ Type of harvest is clearly specified for each harvest unit *(Typically trees are marked both at eye level and on the stump, or harvest tree characteristics are defined by species, diameter, crown characteristic, or residual tree spacing)*
- ___ Timing of harvest is specified *(Dates when harvesting and/or other treatments need to be conducted or completed by)*
- ___ Residual property specifications should be defined *(This is as detailed as the landowner and contractor can agree upon. Issues can be the completeness of residual logging debris disposal, burn pile rehabilitation, grass seeding, skid trail rehab, noxious weed control, tree planting, noncommercial thinning)*
- ___ Hazard Reduction Permit has been acquired and responsible party designated *(Under state law a hazard reduction permit must be obtained from the DNRC and a bond posted that covers the expense for meeting the HRA specifications. Either the landowner or contractor is responsible for this)*
- ___ Best Management Practices (BMP's) and Streamside Management Zone (SMZ) responsibilities are designated *(Compliance to Montana BMP's is ultimately the landowners responsibility but should be specified in the contract. Similarly, compliance with SMZ's are state law and their implementation should be specified)*
- ___ Performance bond or contract penalty clauses *some provision for compensation to the landowner for harvesting activities that deviate from specifications. Having the contractor post a bond is the best protection for the landowner but imposes a risk on the contractor. Contractors already post a performance bond with the state to comply with the Hazard Reduction Agreement)*
- ___ Method of payment is clearly defined *(Lump sum is one payment for the entire estimated log volume, this method may over or underestimate actual value but is simple and can be demanded in advance of the actual harvesting. **Payment by unit** is where payment for logs occurs based upon the actual scaled logs at the mill. Either the contractor pays an agreed upon percentage to the landowner or the mill pays agreed upon percentages separately to the contractor and landowner. Downfall is that in cases of salvaging dead and dying trees a delayed harvesting job can result in losses of standing tree value)*

___ **Method of scaling is defined** (*Either direct scaling or weight scaling are used. Direct scaling tends to be more accurate though each mill may use different defect deductions. Weight scaling works for large volume sales that have trees of similar species and diameter. In general logs should be trucked to the mill quickly following harvest or they lose significant water weight or for most accurate conversions a continuous representative sample of logs should be check scaled and weighed*)

___ **Notification** (*It is defined if and when the contractor or landowner needs to notify the other party about when activities are to start or end and the type of format – written, e-mail, telephone. This is to avoid issues with blocked access, noise, etc.*)

___ **Expiration date** (*Any contract should have a defined end date after which the contract is no longer valid*)

___ **Notarization** (*Any legally binding document should have signatures notarized*)

*** This is simply a recommended check list compiled from a variety of sources including The Montana Logging Association for a harvesting contract. Any contract can be challenged. It is always advised that a contract be reviewed by an attorney. You may also want an attorney's fees recovery statement in the document that will allow for recovery of legal fees should a dispute require legal action. ***

Supplemental pages for unit/stand descriptions and desired future conditions

Unit _____ Acres _____

Objectives: _____

Description: _____

Unit _____ Acres _____

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Description: _____

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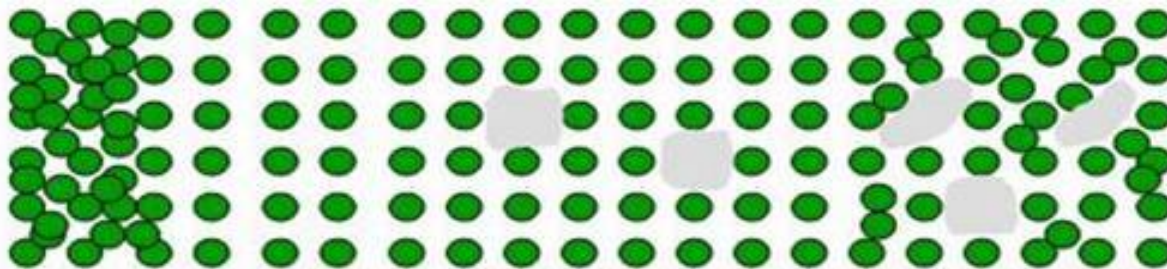
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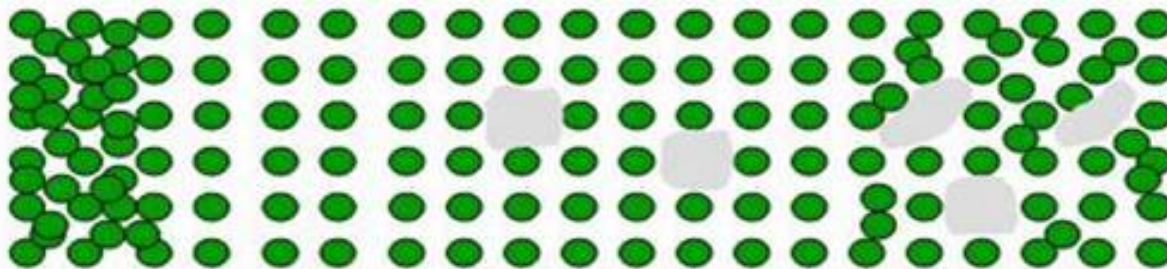
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