

SAMPLE FOREST MANAGEMENT PLAN

1) COVER PAGE OF FOREST STEWARDSHIP PLAN

A. Landowner Description:

Dick & Jane Smith
44 Forestry Road, White Salmon, WA 98672
Phone ###-###-####
Parcel Number(s):

B. Property Location:

30 acres more/less in the W1/2 SW1/4 NW1/4 & the SE1/4, SW1/4 NW1/4 of Sec. 9, T 3 N, R 12 E WM.
Mailbox & road access are 8.5 miles up the Snowden Road, approx. 7 NE of White Salmon.

C. Plan Preparer information: This is written by _____, assisted by Dept. of Natural Resources
Service Forester Jesse Calkins.

D. Date Plan was Prepared: ___ 2002

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3) DESCRIPTION OF LANDOWNERS OBJECTIVE(S)

- A. Make a profit from the commercial sale of timber & other forest products
- B. Develop & maintain a fire, insect & disease resistant forest.
- C. Provide habitat for birds & other wildlife
- D. Maintain an esthetically pleasing appearance

4) GENERAL PROPERTY DESCRIPTION

The 30 acre forest is located 8 miles north on Z Road, northwest of Husum, WA. Wee Road connecting from Bo Road on the south boundary winds through the 30 acres. The land adjoins forests, hay fields & scattered homes. The property is on Fox Hill & was the old Smit homestead. The land includes a 1 acre home site.

The topography rolls with ridges, benches & hollows. Four distinct seasons exist due to its location on the east side of the Cascade Mountains. Average elevation is 220 feet above sea level & annual precipitation ranges from 35 to 45 inches.

Please include an aerial photo or a good quality copy of the aerial photo showing property lines, access roads, etc.

- a.) Include a photo overlay map delineating forest types according to stand management needs.

5) RESOURCE DESCRIPTIONS/RECOMMENDATIONS

I: Forest Health:

General resource inventory/condition description

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Seasonal gales, animal damage & extreme weather cause blow-down, tree injuries & decay. Possible root rot may exist in the northeast corner of the property. Bark beetle (fir engraver) attack was observed there on grand fir. Heavy fire ladder fuels & a dense 5 acre brush field exists in the SW corner of the property.

General resource protection measures

Reduce potential fire hazard by pruning, cutting brush & excess conifer seedlings & slash piling where necessary to reduce fuel ladders & other buildup. Maintain a defensible space along roads & around dwelling & out buildings. Keep fire trails open. Monitor root disease & insect damage by annual walk-through surveys. Treat any root rot by harvesting & planting resistant species. Reduce insect & root rot damage by trying to thin mid-august to April 1.

Resource management/enhancement recommendations

Create & maintain additional fuel breaks (like roads, trails & openings.) Install nest boxes for insect-eating byroads. Consider treating root disease by pulling stumps or pushover logging if necessary & cost-effective. Fence out livestock when necessary to protect conifer seedlings.

II: Timber & Wood Products:

General resource inventory/condition description

Dominant conifers are Douglas-fir with about 10 % white fir & scattered ponderosa pine averaging about 55 years in age with a few younger red cedar, white pine, white fir & ponderosa pine in openings & in the understory. Dominant Douglas-fir average 20" dbh with most having two 32' saw logs. Co-dominants & suppressed trees average 8" dbh & less ranging from 14 to 32 years old. Much shrub cover exists as willow & hazel. Commercial hardwoods (for firewood) include Oregon oak & bigleaf maple, averaging about 10 per acre scattered among the Douglas-fir. Most are suppressed & dying from the overstory conifers. An 8- year-old ponderosa pine plantation covers 7 acres in the middle of the parcel.

General resource protection measures

Special care will be taken in spring operations when high sapflow makes trees more susceptible to damage. Patch cutting (3 to 5 acre openings) are planned to achieve a wider diversity of tree size & species. Regeneration will be by planting Douglas-fir & ponderosa pine & natural seeding.

Resource management/enhancement recommendations

The young ponderosa pine stand will be pre-commercially thinned using variable density thinning to reduce chances of bark beetle attack & to create a mix of widely spaced trees & dense conditions for animal habitat & understory plant development. Obtain & carefully review cutting permits, the Forest Practices Illustrated & Planting Forest Seedlings booklets from DNR's Regional office. Hire a cruiser to give you good stand inventory data. If logging is considered Dept. of Natural Resources Forest Practice forester can be for applications to log. This is Jon Paul Anderson at (541) 980-1840 or e-mail is: jonpaulanderson@wadnr.gov.

III: Soils:

General resource inventory/condition description

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NOTE: Obtain Soil Survey & other data at your local Natural Resources Conservation Service office, or DNR district office.

The Soil Series is predominantly XYZ Soils, well drained, averaging 60" deep, supporting ponderosa pine, grand fir, Douglas-fir, bigleaf maple & vine maple. The Douglas-fir 50 yr. Site Index (SI) is 110 at 50 years & for ponderosa pine, SI is 100. Soil Loss tolerance is 5. *[NOTE: These values are needed to process plans.]* Soil slopes range from 2 to 35% (means surface varies from 2-35 ft of rise for every 100 ft. of flat distance). The landform is basalt plateaus, benches, hillsides with steep side slopes & draws. Water permeability is moderate to moderately slow. Moist soil compaction potential is high. Moist & dry soil displacement potential is low. Erosion potential is low to medium.

Soil parent material is loess & volcanic ash. The organic layer thickness is 1-2". Typical topsoil is red brown (when dry). Underlying soil layers average brown over a brown loam. Soil is 5-25% hard basalt pebbles & cobbles, 15-35% soft fragments. Prescribed burning damage potential is low. This soil is often low in nitrogen, potassium, phosphorus & sulfur, boron & selenium. Rockiness isn't a timber harvest limitation here. Natural & disturbed slopes are considered stable. The soil has medium frost action damage potential. Grass, brush & competing hardwoods/conifers can be severe & may require control.

General resource protection measures

Machine use will be limited in the wet season to avoid soil erosion & compaction. Designated skid trails will be used during harvesting with trees felled to lead to the skid trails. Roads will be either rocked or water bars & dips will be emplaced. Culverts will be of suitable size. Limit wet area crossings & cross at right angles.

Resource management/enhancement recommendations

Use designated skid trails, avoid wet areas as landing sites & winter burn excess slash piles not wanted for wildlife.

IV. Water Quality, Riparian & Wetland Areas:

General resource inventory/condition description

NOTE: Get a Forest Practice water type topo maps from our DNR Regional office (800-527-3305). Attach this map to your SIP plan with your property drawn in to identify typed waters or class A, B or forested wetlands.

General resource protection measures

Due to no streams on the property or nearby, other than rapid snow melt/spring runoff, water shouldn't be a special concern on this property other than maintaining roads & culverts to prevent excessive soil movement.

Resource management/enhancement recommendations

Seed grass & legume mix per NRCS recommendations on exposed road fills, cut banks & landings to prevent soil loss. Conduct fueling & hydraulic repairs carefully to prevent loss of petroleum products on soil. Apply herbicides according to label instruction & relevant WSDNR, WSDA & WSDOE regulations. [If you do have trees under Forest Practice rules that you are required to leave in a Riparian Mgt. Zone along a stream you may be eligible for some re-imburement. Consider contact the Small

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Landowner Office Forester Joe Weeks for info & help at (509) 925-0972 or e-mail: joe.weeks@wadnr.gov.]

V: Fish & Wildlife Habitat:

General resource inventory/condition description

Nuthatches, chickadees, wrens, swallows, blue byroads, ravens, red tail & Cooper hawks, Sawhet & Pygmy owls, turkey vultures, bald eagles; Alligator & Blue-belly lizards, blue tailed skinks, rubber boas, bats & rattlesnakes, toads & frogs occur here. We see occasional bear, raccoon, cougar, bobcat, blacktail deer, elk, porcupine, rabbits, coyote, rabbit, flying & Douglas pine squirrels too. Some seedling browsing\horn rubbing by deer or tree girdling occurs.

General resource protection measures

Create habitat variety of habitat structure for resting, breeding & nesting. See variable density thinning under "B. Timber & Wood Products." Review the following website... www.woodlandfishandwildlife.org

Resource management/enhancement recommendations

Enhance habitat diversity by selective brush control (favor currents, elderberry, dogwood); modify stand structure by thinning, supplemental planting/seeding preferred foods. Create extra snags & down logs near water, rock outcrops & wildlife corridors when consistent with fire mgt. Install nest boxes/roost poles to supplement\speed snags use. Control animal damage on reforestation by repellants & mechanical barriers. Limit hunting. Contact DNR's service wildlife biologist, Jim Bottorf (360) 902-2599 or 791-5560 or e-mail him at: jim.bottorf@wadnr.gov.

VI. Threatened & Endangered Species & Cultural Resources:

[You will need to give me (jesse.calkins@wadnr.gov) your properties legal description & I'll run a computer check to see if your plan potentially impacts these things.]

General resource inventory/condition description

We're unaware of any threatened\endangered species\Cultural Resources of concern here (or list known ones here).

General resource protection measures

Call DNR Regional office (1-800-527-3305 1...1...7...1) with the assessors property description. Applying for a Forest Practice permit will trigger the process of checking to see if you potentially have a species of concern.

If you're planning to excavate, build a road or clear land (other than for a house or garden) for potential Cultural resources that may need protection call YIN archeologist David Powell at (509) 945-4719 or (509) 865-5121 ext. 6690 or e-mail dwpowell@nwinfo.net or write him at Timber Fish & Wildlife POB 151, Toppinish, WA 98948,

Resource management/enhancement recommendations

Calls to the DNR (509) 925-0964 & Yakima Indian Nation archeologist David Powell (509) 945-4719 may tell you what is known & what measures may be needed to protect these special resources. List these.

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VII. Aesthetics & Recreation:

General resource inventory/condition description

Views around our house & from adjoining roads are mostly conifers with few plants of contrasting shapes & colors.

General resource protection measures

Enhance views by pruning, planting dogwoods & vine maple to provide color/texture contrasts. Use irregular patch cuts along roads to prevent rectangular appearance of harvest units, get good green-up before harvesting adjoining areas.

Resource management/enhancement recommendations
Consider additional planting of varied suitable native species.

VII: Agro-forestry/special Forest Products: optional.

General resource inventory/condition description

Limited livestock forage exists & the area isn't fenced. Many mushrooms have been observed. Some Oregon grape exists. Some conifers may be pruned for wreath making branches.

General resource protection measures

Identify mushrooms with assistance of WSU Cooperative Extension Resource

Management/enhancement recommendations
Explore use Oregon grape, & conifer branches for wreath making & mushrooms for marketing.

6. MANAGEMENT TIMETABLE . *NOTE: This is just an example of plan for the next 10 years. It isn't cast in stone! The Federal fiscal year is Oct. 1 -Sept.30. Cost share rates vary & funding often are not available in the Stewardship or Forest Incentive Programs SIP & FIP. Annually contact DNR for SIP funding availability for specific practices. Note that the plan should be reviewed in year 5.*

Year 1

Complete SIP 1 -FOREST PLAN, written by self, assisted by DNR Service Forester & WSU Extension Forester. (*NOTE: no cost share is allowed if you write your own plan. If you choose to hire a consulting forester to write your SIP plan you, may be able to pre-apply for cost sharing under the Fire Hazard reduction program*)

Create wildfire defensible space around dwelling & outbuildings. Apply for fire hazard reduction cost sharing on wooded property buffers with the Dept. of Natural resources. If approved, try to do most work mid-August-March to lessen damage by insects or rot. Cover slash piles with kraft paper or black poly & burn in winter, get DNR permit. Pile & burn slash & branches in late Oct.-Mar. to minimize potential damage & fire holdover escape.

Develop a record keeping system to track management expense, labor hours & taxes. Consider Elwood's 4-D's

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Obtain reputable forestry consultant or logger & prepare sale of about 60 MBF grand fir & Douglas-fir in patch cuts. See Extension publications on sale planning & harvesting. Plan reforestation using Extension reforestation publications. Survey for competing vegetation. Reserve poorly formed conifers for wildlife trees.

Order seedlings for 6 acres at 250 tpa, 40% Douglas-fir & 60% ponderosa pine to replant hole NW of Hwy 141.

Do routine surveys for disease & insects.

Survey road conditions, waterbars, rolling dips & culverts & needing maintenance. Put a load of rock on bad spots.

Survey for noxious weeds & control as necessary.

Year 2

Pre-commercially thin trees out to obtain 5-10 ft. between driplines & prune conifers 16'+ (after mid August) to greatly reduce fire risks, disease & insects, weather damage & to improve wood production.

Mark favorable micro niches & test plant ponderosa pine or sequoia, juniper or Incense cedar or Western white pine.

Start putting up 2-3 birdboxes\acre to help insect control

Survey for noxious weeds & control as necessary.

Research potential special forest products that might be marketable.

Fix priority problems on road drainage with drainage dips & good rock.

Maintain records.

Year 3

Pre-commercially thin trees out to obtain 5-10 ft. between driplines & prune conifers 16'+ (after mid August) to greatly reduce fire risks, disease & insects, weather damage & to improve wood production.

Control competing vegetation mechanically or by herbicides. Monitor seedlings for porcupine & deer damage.

Build & set out more byroad boxes to reduce destructive forest insect populations.

Plant vine maples & dogwoods in woods near house & prune trees near house for view.

Check waterbars, rolling dips & culverts & plan any necessary maintenance. Put a load of rock on.

Survey for noxious weeds & control as necessary.

Identify fungi fruiting bodies on property for potential root rot control or as edibles\for sale.

Plant wildlife plant species like dogwood, current, elderberry (try a few Sequoia gigantia, W. white pine & Incense cedar in spots).

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Maintain records.

Year 4

Pre-commercially thin trees out to obtain 5-10 ft. between driplines & prune conifers 16'+ (after mid August) to greatly reduce fire risks, disease & insects, weather damage & to improve wood production.

Check region unit for weeds & animal damage; control as necessary.

Clear old fire trails.

Continue removing fire ladders.

Survey for noxious weeds & control as necessary.

Monitor byroad boxes for starlings during year; clean bird boxes in fall, spray insides with WD40 or like to kill parasite eggs;

Check waterbars, rolling dips & culverts & plan any necessary maintenance. Put a load of rock on.

Obtain reputable consulting forester or logger, set goals & prepare commercial thinning from below of trees in pole size unit; remove all grand fir & space dominant & co-dominant Douglas-fir to about D+8.

Maintain records

Year 5

Pre-commercially thin trees out to obtain 5-10 ft. between driplines & prune conifers 16'+ (after mid August) to greatly reduce fire risks, disease & insects, weather damage & to improve wood production.

Check region unit for weeds & animal damage & control as necessary.

Commercially thin stand in fall on dry soils using designated skid trails & falling to lead. Lop & scatter slash from thinning.

Seed bare soil areas with grass-legume mix.

Clean bird boxes in fall, monitor for starlings during year

Check waterbars, rolling dips & culverts & plan any necessary maintenance. Put a load of rock on.

Maintain records

Year 6

Pre-commercially thin trees out to obtain 5-10 ft. between driplines & prune conifers 16'+ (after mid August) to greatly reduce fire risks, disease & insects, weather damage & to improve wood production.

Check region unit for porcupine damage & control as necessary. Continue removing fire ladders & excess ground fuels.

Survey for noxious weeds & control as necessary

Year 7

Continue removing fire ladders & excess ground fuels.

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Survey for noxious weeds & control as necessary.

Pre-commercially thin trees out to obtain 5-10 ft. between driplines & prune conifers 16'+ (after mid August) to greatly reduce fire risks, disease & insects, weather damage & to improve wood production.

Clean bird boxes in fall, monitor for starlings during year

Check waterbars, rolling dips & culverts & plan any necessary maintenance. Put a load of rock on.

Plan rehabilitation of brushfield

Maintain records

Year 8

Pre-commercially thin trees out to obtain 5-10 ft. between driplines & prune conifers 16'+ (after mid August) to greatly reduce fire risks, disease & insects, weather damage & to improve wood production.

Locate contractor to cat scarify brushfield with minimal soil disturbance

Check region unit for porcupine damage & control as necessary.

Continue removing fire ladders & excess ground fuels.

Survey for noxious weeds & control as necessary.

Clean bird boxes in fall, monitor for starlings during year

Check waterbars, rolling dips & culverts & plan any necessary maintenance. Put a load of rock on.

Maintain records

Year 9

Plant scarified brushfield with Douglas-fir & ponderosa pine at 350 tpa.

Continue removing fire ladders & excess ground fuels.

Survey for noxious weeds & control as necessary.

Clean bird boxes in fall, monitor for starlings during year

Check waterbars, rolling dips & culverts & plan any necessary maintenance. Put a load of rock on.

Maintain records

Year 10

Survey planted brushfield for weeds & animal damage & treat as necessary. Contact Extension agent or DNR Service forester for control methods

Continue removing fire ladders & excess ground fuels.

Survey for noxious weeds & control as necessary.

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Clean bird boxes in fall, monitor for starlings during year

Check waterbars, rolling dips & culverts & plan any necessary maintenance. Put a load of rock on.

Review plan

Maintain records

New Ten-Year plan will be needed at the Assessor's office.

OTHER SUPPLEMENTAL MATERIALS OR GENERAL ADVICE\GUIDANCE:

A FEW ARTIFICIAL WILDLIFE STRUCTURE CONSIDERATIONS (Birds that live in birdboxes eat huge amounts of destructive insects, up to 2000/day for a pair when feeding their young!):

1. Standard sized birdhouses (songbirds) or holes for small birds should be placed at least 5 -10' above the ground. Large bird\bat\squirrel boxes or their holes\cavities should usually be placed 10' or higher. Birds have preferences & minimum heights can minimize vandalism & predators.
2. Exposed nest devices, holes or excavated large cavities should be placed on more weather sheltered locations, like a N, NE or E trunk of a tree. Placing a box or cavity just under a branch, swelling or bump on a tree & leaning it slightly downward can offer extra weather protection. Sheltered nest device entrance positions inside a denser semi-permanent stand are less critical.
3. Roosts (probably should be really called "Perch") Poles should be mounted on 5-6" diameter wood poles or something comparably long lasting in plastic\metal. Cross piece diameter should be 1". Poles should be 5 ft. or taller than the surrounding trees (if it's on an edge or in a stand of trees) or fence posts (if it's out in an open field).
4. Excavated cavities (large, e.g., flying squirrels\owls) should usually be cut in 10 ft. high or higher above ground into a 10" or bigger diameter point on a tree. Larger diameter trees will increase cavity life expectancy. The excavation should be at least 4" X 4" wide X 10" long. 6" X 6" X 10" or larger cavity would be better in most cases. A board should be used to adequately cover holes, edges to exclude weather. A minimum 1 & 1/4" access hole (or larger) should be drilled in the board near the cavity coverings top. If a tree already has advanced rot a good nest support bottom is needed. If you're trying to create a cavity for woodpeckers (usually better left to make their own), re-fill the cavity up with wood chips. Woodpeckers need to remove chips as part of their nesting routine or they may have infertile eggs.
5. Large nest platforms to attract hawks/owls should be mounted on multi-topped, or flattened tall, large trees. You may wish to hire someone who has done this before. I can give some advice on potentially desirable locations.
6. Down logs (larger the better) or slash piled on top of a stumps, large rocks or holes make dens for coyotes, bobcat & other critters to nest/rest in. Piling logs & slash also reduces fire hazards!
7. For relocation purposes fasten multiple folded tags (like soft aluminum, obtained from a news office/pie pans) with an install date, tree number, number of the bird box, wildlife tree, roost, large cavity or large nest platform. Example: 1999 Tree #5 Sm snag #2, Std box #3. Draw a map of where your practices are located, about how far they are apart from point to point (like one birdbox to the next) on your place & what direction to go to the next tagged tree helps in follow-up maintenance or inspection in future years. Use aluminum nails sticking out a bit so trees can grow.

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8. Get books/pamphlets on birds/making wildlife structures. Audubon & the state Dept. of Wildlife\U.S.F.S. have house plans & recommendations for specific birds. The NRCS Underwood Conservation District office in White Salmon (509) 493-1936, has an excellent birdhouse guides. Local libraries can help too. (Consider making boxes larger than smaller. Many birds like more room.)

9. If you have woodpecker problems like a flicker making holes in your house... You might consider making a "unholed" box for them to have to nest in or drum on in the general area & height.

SOME POSSIBLE PROJECTS YOU MIGHT WANT TO CONSIDER:

Request follow-up site visits by DNR's Service forester, RMAPs forester, Forest Practices forester or Small Landowner Office forester or Service wildlife Biologist

Identify & deal with knapweed or other noxious weeds (call Co. weed control for pictures/assistance)

Clear brush & make a fire trail or fire road along property boundaries for fire & mgt. access

Remove old barbwire fences

Clear brush & prune all trees 5+ft. back & up to 2/3 of their height on both sides of fire & mgt. roads

Burn excess slash/brush piles in winter, not needed for wildlife habitat, get fire permits from DNR

Or catalogs, seed, trees & wildlife plants for consideration for spring planting in the previous fall.

Develop a simple record system to track management expense, labor hours & taxes

Inventory species quantities & volumes or numbers (have cruised?), trees, shrubs, flowers & wildlife

While blooming, tag/label/mark to protect wildlife trees\shrubs (dogwood, currents, elderberry...)

Inventory usage of property or wet areas by mammals, amphibians, birds, fish & insects

Identify good locations along water, trails & open areas for perch or bird/bat box placement, cave starts, excavated cavities or large nest platforms & for placing wildlife watering devices\saltlicks.

Research potentially marketable special forest products

Contact adjacent neighboring landowners & learn what their mgt. goals are

Remove some of the worst mistletoe branches from infected trees to reduce spread.

Remove undesired brush species to decrease fire hazards in forest under story\release desired ones.

Select areas for potential wildlife seedings/ plantings

Consider setting up 40 lb. Selenium supplemented mineral salt blocks for wildlife on property.

Research safest herbicides to use for brush or grass control

Inventory & identify all fungi on property. Learn the bad kinds & unusually good ones like puffballs

Puff dry puffball spores on tree roots to fight harmful fungal diseases, enhance water & nutrient uptake

Identify fungal root disease pockets in your stands, like Armillaria or laminated root rots

Do a complete bird, mammal, reptile & amphibian inventory of the land (including box usage)

Clean out nest materials from birdboxes & spray in oil like WD40 to kill parasite eggs

Actively remove Starlings from birdboxes

Locate micro sites, which could support more specie variety (like Sequia gigantean, Incense cedar, dogwood, elderberry, currents or wildflowers)

Supplementally interplant ferns in damp micro sites, transplanted from other dry areas.

Do survival & spacing inventory of all planted stock or seedlings

Transplant native desirable plants

Get bat droppings from a farmer's barn to mix with water & smear on bathouses to attract bats

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PLANTINGS:

Dug local healthy trees/bushes can offer good genetics for your unique planting area. Transplanted trees/bushes take better if they aren't taller than a foot. Leave plenty of undisturbed soil around their roots. Transplant early before spring buds break open. Try to protect trees from jerking or jarring (it

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breaks off microscopic root hairs) hot sun, dry soil or wind or frost during transport, planting & afterwards if possible. [Unless a prevailing wind is contrary, mature conifers can seed in 1- 1½ times their height in radius].

Try to order larger, well rooted 1-1, plug-1 transplant stock. I rarely plant 1-0 plugs (it just grew in a greenhouse), or 2-0 or 2-1 stock sizes unless they'll be planted on a north slope or along a creek, as their survival rate will generally be lower. Remember that plain plugs (that haven't been transplanted to the field for a while) have had a rather easy greenhouse life where they weren't subjected to the same harsh toughening elements. These plain plugs often have weak cell walls & are very tender & succulent to eat by animals & not very drought, cold or insect resistant. Consider drought & cold hardiness (it can drop to -15 to -20 F. here). Cold hardiness is similar to drought hardiness, as frozen plants can't get water. Usually plants can come down from a colder 1000 ft. higher genetic seed source but rarely up more than 500' from a much lower elevation up w/o suffering weather damage. 100 miles north sort of equals 1000 ft. elevation rise, both have about a 2-5 degree temp. drop. Our seed zone is 653. Try planting in the more unique sheltered micro sites with favorable slope exposure (like facing NE, E or even SE on a hill or side of a stump or log or hole). Consider providing a little extra water & fertilizing with potassium (or sul-po-mag, that's a combo of sulfur, potassium & magnesium that can enhance cold & drought hardiness as well as diameter growth & insect & disease resistance). Plant as deep as the roots are long (10+ inches), up to about ½" just below the lowest live limb & use a tree, bush, stump, log or on a stake on the SW side about 1' away to shade the tree base or matting or mulch (3" deep x 1' radius). Scalping a 1 ft. radius around trees 1 or more inches deep or chemical spot treating (with an appropriate herbicide in a 1 ft. radius around new trees with something like a gallon jug over the tree to protect it) helps survival & growth. New buds on a tree shouldn't be open when spraying. Pre-spraying with long lasting (often cheaper) herbicide in the fall can be done by adding dye to your herbicide. Plant the center of that dye spot next spring. Piled chunks, sticks & branches around trees give extra shade & slow deer browsing.

SOME OTHER POTENTIALLY USEFUL AGENCIES OR SOURCES:

Klickitat County Weed Control Marty Hudson (509) 773-5810
Dept Rev. Forest Tax Dwayne Woolsey (360) 260-6273 dwaynew@dor.wa.gov
Columbia Gor. Nat. Scenic Area planner (541) 386-1916;
Ecology (DOE) Terri Fisher (for Klickitat) (509) 454-7843
Fish & Wildlife habitat specialist Bill Weiler (509) 457-9309
USDA, NRCS (509) 773-5823 dave.guenther@wa.usda.gov
WSU, extension specialist Dr. Ole Stevenson, Stevenson (509) 427-9427 helgerso@wsu.edu
[Http://Skamania.wsu.edu/](http://Skamania.wsu.edu/) [Coordinates training seminars & has free Mid-Columbia Woodland Notes e-mail or hardcopy newsletter. Friendly, helpful, great source of info.!]
YAKAMA INDIAN NATION (YIN): (509) 865-5121 No calls 12:00-1:15
Dept. Of Natural Resources (DNR): Ellensburg SE Region Office 1-800-527-3305 & wait for a real operator & ask for the SE region or the Wenatchee radio dispatch to try to catch someone on the radio or leave a message.
Map & Photo Sales (360) 902-1234
Service Forester, Jess Calkins (541) 980-1104/Wenatchee dispatch or newstart@whitesalmon.net
Service Biologist, Jim Bottorf [in Olympia, so takes a while] (360) 902-2599/791-5560 jim.bottorf@wadnr.gov
Small Landowner Forester, Joe Weeks [call Wenatchee dispatch. Assists landowners under 500 acres laying out required buffers along streams in logging & helps them apply for easement benefits \$ from the state for required protective water buffers.] (509) 925-0972 or joe.weeks@wadnr.gov
Fire permits call Wenatchee dispatch, Bob Marshall/Jodery Goble 773-5588 or Al Lawson 493-3218
Road Maintenance planning, Pete Stocks [call Wenatchee dispatch/(541) 980-1103 or pete.stocks@wadnr.gov

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Forest Practice Forester, Jon Paul Anderson [call Wenatchee dispatch or (541) 980-1840 or jonpaulanderson@dnr.wa.gov

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