

What is the forester's role?

Representative to loggers, mills, regulators

Advises landowner to achieve goals and objectives

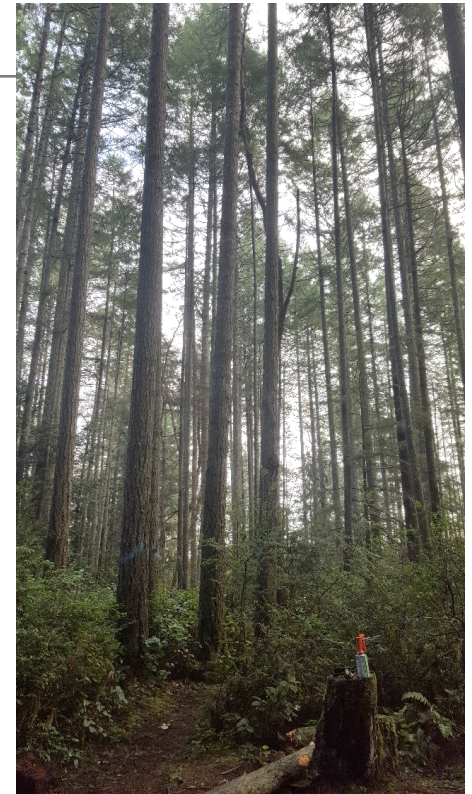
Identify which areas to harvest / which to not

Design harvest prescriptions to meet goals

Type and buffer streams, wetlands, unstable slopes

Estimate volumes, costs and revenue

Prepare the Forest Practices Application



What is the forester's role?

Select the trees for cutting / create prescriptions

Negotiate log purchase agreements with mills

Negotiate logger contracts and rates

Monitor for compliance with plan / regulations

Track log load tickets, mill receipts and revenue

Close out

Organize post-harvest invasives and tree planting



What is the logger's role?

Provide appropriate equipment for conditions

Know the boundaries, restrictions, landowner goals/objectives

Cut to the mark / logger's choice following prescriptions

Remove logs with minimal tree and ground damage

Haul logs and track loads

Clean-up

Possible alternative: purchase and market logs

Selection of logging contractor

Type of equipment needed

Reputation from other landowners / foresters

Look at previous work

Production rate trade off of cost v. care

Availability during dry season



Selecting logging equipment

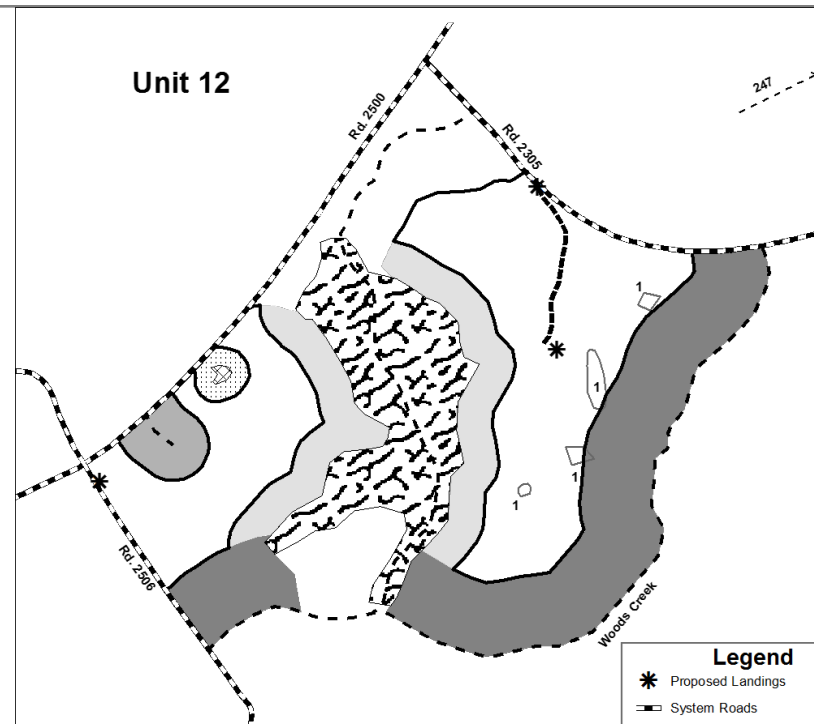
Terrain

- slope angle
- soil types

Tree size

Yarding distance

Production rates



Ground Equipment - Felling

FELLER BUNCHER (WHOLE TREE)



HARVESTER (FELL, LIMB AND BUCK)



Ground Yarding – Wheeled skidder



Ground Yarding - Forwarder



Ground Yarding – Track skidder



Ground Yarding

ATV WITH ARCH



FARM TRACTOR WITH WINCH



Ground Equipment Limitations

Uphill grade (favorable) - 30-35% slope

Downhill grade (adverse) - 40-45% slope

General overall guideline:

35% slope



Ground Equipment Yarding

Tracked skidder - up to 500 feet

Rubber tire skidder - up to 1000 feet

Skid trails should be at least 70 feet apart

Trails 10 to 12 feet wide



Cable/Tower Equipment - Yarding

SWING YARDER



SMALL TOWER YARDER



Tower/Cable Yarding

Yarding distance - up to 1000 feet in thinning

Thinning Corridors 100 to 140 feet apart

Corridors approx. 14 to 15 feet wide

Logger lays out corridors



Landing Equipment

PROCESSOR



SELF LOADER LOG TRUCK



Efficiency in harvesting

Whole tree yarding v. bucked in woods v. cut-to-length

Hand falling v. mechanized

Line yarding v. grapples

Camp run v. log sorts



Feller buncher + grapple skidder + landing processor (whole tree yarding)



+



+



Harvester + Forwarder (cut-to-length)



+



Chainsaw + Skidder (bucked and limbed in the woods)



+



Wet season – to harvest or not



Tree and road damage



Roads

Requires extensive planning

Consider yarding distance / equipment type

Upgrade roads over building new

New roads or intensive rebuild should
be in a year before use

Permanent feature and an investment



Landings

Identify location and size with the logger

Permanent or temporary feature?

May need rock for logging trucks



