



## **RESTOCKING PLAN**

**FOR**

**APN 221-021-026**

August 15, 2018

165 South Fortuna Blvd  
Fortuna, CA 95540  
707-725-1897  
707-725-0972 Fax  
[trc@timberlandresource.com](mailto:trc@timberlandresource.com)

## Regeneration Plan

Site Preparation: Site preparation is a widely used method to facilitate the establishment of a desirable stand of trees. Site preparation activities remove or reduce competing vegetation, reduce or remove unwanted trees and logging debris, and prepare the soil to promote the growth and survival of desired tree species. There are many methods of site preparation that fall under either chemical or mechanical site preparation. The primary objective is to have an area suitable for planting and establishing a new stand of trees. If heavy equipment is available, the RPF recommends subsoiling/ripping the planted sites. Subsoiling/ripping is a mechanical site prep method for heavy soils on cutover or agricultural lands that have a compacted layer at or below the soil surface that limits root growth and development. Subsoiling/ripping increases aeration and water-holding capacity of compacted soils and breaks up root restricting hardpans and/or traffic pans.

Planting: The RPF recommends planting Douglas-fir seedlings at a spacing no less than 10 feet by 10 feet or 435 trees per acre. If deer browsing is expected (landowner's local knowledge), then the density can be slightly increased to account for mortality and/or damage. The area to be planted at the Bladder Site is approximately 0.12 acres in size, which shall require approximately 50 conifer seedlings to be planted. The area to be planted at Cultivation Site 3 is approximately 0.30 acres in size, which shall require approximately 130 conifer seedlings to be planted.

Seedlings: Most conifer seedlings that come from the nursery are usually available in two forms; bareroot seedlings and containerized seedlings. Bareroot seedlings are essentially stock whose roots are exposed at the time of planting. Bareroot seedlings are grown in nursery seedbeds and lifted from the soil in which they are grown to be planted in the field. Containerized seedlings are grown in a variety of hard-walled vessels or in peat pots from seed. Given the conditions of the site and the higher survival rate associated with containerized stock, the RPF recommends using containerized seedlings if available. Seedling care and handling is extremely important to ensure post planting survival. For long-term storage (more than 3 days) store at 33-36 degrees Fahrenheit. For short-term storage (several hours to less than 3 days) store below 42 degrees Fahrenheit. At the planting site take care to not let the roots dry out and avoid exposure to the sun or warmer temperatures.

### Planting Instructions:

1. Tree planting shall only occur in winter or early spring. Tree planting should not occur if the ground is frozen, or during unusually warm periods.
2. Dig a hole at least one inch deeper and wider than the seedling roots. If planting from a container, dig the hole an inch deeper and wider than the container.
3. Place the seedling into the hole taking care not to bend the taproot, or main vertical root, and cover with soil.
4. Pack the soil down firmly around the seedling to remove any air pockets.
5. See Appendix A-D for illustrations for correct planting techniques.

6. The RPF recommends acquiring conifer seedlings from Green Diamond Resource Company's nursery in Korb. Contact Glen Lehar @ 707-668-4439. Indicate the elevation and geographic area of the planting site and he will recommend the appropriate stock.

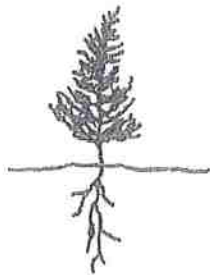
Sincerely,



Chris Carroll, RPF# 2628  
Timberland Resource Consultants

# APPENDIX A

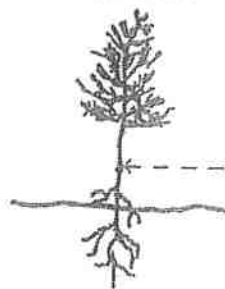
## CORRECT METHOD OF SEEDLING PLANTING



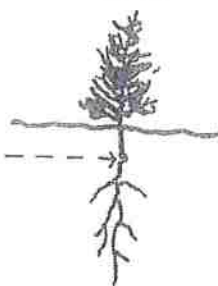
- Soil firmly packed around roots.
- No air pockets.
- Roots straight with no J or L bends.
- Root collar at or slightly below ground level.
- Root not pruned.

## ERROR IN PLANTING

Too shallow



Too Deep



Root Collar

- Hole not deep enough.
- Root collar and upper roots exposed.
- Roots dry out.

- Hole is too deep.
- Root collar buried.

J or L Roots



Air Pockets



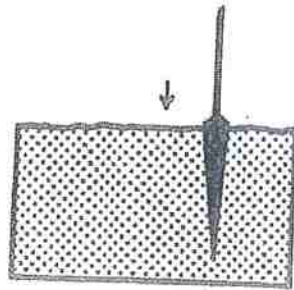
Root Collar

- Hole is not deep enough — planting in rocky soil.
- Roots cannot effectively take up water.
- Tree not wind-firm.

- Soil not firmly packed around roots.
- Air pocket forms.
- Roots dry out.

APPENDIX B  
PLANTING WITH A FLAT BAR

1. Insert flat bar straight down.

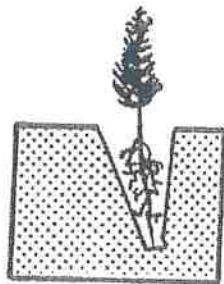


2. Pull flat bar backward to open hole.

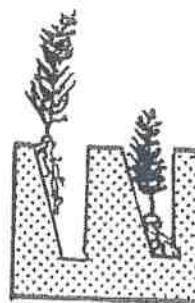


3. Remove flat bar and place seedling at correct depth with root collar at or slightly below ground level.

Correct

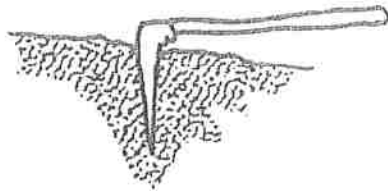


Incorrect

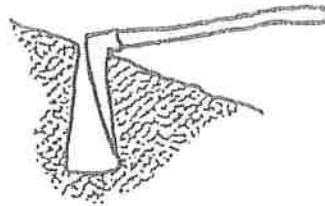


APPENDIX C  
PLANTING WITH A HOE

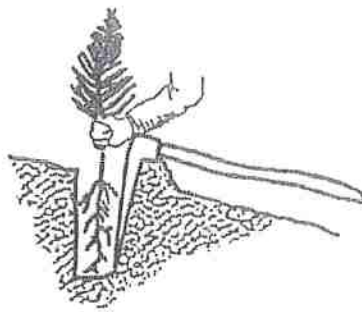
1. Swing hoe to get full penetration.



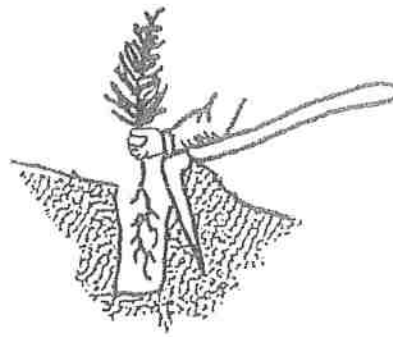
2. Lift handle and pull up to widen hole.



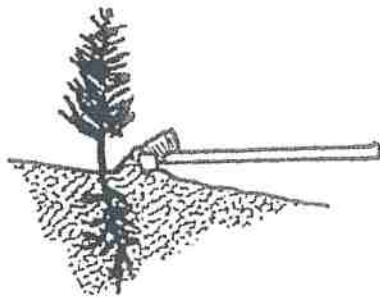
3. Place seedling while using hoe to hold back soil.



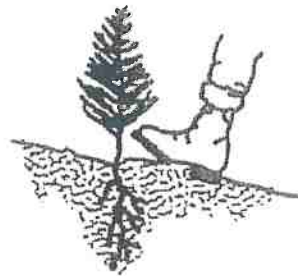
4. Use hoe to pack soil at bottom of hole.



5. Use hoe to pack soil at top hole.



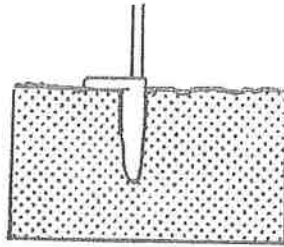
6. Firm soil around seedling with feet.



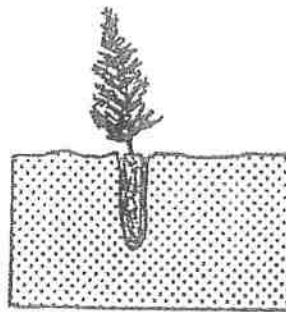
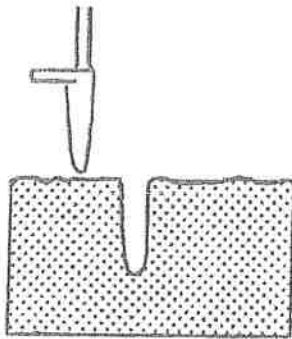
## APPENDIX D

### PUNTING WITH A PLUG BAR

1. Insert plug bar straight down until plug bar footrest is level with ground.



2. Remove plug bar and place seedling in hole.



3. Firm soil around seedling with heel of boot.

