

# After the Fire, Where, When and What Do We Plant?

### A DNR Perspective

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### Presentation Outline

- Fire Overview
- 2014, 2015 & 2016 Fire Planting Needs
- Factors Affecting Where, When and What We Plant



### DNR Northeast Region

- Headquartered in Colville with district offices in Colville, Deer Park, Loomis and Omak.
- 2.5 million acres of state and private forestlands in Ferry, Okanogan, Pend Oreille, Spokane and Stevens counties, and the northern third of Lincoln County.
- 567,000 trust acres
- 331,000 forestland acres.

### 2005, 2015, 2016 Fires

#### Northeast Region

#### **Burned Acres:**

- 117,662 Trust Acres
- 62,966 Forest Acres
- 4,383 Plantation Acres

(Approximately 19% of all forested trust lands in the Region)



### Salvage Prioritization

### Revised Prioritization Criteria:

- Stand Volumes>7,000 Bd Ft/Acre
- Site Indices > 80
- Slopes < 40%</li>
- Slope Stability Ratings less than 2.
- Proximity of Volume to Existing Roads.
- Burn Severity Data, If available.



### Post Fire Reforestation Priorities

#### First Priority:

- 7,437 Salvaged Acres (Legal & SFI Obligations)
   Second Priority:
- 2,236 Plantation Acres on Sites > SI 70 (Fiduciary Obligation) Third Priority:
- 5,656 Non-salvaged Acres on Sites > SI 70 (Fiduciary Obligation) Fourth Priority:
- 2,147 Plantation Acres on Sites < SI 70 (Intergenerational Transfer) Final Priority:
- Remaining Non-salvaged Acres on Sites < SI 70 (Intergenerational Transfer)

### Factors Affecting Planting Decisions



### **Economics**

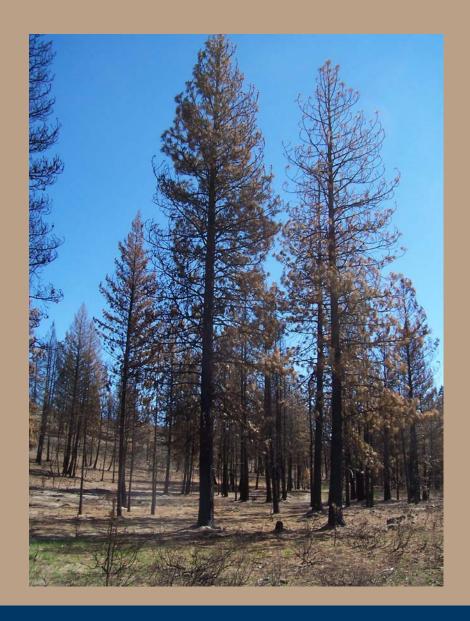
Where is the wood?

How much will the mill pay for our wood?

How much does it cost to get the wood to the mill?

How expensive will it be to reforest the site?

Will the future value be worth enough to recoup our investment and make a profit?



# Access & Infrastructure

What are our Infrastructure needs?

How do we pay for this?

When will the work be done?





# Natural Regeneration

Are we getting any natural regeneration?

What is the spatial distribution of the seedlings?

Will these seedlings need to be released from competing vegetation?

### Salvaged Acres

Are the remaining standing trees a safety hazard?

How structurally sound will the snags be when the planting crew is present?



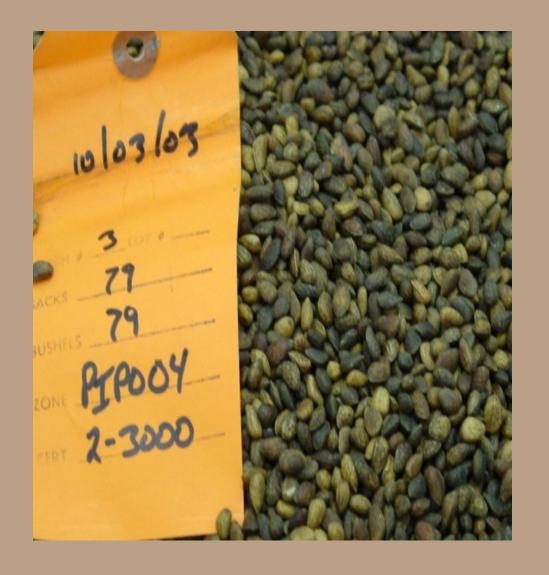


### Non-Salvaged Acres

How many standing trees will there be when the site is planted?

How structurally sound will the snags be when the planting crew is present?

What happens if all of the snags are on the ground?



### Seed

Non-salvage Annualized Need:

- DF 54,000 Trees
   (2.6 lbs/5 Bu)
- PP 362,000 Trees (60.4 lbs/53 Bu)
- WL 510,000 Trees (7.1 lbs/16 Bu)
- WP 26,000 Trees (2.0 lbs/2 Bu)

57 species/zone/elevation combinations



### Site Preparation

What grass and brush species are coming back?

Will incoming grass and brush compete with planted trees?

Will release be an option?





### Site Preparation

Prep this?



### Site Preparation

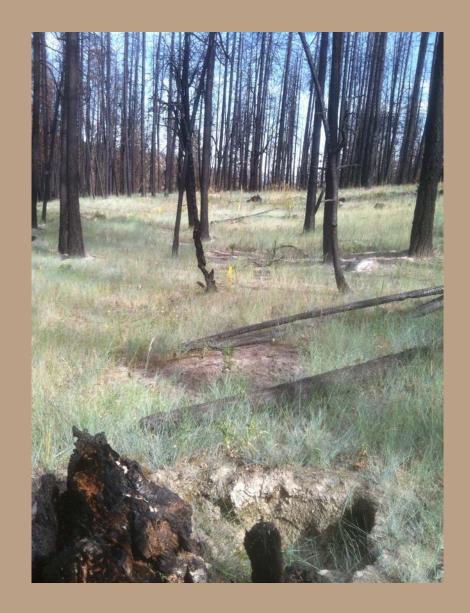
Or This?





### Site Preparation

Or This?





### Stock

Are the stock types that we currently use sufficient to deal with the anticipated onslaught of grass and brush?

Do we need to look at alternatives stock types?:

S10 vs S15, 1+1 or P+1?

What are the costs of the stock relative to the performance?



## Financial Considerations

Funding?

Alternative investments?

Will release be an option?





### Trust vs Public Responsibilities

Intergenerational Transfer



# 2014, 2015, 2016 Post-Fire Reforestation Costs

Projected Post-Fire Reforestation Costs: Up to \$6,000,000

Projected Post-Fire Seedling Needs: Up to 4,000,000 Trees

Current Region Silviculture Budget ('16-'17): \$3,037,000

Projected Region Silviculture Budget ('18-'19): \$2,530,000

#### **Potential Budget Reduction Offsets**

- Forest Health Funding Legislation
- Potential changes in Forest Improvement Treatment Spending Rules
- Are these offsets enough?



