## **Aerial Fertilization**

# Prescription Development

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### **Determine Target Stands**

Cedar salal stands (SCHIRP) Douglas fir

### **Determine Target Stand Characteristics**

I am more familiar with Fd stand fertilization so I will not deal with SCHIRP but the same methodology applies

- Fd Stands
  - Higher the Fd % the better
  - Preferable to have density control, commercial thin the best, juvenile spaced second
  - $\circ$  Target site index 20 33
  - Older second growth stands are preferable, less time to hold the investment until harvest date
  - Do not treat stands within 5 years of planned harvest

### **Utilize Local Knowledge for Selecting Watersheds**

Issues to Consider

- Stand management history, commercial thin, spacing, pruning (MoF a great information source)
- Forest health
- Environmental issues (drinking water)
- Road access
- Harvest plans (ideally there would be at least a ten year harvest plan)

Ideally an overview fertilization plan would exist on a management unit or TSA level. This would prioritize fertilization activities on a watershed by watershed basis.

### **Information/ Map Review**

Identifying suitable polygons can be done by manual map review or a GIS query.

Create a map with the following features:

- Forest cover, planned harvesting, stream classification, community watersheds, water intakes, research installations, wildlife habitat areas, ungulate winter ranges, old growth management areas, wildlife tree patches, karst areas
- MAPVIEW is an excellent information source

Identify treatment areas based on target stand characteristics that do not have resource conflicts

- Try to create larger treatment areas
- Do not include narrow fingers that go perpendicular to the contours

#### **Field Review**

Field review includes:

Identifying helicopter loading areas.

- Maximum flight distance is two km.
- Be familiar with the helicopter's requirements, this can be a project limiting factor
- Identify all possible loading areas on prescription map.
- Consult with MoF or Licencee if trees can be felled in order to create loading sites.

#### Forest Health Conditions

• Root rot is the most common issue

### Accuracy of Forest Cover Information

- Have the base maps accurately identified what is logged.
- Are leading species and site index correct

#### Stream Identification

- Identify fish bearing streams that are not on the base map
- Identify streams visible from the air
- Stream to protect use as boundaries or buffer

### **Processing Field Review Data**

Amend treatment units with field review data Create final treatment units

Reference material can be found at: Forests for Tomorrow - Fertilization Guidelines