



Staney Cone Helicopter Timber Sale

Uneven-aged Management using Single Tree Selection Prescriptions

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Uneven-aged management is authorized by the Prince of Wales Landscape Level Analysis Project FEIS and ROD, and is described in Activity Card 14: Harvest of Old Growth using Uneven-aged Management (POW LLA Project ROD, Appendix 1, page 119). Unit cards in the upcoming Out-year Plan display where helicopter harvest is proposed. The objective of uneven-aged management is to: 1) economically harvest a portion of the stand, 2) maintain old-growth structure in the stand, and 3) retain trees that will provide for economically viable and sustainable future entries. There is no final rotation age as in even-aged or two-aged systems but instead regular, periodic entries designed to maintain three or more distinct age classes and a range of diameter classes in a reasonably well dispersed manner across the stand. This results in a stand of high structural diversity due to the high variability in tree sizes and individual tree characteristics.

A cut-tree mark designates trees for removal in units. When implementing a cut-tree mark, safety or hazard trees may also be marked as required for safety purposes. Variability in the stand will result in variability in the mark, from scattered individual trees to groups where overstory removal is less than 2 acres in size. On average, approximately 66% of the pre-harvest basal area of standing live trees will be retained, with at least 75% remaining in portions of the unit where windthrow risk is high. Generally, the pre-harvest species composition will be maintained in the stand after harvest.

This prescription is based on the concept of three basic tree types being present after harvest to meet the future objectives for the stand. These tree types are: 1) healthy young **crop trees** that promote economic future entries, 2) older **wildlife trees** with low timber value but high value to wildlife, and 3) **advanced or new regeneration** that will comprise the next age class in the stand. Additional marking guidelines account for not impeding wildlife movement in the stand, protecting pockets of regeneration, creating openings for adjacent desirable seed sources, windfirmness of the residual trees, defect and decay, disease, and insects. The Silviculturist will establish inspection plots to ensure marking guidelines are adhered to and objectives are met for the unit.

The canopy gaps and disturbance created by single tree selection harvest would promote new tree regeneration to facilitate future harvest entries as well as promote the growth of understory plants important for wildlife. Future entries would continue the process of developing additional age classes. The next entry would likely occur in 50 to 100 years. This would allow retained young trees to mature. The silvicultural prescription would maximize the flexibility of helicopter yarding to allow for the removal of a higher percentage of more economically valuable trees, while retaining a higher percentage of trees that have higher value for wildlife, or trees that would be more economically valuable for timber in the future.

