



Legacy Forest Defense Coalition
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To: Board of Natural Resources
MS 47000
Olympia, WA 98504-7000
Submitted via email: bnr@dnr.wa.gov

Re: **Addendum B** to Letter of Opposition to Last Crocker Timber Sale:
Structurally Complex Stand Characteristics

DNR is required under the terms of its Policy for Sustainable Forests to manage structurally complex forests to meet older forest targets.¹ Structurally complex stands are defined by DNR as those that are in the botanically diverse, niche diversification, or fully functional stand development stage.² Forests in the niche diversification and fully functional stages of development are rare in the Straits HCP planning unit.³ Most of the existing structurally complex forests in the planning unit are in the botanically diverse stage of stand development. The HCP classifies structurally complex stands as those that are more than 70 years old. DNR guidelines for Identifying Mature and Old Growth Forests suggest that stands in the botanically diverse stage of stand development range between 70 to 160 years old.⁴ According to the SEPA checklist for “Last Crocker”, units 1 and 2 are between 85 to 91 years old.

DNR guidelines for identifying mature and old growth forests define botanically diverse stands as characterized by a shift of the dominant mortality processes from inter-tree competition to stochastic events (disease, wind, fire, pests). This shift results in stem loss of larger trees (dominant and codominant) and a loss of shade. Openings in the Botanically diverse canopy appear, allowing regeneration of shade tolerant species including western hemlock and western redcedar. These stages generally lack large down woody debris and large snags.⁵

¹ See Policy for Sustainable Forests, p. 46.

² See 2004 SHC FEIS, p. 4-22; PR 14-004-046, p. 1.

³ According to DNR’s own analysis, less than 2% of the Straits HCP planning unit has protected forests in the niche diversification or fully functional stages of development. See Table 2, Estep & Buffo. 2021. Identifying Stands to Meet Older Forest Targets in Western Washington.

⁴ See Van Pelt, 2007. Identifying Mature and Old Growth Forests in Western Washington. Department of Natural Resources, Olympia, WA, p. 64.

⁵ See Van Pelt, 2007. Identifying Mature and Old Growth Forests in Western Washington. Department of Natural Resources, Olympia, WA, pp. 36-37, 103.

Many of the dominant conifers in this timber sale are close to 200 feet tall (see LiDAR images, below). There are numerous gaps in the overstory, and well developed understory canopies, particularly in units 1 and 2. Trees have a variety of diameters and heights, and natural mortality or stem loss is evident throughout these two units (see Figures 3 and 4 below, and representative photographs in **Addendum C**).

The Policy for Sustainable Forests, and 2004 SHC FEIS, define the botanically diverse stand development stage as follows:

Multiple canopies of trees and communities of forest floor plants are evident. Large and small trees have a variety of diameters and heights. Decayed and fallen trees are lacking in abundance.⁶

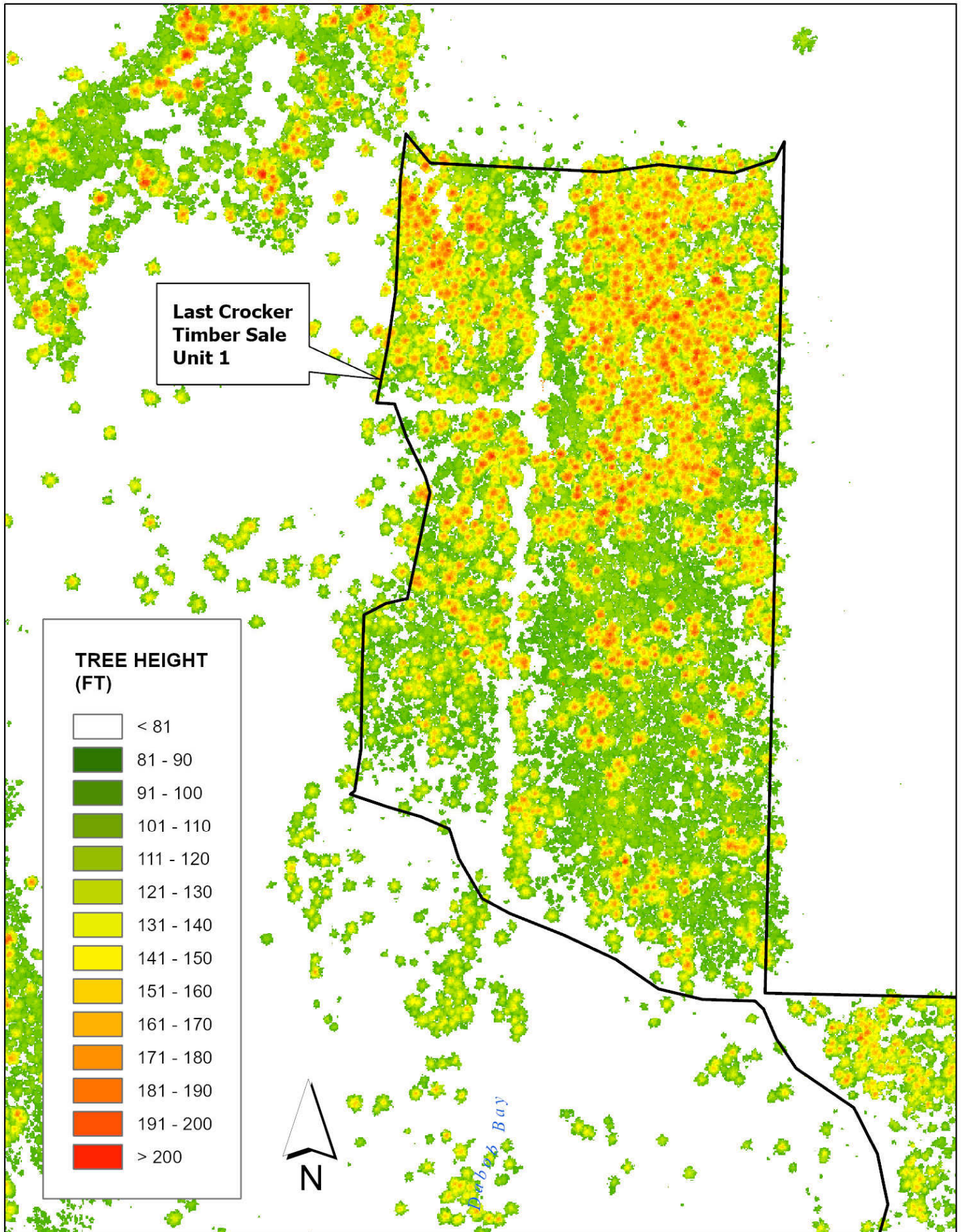
Units 1 and 2 of this timber sale meet these criteria and are structurally complex.

A handwritten signature in black ink, appearing to read 'Stephen Kropp', with a horizontal line extending to the right from the end of the signature.

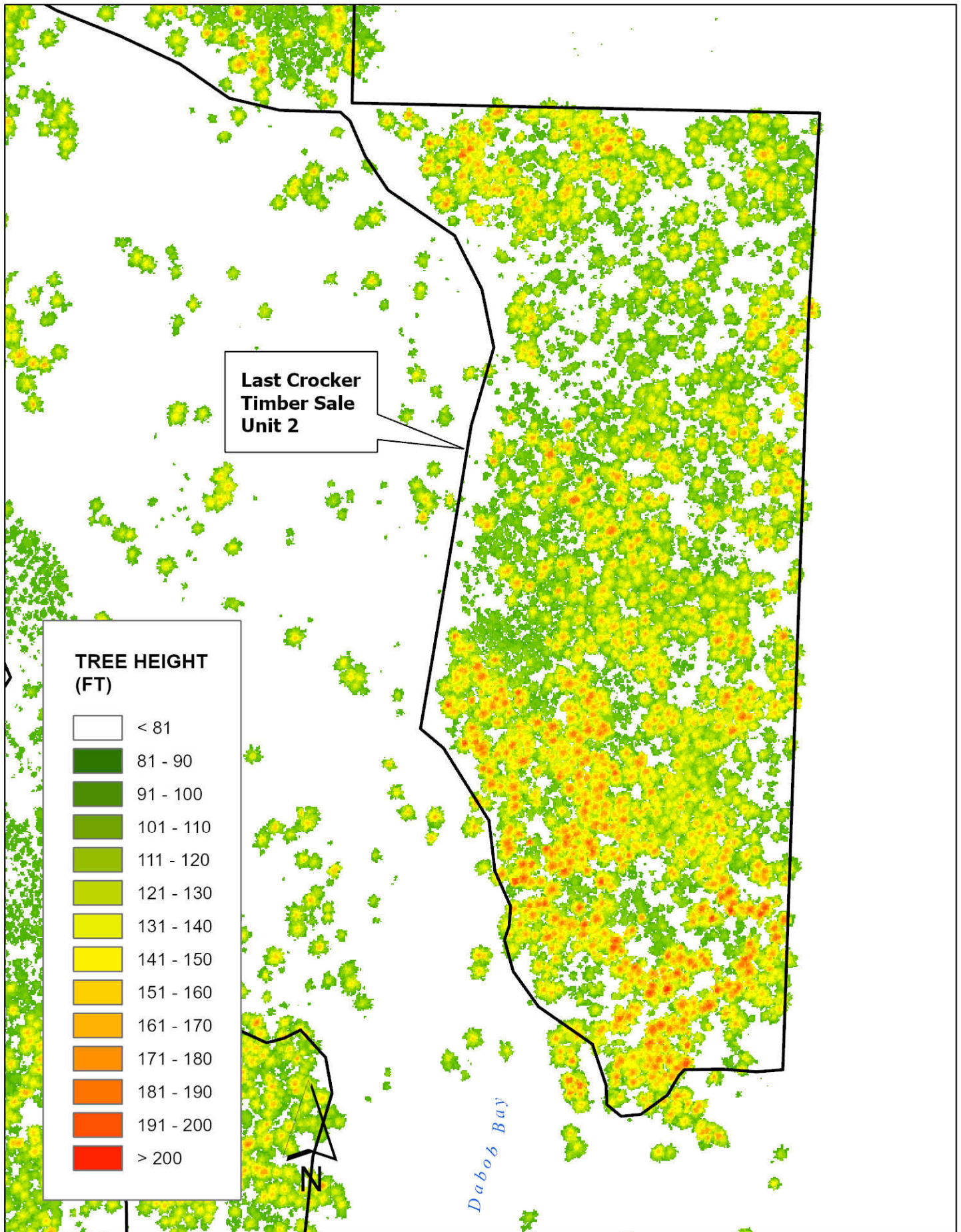
Stephen Kropp
Director

⁶ See 2004 SHC FEIS, p. B-51.

Map of Tree Heights: Unit 1



Map of Tree Heights: Unit 2



2017 Aerial Photo: Unit 2

