

Sampling Design and Estimation Procedures for the Down Woody Materials Indicator of the FIA Program

C.W. Woodall₁, USDA Forest Service, North Central Research Station,
St. Paul, MN, 55108, U.S.A.

¹Corresponding author (Fax: 651 649-5140, Ph: 651 649-5141, E-mail: cwoodall@fs.fed.us)

11 **Outline**

12 1. Indicator Overview

13 1.1 FIA Inventory and Forest Health Indicators

14 1.2 The Down Woody Materials Indicator

15 1.2.1 Fire, Wildlife, and Carbon Modeling Sciences

16 1.2.2 Detection and Evaluation Monitoring

17 1.2.3 Current and Expected Outputs

18 2. Plot-Based Sampling Design

19 2.1 Overview and Literature Discussion

20 2.2 Coarse Woody Debris

21 2.3 Fine Woody Debris

22 2.4 Duff/Litter/Fuelbed

23 2.5 Shrub and Herbs

24 2.6 Slash Piles

25 3. Data Processing and Estimation

26 3.1 DWM Component Level Estimation

27 3.2 Plot-Level Estimation

28 3.3 Data Processing Routines

29 3.4 Population-Level Estimation

30 3.5 Estimation in conjunction with other FIA Inventory Phases

31 4. Change Estimation

32 4.1 DWM Component, Plot-Level, and Population Estimation

33 4.2 Estimation in conjunction with other FIA Inventory Phases

34 5. DWM Indicator Analysis

35 5.1 Introduction

36 5.2 Field Data

37 5.3 Core Tables

38 5.4 Core Graphics

39 5.5 Maps

40 6. References

41 7. Appendices