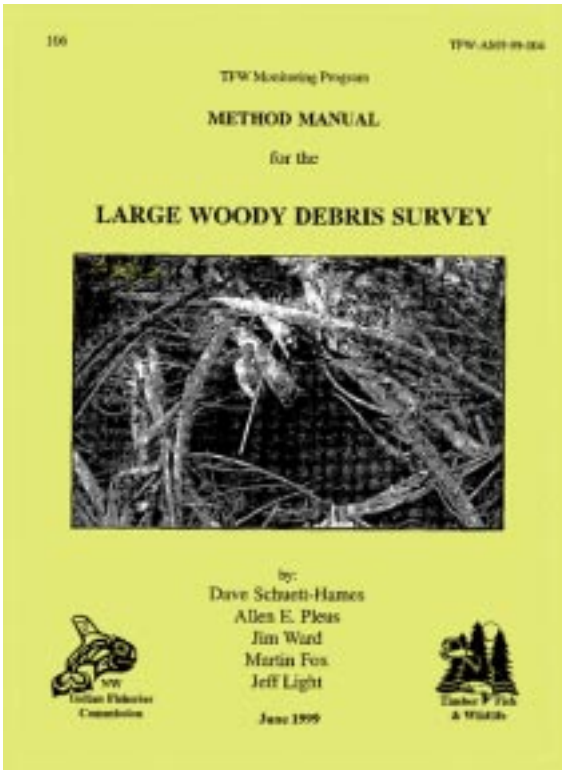
Document No.: 1

Timber-Fish-Wildlife (TFW)Method Manual for the Large Woody Debris Survey

Citation: Shuett-Hames, D., A. E. Pleus, J. Ward, M. Fox, and J. Light. 1999. TFW Monitoring Program method manual for the large woody debris survey. Prepared for the Washington State Dept. of Natural Resources under the Timber, Fish, and Wildlife Agreement. TFW-AM9-99-004. DNR #106. March. 33 pp.



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Cost: No charge

Abstract: Provides two levels of standard methods for assessing and monitoring the quantity and quality of LWD at the TFW stream segment scale.

Pre-monitoring requirements include the TFW Stream Segment Identification Method (Protocol # 9) and the TFW Reference Point Survey Method (Protocol #6).

The relatively quick Level I method quantifies the number of pieces in each of several size class categories and by bankfull channel zone.

The Level 2 Method collects more detailed information on individual pieces including piece count, volume by bankfull channel zone, whether it is deciduous or conifer, and stability. LWD jam information is collected for both Level I and Level 2 Surveys. The Jam method collects information on jam and piece count, number of jams by bankfull channel zone, and number of pieces per jam in each of several size class categories.

Association with a Reference Point Survey provides information on piece and jam distribution. Optional key piece information can be collected for the Level I and II methods and is calculated in the database for Level 2 pieces. TFW data management services provide basic analysis of LWD data at 100 meter (except Level I) and stream segment scales. Standard calculations include the number of pieces and jams per channel width and kilometer.

Sections are presented in order of survey application including: study design, pre-survey preparation, stream discharge measurement, survey method, post-survey documentation, data management, and references. An extensive appendix is also provided that includes: copy masters of field forms; examples of completed field forms; a field criteria and code sheet; a standard field and vehicle gear checklist, and data management examples.

Target Application: Management

Suitable for Volunteers: Yes, with training, or if supervised by experienced personnel

Training Recommended: Yes

Available? Not at this time

Monitoring Focus:

Large woody debris quantity and quality:

1) Provide a means of accurately documenting the current abundance, characteristics, and function of large woody debris in stream channels.
2) Provide a repeatable methodology that can be used to monitor changes in the status of large woody debris over time.
3) Improve knowledge of the distribution, characteristics, and function of large woody debris in Pacific Northwest streams.

Geographic Scale: Basin, sub-basin, stream reach, or project site

Methods: Office **&** Field

Level of Data Quality: Level 3

Equipment and Tools: Appendix D of the document

Data Forms: Appendix A and C of the document

Examples of filled-in data forms: Appendix B of the document

Key References: Page 32 the document