

Westside Type F Riparian Prescription Exploratory Field Study

Updated Project Summary

This document has been drafted to fulfill the TWIG's responsibility under the CMER Lean process to provide a prospective Findings Report that addresses the intent of the standard "six questions" document which is provided to Policy at the completion of a project. Information contained in this document is based on the TWIG's expectations on how the study will be conducted and the scope of the expected findings.

Background and Purpose

Riparian prescriptions and rules are very different from Eastern to Western WA for Type F waters. Currently no Westside Type F Effectiveness Studies are being conducted by CMER. While CMER has tested the effectiveness of Eastside Type F riparian prescriptions and the FP shade rule, the current Westside rule remains based on untested assumptions that riparian prescriptions are functioning as intended. There is a need for a Westside Type F Riparian Prescription Effectiveness study to fill this knowledge gap and compliment the Eastside Type F Effectiveness Study results. However, little is known about the distribution of stand conditions in Westside Type F streams under the current suite of prescription variants¹. Before such a Type F effectiveness study can be implemented, an Exploratory Study is needed to assess these basic questions. The goal of this Exploratory Study is therefore to produce information needed to focus and design the Westside Type F Riparian Prescription Effectiveness BACI study.

Study Intent and Products

This Exploratory Study will assess riparian stand conditions and selected riparian functions across a wide range of prescription variants and site conditions. Given the complexity of Type F rules and the variability in application across the landscape, there is a need to better understand how the rules influence riparian forest functions. The Exploratory Study will provide a coarse-level assessment of current riparian conditions that focuses on addressing scientific uncertainty surrounding their sensitivity to prescription variants. At the conclusion, CMER will have information for most of the Westside Type F prescription variants including:

- the level of riparian functions associated with the prescriptions, including data on post-harvest large wood recruitment, shade, and sediment delivery,
- riparian stand conditions associated with the prescriptions, including stand mortality, density, basal area, and the proportion of sites currently on trajectory to meet DFC target of 325 ft²/acre of basal area at 140 years,
- the frequency, magnitude and distribution of windthrow and its effects on stand structure, buffer tree mortality rates and riparian functions,
- the relative influence of differences in site conditions and geographic location on the above.

What the Exploratory Study does not address

This project is not a designed experiment but an exercise in collecting pilot data for riparian prescriptions that are already distributed across the landscape. It is important to note that results of the Exploratory Study will not directly answer questions of causation from forest practices in meeting most resource objectives outlined in Schedule L-1 (defined as functional objectives and performance targets). That will be the main goal of the next phase of the project, the Westside Type F Riparian

Prescription Effectiveness BACI Study (yet to be scoped) that this Exploratory Study is intended to help focus.

Project History and Status

This Exploratory Study design was developed by a TWIG (Technical writing and implementation group) under the LEAN pilot project process. The design was reviewed and approved by CMER consistent with the Protocol and Standards Manual (2016), and successfully went through Independent Scientific Peer Review (ISPR). Status of this project is slated to be updated in the CMER Work Plan 2019. The Exploratory Study is ready for implementation pending Policy approving funding. Completion of the Exploratory Study is anticipated to be 2021.

ⁱ Variant refers to the 25 potential RMZ options for westside Type F and S streams that result when applying the five site class categories, two channel bankfull width categories and three harvest options used in the western Washington Type F and S riparian prescriptions (WFPB 2016).