Findings Report for Eastern Washington Riparian Assessment Project (EWRAP) Phase II Report

1. Does the study inform a rule, numeric target, performance target, or resource objective?

Yes. The study contains information relevant to the Timber Habitat Type framework used to apply the eastside Type F riparian rule prescriptions. This is an exploratory study that was not intended to evaluate the effectiveness of a rule, numerical target, performance target or resource objective. The purpose of the project is to address uncertainty about the current condition of riparian forests adjacent to eastern Washington fish-bearing (Type F) streams on lands managed under the Forest Practices Habitat Conservation Plan (FP-HCP). The Scientific Advisory Group for the Eastside (SAGE) conducted this study to provide a better understanding of current riparian stand conditions for use in developing future projects to evaluate the effectiveness of the Eastern Washington riparian prescriptions for Type F streams.

2. Does the study inform the Forest Practices Rules, the Forest Practices Board Manual guidelines, or Schedules L-1 or L-2?

This project is related to the Forest Practice Rules for Eastern Washington riparian management zones (WAC 222-30-022*). It does not evaluate effectiveness of the riparian harvest rules in meeting resource objectives or performance targets (Unlike the Westside, Eastside performance targets for type F waters are not well developed), but it does characterize current (2006) conditions of riparian stands sampled where existing forest practices rules are being applied.

3. Was the study carried out pursuant to CMER scientific protocols (i.e. study design, peer review)?

Yes. However, because this study was initially planned as an exploratory effort for a larger study, the study design and the final report were reviewed and approved by SAGE and CMER, but did not receive ISPR review.

4. What does the study tell us or not tell us?

a. The study tells us:

The study provides estimates of the distribution of current (2006) riparian conditions adjacent to fishbearing streams in eastern Washington from a random sample of 102 sites. It characterizes large trees, small trees (regeneration), understory shrub/herbaceous cover, presence of insect and disease damage, and occurrence of human and natural disturbances. The study presents information on potential relationships between riparian stand conditions and site conditions, regional patterns in riparian stand conditions, and vegetative patterns related to distance from stream. It also compares the distribution of riparian stand conditions and stand types by Timber Habitat Type (elevation) zone as prescribed in the forest practices rules.

b. The study does not tell us:

The study does not evaluate the effectiveness of the Forest Practice Rules for Eastern Washington riparian management zones or contain sufficient data and information to provide a thorough evaluation and validation of the existing Timber Habitat Type System.

5. What is the relationship between this study and any others that may be planned, underway, or recently completed?

Two related follow-up studies have been proposed by SAGE and reviewed by CMER that were submitted as candidates for funding as FY 2015-2016 Proposed Mid Year Projects as they are not currently prioritized on the CMER Master Schedule approved by Policy and the FP Board. The Eastside Modeling Evaluation Project (EMEP) would use the FVS growth and yield model and EWRAP stand data to predict future stand conditions and estimate the proportion of sites that would meet existing riparian stand criteria in the rules for inner zone harvest over time. The Eastside Timber Habitat Type Validation Project would build on this study to validate the Timber Habitat Type System (elevation zones) used in the Eastside Type F riparian prescriptions as a framework for the inner zone leave tree requirements.

6. What is the scientific basis that underlies the rule, numeric target, performance target, or resource objective that the study informs? How much of an incremental gain in understanding do the study results represent?

The eastern Washington riparian management prescriptions are intended to provide stand conditions that vary over time and mimic eastside disturbance regimes within a range that meets functional conditions and maintain general forest health (WAC 222-30-022). However, there is uncertainty about the scientific basis underlying the rules because no documentation is available that details or describes how the timber habitat type elevation zones or the basal area ranges were developed and agreed upon during the FFR negotiations. This study does not directly inform a rule, numeric target, performance target or resource objective or address the uncertainty concerning the scientific basis that underlies the current rules governing eastside Type F waters. It does reduce scientific uncertainty about riparian stand conditions adjacent to Type F streams in eastern Washington and provides a modest incremental gain in understanding. This information will be useful in scoping and designing future east side studies.

Technical implications and recommendations

The study highlights the diversity of riparian forests being managed under the eastside Type F riparian rules. The study documented a large number of tree species occurring in riparian stands and the presence of many forest types (forest series). There was extensive variation in riparian stand composition and characteristics such as stand age, height, density and basal area. The diversity of forest types and riparian stand conditions appears to be related to several factors, including differences in growing conditions, past management and disturbance. The diversity of conditions documented in this study highlights the challenges of developing appropriate management prescriptions and performance targets for riparian forests in an area as large and diverse as Eastern Washington. The analysis by Timber Habitat Type documented extensive overlap in the distribution of forest types across the Ponderosa Pine and Mixed Conifer Timber Habitat Types, indicating that the existing Timber Habitat Type framework in rule did not consistently sort riparian stands on the basis of current forest type (series) or current stand condition. The implications of this for the eastside Type F riparian prescriptions are unclear. If reducing scientific uncertainty about the Timber Habitat Type System is a priority concern for the adaptive management program, the report recommends developing a focused study to further examine and validate the Timber Habitat Type system.