Eastside Timber Habitat Type Evaluation Project

PROJECT CHARTER

Washington State Cooperative Monitoring, Evaluation, and Research Committee (CMER) Protocols and Standards Manual (PSM) Chapter 7, Section 4

Project Charter 1¹: Issue/Problem Statement, Purpose Statement, Project Objectives, Critical Questions, Program Rule Group and Program, Project Tasks and Timeline, Budget, Project Team Roles and Responsibilities, Communication Structure, Authorization, Recognition of Support, References

Oversight Committee: Eastside Scientific Advisory Group (SAGE)

Project Team Members: Todd Baldwin, Cody Thomas, Gretchen Lech, Rohan Theobald, James Hartley, Teresa Miskovic (PM), Malia Volke (PI)

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Issue/Problem Statement

The Washington Forest Practices Rules (WAC 222-30-022) identify three timber habitat types (THT) in Eastern Washington riparian management zones (RMZs) based on elevation – Ponderosa Pine (< 2500 ft.), Mixed Conifer (2500-5000 ft.) and High Elevation (>5000 ft.). Each THT is associated with its own unique range of harvest prescriptions. WAC 222-30-022 describes the intent of riparian management is to "provide stand conditions that vary over time... and are designed to mimic eastside disturbance regimes within a range that meets functional conditions and maintains general forest health". While this simple classification system is easy to implement, it is inaccurate in two main ways. First, the elevation zone classification system is inaccurate, particularly in the Ponderosa Pine THT. Studies (Schuett-Hames 2015) have documented misclassification rates in the Ponderosa Pine zone as high as 92% with 31 of the 38 (82%) study sites classified as Mixed Conifer THT. As a result, harvest prescriptions for sites in the Ponderosa Pine zone are incorrectly applied. Second, the classification categories are overly broad, i.e. they encompass too many stand types and conditions to provide ecologically meaningful guidance for management. For example, the Mixed Conifer THT doesn't differentiate between wet, mesic, and dry mixed conifer stands, which vary in composition and have different management issues; and the Ponderosa Pine THT doesn't address hardwooddominated stands.

The inaccuracy and lack of resolution of the current THT system creates an impediment to identifying riparian stand conditions that are not meeting the Washington Forest Practices

¹ The purpose of the Charter is to describe the project and give the PM and the Project Team the authority to begin spending allocated project funds. In general, Project Charters should be brief and updated as needed as the project is implemented to accurately, reliably and concisely communicate projects' basic elements and objectives. (PSM Ch. 7 CMER review5 06_19_2017 final draft). When substantive changes are considered necessary, which amend the scope of the project (i.e. study design, budget, or schedule), the charter should to be updated (version #2, #3, etc.) to communicate those changes.

Habitat Conservation Plan (FP HCP) resource objectives (functional objectives and performance targets), and determining appropriate management to achieve healthy stands that provide the ecological functions as outlined in the FP HCP e.g. "bank stability, the recruitment of woody debris, leaf litter fall, nutrients, sediment filtering, shade, and other riparian features that are important to both riparian forest and aquatic system conditions". An ecologically based system with the resolution to identify situations where specific management actions are needed would improve the effectiveness of the FP HCP's riparian management strategy. For example, stands in dry and mesic sites where past harvest and fire suppression have led to the establishment of a dense grand fir understory are at risk of severe disturbance from fire, disease or insects that could impair riparian function and aquatic resources. Identifying situations such as this would facilitate development of riparian management prescriptions to specifically address the management context and achieve desirable outcomes.

Purpose Statement

The purpose of this project is to develop options for an eastern Washington riparian forest management system. The system will consist of : 1) an ecologically based classification system that groups riparian forests based on stand trajectory and function, 2) management objectives for each classification group consistent with the management objectives of the FP HCP Appendix N, Schedule L-1 (WA DNR 2005), and 3) scientific guidance for silvicultural measures to achieve those objectives.

A Scoping Paper will be developed based on findings from peer-reviewed literature and review of best available science.

CMER and Policy can use the completed Scoping Paper to assess the value of a field study to test any of several new classification system options. If interest exists, a Study Design would be developed.

Project Objectives

- 1) Identify, evaluate, and rank systems for ecologically classifying riparian timber habitat types in eastern Washington.
- 2) Test the most suitable classification system to determine feasibility and on the ground accuracy.
- 3) Recommend specific management goals and silvicultural measures for each proposed timber habitat type to achieve FP HCP goals, functional objectives and performance targets.

Critical Questions

The table below contains critical questions from the 2019 CMER Work Plan that are associated with the relevant rule group and associated projects within the Eastside Type F Riparian Rule Tool Program. The critical question associated with the ETHEP is: *Will application of the prescriptions result in stands that achieve eastside FP HCP objectives (forest health, riparian function, and historical disturbance regimes)?*

Table 1. Eastside Type F Riparian Rule Tool Program: Applicable Rule Group Critical Questions with Associated Research Projects

Rule Group Critical Questions	Project Names
What is the current range of conditions for	Eastern Washington Riparian Assessment
eastside riparian stands and streams?	Project Phase 1
	Eastside Type F Channel Wood
	Characterization Study
	Eastern Washington Riparian Assessment
	Project Phase 2
What are appropriate LWD performance	Eastside LWD Literature Review Project
targets?	Eastside Type F Channel Wood
	Characterization Study
Can the shade/temperature relationships in the	Eastside Temperature Nomograph Project
eastside temperature nomograph be refined?	
Will application of the prescriptions result in	Eastside Disturbance Regime Literature
stands that achieve eastside FP HCP	Review Project
objectives (forest health, riparian function,	Eastside Timber Habitat Evaluation Project
and historical disturbance regimes)?	(ETHEP)

The following objectives and critical questions were developed by SAGE to be addressed:

Objective 1: Identify, evaluate, and rank systems for ecologically classifying riparian timber habitat types in eastern Washington.

Critical Questions:

- 1. What systems are potentially available to classify forest stand types in eastern Washington?
- 2. What characteristics and capabilities are necessary or desirable in a classification system to guide management of riparian stands to meet FP HCP resources objectives? Examples might include the ability to differentiate riparian stand types on the basis of:
 - Stand development (composition and structure) in response to environmental and biotic factors, 1) in the absence of management, and 2) under current management scenarios,
 - Differences in the ecological functions they provide to meet FP HCP functional objectives and performance targets, i.e. large wood, shade, erosion reduction, bank stability, and nutrient input,
 - Susceptibility and response to disturbance, e.g. fire, insect epidemics, disease, wind, flooding as stands develop over time,
 - Response to past management (e.g. harvest, fire suppression and/or passive riparian management) on current structure/composition and future stand development.
- 3. Do existing classification systems have the necessary characteristics and capabilities for ecologically classifying riparian timber habitat types in eastern Washington, or is there a need for further development of a suitable classification system?

Objective 2: Test the most suitable classification system to determine feasibility and on the ground accuracy.

Critical Questions:

- 1. How well does the proposed classification system meet FP HCP resource objectives?
- 2. What is the applicability and utility of the recommended system to FFR lands?

Objective 3: Recommend specific management goals and silvicultural measures for each proposed timber habitat type to achieve FP HCP goals, functional objectives and performance targets.

Critical Questions:

- 1. What are the desired ecological outcomes for each riparian stand type?
- 2. How can potentially conflicting FP HCP goals and resource objectives for eastern Washington riparian stands be optimized?
- 3. What are the appropriate management goals for each stand type?
- 4. What silvicultural measures are appropriate to achieve the management goals?

CMER Rule Group and Program

This project is part of the Type F Riparian Prescriptions Rule Group, Eastside Type F Riparian Rule Tool Program (CMER Workplan 2019, https://www.dnr.wa.gov/publications/fp_cmer_2019_2021_workplan_20190119.pdf?7vilcn).

Project Tasks and Timeline

The following table depicts the tasks, responsible team member for completing the task, and estimated completion dates for work associated with this project.

Table 2. Tasks, responsible team members, and completion dates.

Task	Responsible Team Member	Estimated Completion Date		
Task 1. Summarize data from existing CMER projects and review published literature to provide best available science (BAS) for study context and development				
Subtask 1.1. Summarize findings from published literature and related CMER studies.	Project Team	January 2020		
Task 2. Develop Scoping Paper for CMER and Policy.				
Subtask 2.1. Narrow findings from Task 1 to inform recommendations and alternatives for possible future study and development based on the current BAS.	Project Team	June 2020		
Subtask 2.2 SAGE/CMER review and approval of scoping document.	SAGE, CMER, and Project Team	September 2020		
Subtask 2.3 Policy review and approval of scoping document. Presentation given to Policy.	Policy and Project Team	October 2020		

Task 3. Develop study design			
Subtask 3.1. Use the completed Scoping Paper to develop a study design for this project.	Malia Volke, Eastside CMER staff scientist and Project Team	FY21	

Budget

Currently, there is no funding allocated for this project beyond CMER staff time. SAGE anticipates that once the scoping process is completed, the group will have a better understanding of project funding needs.

Budget spent to date (as of April 2020): All expenditures have been by the North West Indian Fisheries Commission (NWIFC) on CMER scientist staff time.

 Table 3. Project Team Roles and Responsibilities

Position	Roles and Responsibilities	
Project Manager (PM): Teresa Miskovic	• Monitors project activities and the performance of the Subcommittee.	
	 Communicates progress, problems, and problem resolution to the Adaptive Management Program Administrator (AMPA), CMER, and SAGE. Works with SACE and Project Team to help develop Project. 	
	• Works with SAGE and Project Team to help develop Project Charter and other managing documents, and keeps them updated.	
	 Works with the AMPA, SAGE, and Project Team to develop and review proposals, RFPs or RFQQs, review contractor proposals, monitor contract performance, and provide input on budgeting, schedule, scope changes, and contract amendments. Works with SAGE and Project Team to develop interim and final 	
	draft reports.	
	 Ensures coordination between SAGE, CMER, and Project Team. Coordinates all technical reviews and responses in a timely fashion. 	
	• Facilitates archiving of all data and documents	
	• Ensures that contract provisions are followed.	
	 Provides direction and support to the Project Team to achieve clear and specific scopes of work, schedules, and budgets within approved contracts. 	
	• Coordinates and/or authorizes communication with all project- related contractors.	
	• Maintains sole responsibility for all aspects of project management even if other individuals are completing or helping complete parts of the project.	
Principal Investigator (PI):Malia Volke	• Lead in the development and writing of the scoping paper and study design.	

	• Works with the PM and SAGE to identify additional technical
	expertise and time commitments needed to complete scoping and
	study design development.
	• Provides materials needed by the PM.
	• Prepares quarterly summary and progress report of project status
	• Lead in the development and writing of interim and final draft reports.
	• Presents technical findings to SAGE, CMER, and TFW Policy as necessary.
	• Communicates project status and issues to the PM and Project
	Team.
	• Lead author of prospective answers to 6 questions document.
Project Team members:	• Assist with finding solutions to technical issues that arise during
Todd Baldwin, Gretchen Lech,	scoping and study design development.
Rohan Theobald, James	• Provide expertise needed for successful completion of scoping
Hartley, Cody Thomas	and study design.
	• Assist with writing technical documents such as: project charter,
	communication plan, scoping document, study design, and
	prospective findings report 6 questions document.
	• Provide constructive and timely feedback on project documents.
	• Assist as needed with communicating project information to
	SAGE and CMER.
	• Participate in project meetings and conference calls as needed.

Authorization

The Washington Forest Practices Board (Board) has empowered the CMER committee and the TFW Policy committee to participate in the Adaptive Management Program (AMP) (WAC 222-12-045(2)(b)). CMER is responsible for completing technical information and reports for consideration by TFW Policy and the Board. CMER has been tasked with completing a programmatic series of work tasks in support of the AMP; these tasks are outlined in CMER's biennial work plan approved by TFW Policy and the Board. This project listed under the Type F Riparian Prescriptions Rule Group, Eastside Type F Riparian Rule Tool Program.

Recognition of Support

Committee	Date of Acceptance	Reference
SAGE	April 14, 2020	meeting minutes
CMER	April 28, 2020	meeting minutes
TFW Policy	May 7, 2020	meeting minutes

References

Cooperative Monitoring Evaluation and Research (CMER) Committee. (January 2019), 2019-2021 Biennium Work Plan. https://www.dnr.wa.gov/publications/fp_cmer_2019_2021_workplan_20190119.pdf?o9uq19w.

Protocols and Standards Manual (PSM). (2017), CMER Review 5 06_19_2017 Final Draft, Chapter 7, Section 4.

Protocols and Standards Manual (PSM). (2017), CMER Review5 06_19_2017 Final Draft, Chapter 7, Section 6.3.

<u>Schuett-Hames, D. 2015. Characteristics of Riparian Management Zones Adjacent to Eastern</u> <u>Washington Fish-Bearing Streams Managed Under the Washington Forest Practices Habitat</u> <u>Conservation Plan.</u>

WAC 222-12-045. October 2013. https://apps.leg.wa.gov/wac/default.aspx?cite=222-12-045

WAC 222-30-022. December 2013. https://apps.leg.wa.gov/wac/default.aspx?cite=222-30-022

WA DNR. 2005, December. Final Forest Practices Habitat Conservation Plan. Appendix N. Washington State Department of Natural Resources. https://www.dnr.wa.gov/publications/fp_hcp_31appn.pdf?sds8h4