

# Westside Type F Riparian Prescription Monitoring Project

May 2019

# Objectives

Reduce scientific uncertainty for the Westside Type F riparian prescriptions:

- Riparian stand response (e.g. wind throw mortality)
- FPHCP functional objectives and performance targets
  - Shade/temperature
  - Wood/nutrients
  - Trajectory to DFC
  - Fish habitat

# Critical Questions

## 1. Riparian Stand Characteristics and Functions

- How do riparian stand characteristics and riparian functions change?
- Are stands on trajectory to achieve DFC targets?

## 2. Physical Stream Characteristics and Processes

- How do physical stream habitat and processes respond to changes in riparian functions?

## 3. Aquatic Biological Response

- What is the aquatic biological response to changes in riparian functions?

# Complex Prescription Package

## ~ 25 Prescription Variants

- 10 site class / stream width combinations
- Differences in buffer width
- Thin from below and “pack-and-whack” options
- No inner zone harvest scenarios

# Approved Strategy

## GIS –FPA Analysis

- Frequency prescription variants are being used

## Exploratory Study

- Assess stands / functions for range of prescription variants
- Assess trajectory to DFC target
- Use info to design the intensive study

## Intensive Study (BACI)

- Focus on a sub-set of prescription variants
- Greatest uncertainty / risk to resource
- Add stream habitat, water quality and biotic response

# Exploratory Study Goals

## 11 Common Prescription Variants

### Stand Structure (3 years post-harvest)

- Mortality / wind throw
- % on trajectory to DFC target

### Riparian Functions

- Shade
- Wood recruitment

### Site Conditions

# Exploratory Study Team Structure

SAG Oversight: RSAG

Project Manager

- Teresa Miskovic, DNR

Principal Investigators (PIs)

- Dave Schuett-Hames, CMER Lead Scientist
- Emily Davis, CMER Riparian Ecologist

Other Team Members

- Rebecca Flitcroft, USFS PNW Research Station
- Doug Martin, Martin Environmental
- Statistician TBD

# Exploratory Study

## Data Collection Timeline

### Site Selection / Access

- Davis - Miskovic (complete)

### Site Screening / Layout

- West Fork (complete)

### Training / Quality Assurance

- Davis, Schuett-Hames (training, initial QA complete)

### Data Collection

- West Fork (underway)
- 50% by June 30, 50% by Sept. 30



# Exploratory Report Timeline

## Data Analysis / Draft Report

- PIs and Project Team (February 2020)

## SAG / CMER Review

- March-November 2020

## ISPR Review

- December 2020-May 2020

## CMER Approval of Final Report

- July 2021

## CMER Approval of Finding Report

- September 2021

# Budget

FY 19: \$228,000

- Site Validation and Layout 110 sites
- Data collection 55 sites

FY 20: \$125,000

- Data collection 55 sites
- Additional request crew variability testing