

UCFWG Habitat Workshop

June 11, 2021

Introduction

Anthropogenic and mining-related impacts in the Upper Clark Fork River, MT (UCFR) can be captured conceptually in a single multivariate stressor – habitat degradation. Habitat generally includes all abiotic (physical) aspects of an aquatic ecosystem relevant to species of concern, though biotic components like riparian vegetation and aquatic macrophytes may well be included. In the UCFR, changes in habitat have been observed among four primary dimensions: flow and thermal regime, morphological habitat quality, heavy metal contamination, and nutrient enrichment. Identifying and quantifying the spatial and temporal influence of each stressor is vital to further our understanding of how stress manifests at different levels of biotic organization along the UCFR.

This assessment effort will be organized through a hierarchical approach based on spatial scale, where river-level measures are undertaken using satellite methods (i.e., Google Earth) and mesoscale-level measures obtained using reach-scale field evaluations. Three components likely to reflect habitat degradation include water quality (i.e., nutrients, metals, algal abundance), reach morphology (riffles, pools, water depth, organic debris cover) and riparian vegetation (land use type, percent cover). The purpose of this workshop is to identify key habitat metrics to be measured at the mesoscale-level, integrate academic and management perspectives, and determine constructive and feasible goals for morphological habitat assessment during the 2021 summer field season.

Desired outcomes

- 1) Identify key components of habitat composition, incorporating academic and management foci into measures of habitat diversity
- 2) Establish protocols for measuring all identified features
- 3) Generate initial schedules and coordinate field efforts on the UCFR for the summer 2021 field season.

AGENDA: UCFWG HABITAT WORKSHOP

June 11, 2021 10:00am – 3:00pm

Zoom DETAILS

Taylor Gold Quiros, Workshop Lead, taylor.goldquiros@umontana.edu

Maury Valett, UCFWG Executive Chair, maury.valett@umontana.edu

Andy Hauer, UCFWG/CEWS Communications Coordinator, andrew.hauer@umontana.edu

When	What	Who
10:00 AM	Welcome, Introductions, and Agenda Review (30 min.) <ul style="list-style-type: none">• Workshop Goal and Objectives Overview• Online Facilitation Tools Overview• Participant Introductions	Taylor Gold Quiros, UM
10:30 AM	Presentation: Project Needs, Goals, & Objectives (20 min.)	Maury Valett, UM
10:40 AM	Presentation(s): Existing Data & Conditions (20 min.)	Nathan Cook, FWP
11:00 AM	BREAK (15 min.)	
11:15 AM	Group discussion: Key Habitat Metrics (1 hr.)	
12:15 PM	LUNCH (30 min.)	
12:45 PM	Group discussion: Summer 2021 Field Protocols (1 hr.)	
1:45 PM	Facilitated Exercises: Wrap Up and Marching Orders (1 hr.)	
2:45 PM	Final Business & Closing Remarks (15 min.)	
3:00 PM	Adjourn	