

-Request for Proposal-

Helicopter Wood Placement Design

Introduction

The project area is located between 46.253248° latitude, longitude -120.409177° on the upstream end and 46.264340° and -120.315827° (Google earth), on the downstream end of Satus Creek. Satus Creek is a tributary to the Yakima River. In general, the project area has suffered from channel and habitat simplification and lack of large wood.

Disconnected floodplain surfaces also occur throughout the project area. However, channel evolution following past incision has resulted in the development of an inset floodplain surface at several locations. These areas provide pockets of planform complexity including deep pools and occasional off-channel habitats. Although there are signs of some habitat function, the project area suffers from lack of instream complexity in existing pools, lateral erosion into banks comprised of fine sediment, lack of high quality off-channel habitat, and lack of large wood to promote habitat and channel forming processes.

Objective

The objectives of restoration work at this site include addressing channel incision, floodplain disconnection, rapid erosion of fines into the channel, lack of instream complexity, and impaired riparian function.

Background

Satus Creek is used by ESA listed Middle Columbia River Steelhead Trout during numerous freshwater life history stages. YRWP and wildlife staff have identified an opportunity to conduct placement of engineered log jams in this reach of Satus Creek. Placement will occur with a helicopter due to the desired distribution of large wood with minimal vehicle access. This project is one of two project sites that will be treated with helicopter placement but the only one that requires designed log jams.

Project Specifications

Task 1.0 – Site investigation and baseline analysis

Task 2.0 – Alternatives analysis and concept design

Task 3.0 – Draft construction plan

Task 4.0 – Final Construction Plan

Task 5.0 – Project management

Task 1.0 Site Investigation and Baseline Analysis

-1.1: Existing data review

-1.2: Geomorphic field investigation and site survey

-1.3: Hydrology

-1.4: Hydraulic analysis

-1.5: Geomorphic assessment

Task 2.0 Alternatives Analysis and Concept Design

- 2.1: Development of concept alternatives
- 2.2: Development of concept drawings
- 2.3: Development of concept alternative report

Deliverables:

1. Concept drawings and report in PDF format
2. Review teleconference/web meeting

Task 3.0 Draft Construction Plan

- 3.1: Design level survey
- 3.2: Development of permit level construction plan

Deliverables:

1. Preliminary plans, cost estimate, and design report in PDF format
2. Review teleconference/web meeting

Task 4.0 Final Construction Plan

- 4.1: Development of final construction plan
- 4.2: Create and provide a design report

Deliverables:

1. Final plans, cost estimate and design report in PDF format
2. Three hardcopies of final stamped plans

Task 5.0 Project Management

- 5.1: Project management and coordination
- 5.2: Meetings

Designated Representative

The designated representative for the Yakama Nation is Josh Hall.

Contractors Obligation

The contractor shall furnish all supervision, labor, equipment and tools necessary to complete the project as outlined in the following elements.