

The Confederated Tribes of the Warm Springs Reservation of Oregon



Hood River Production Program



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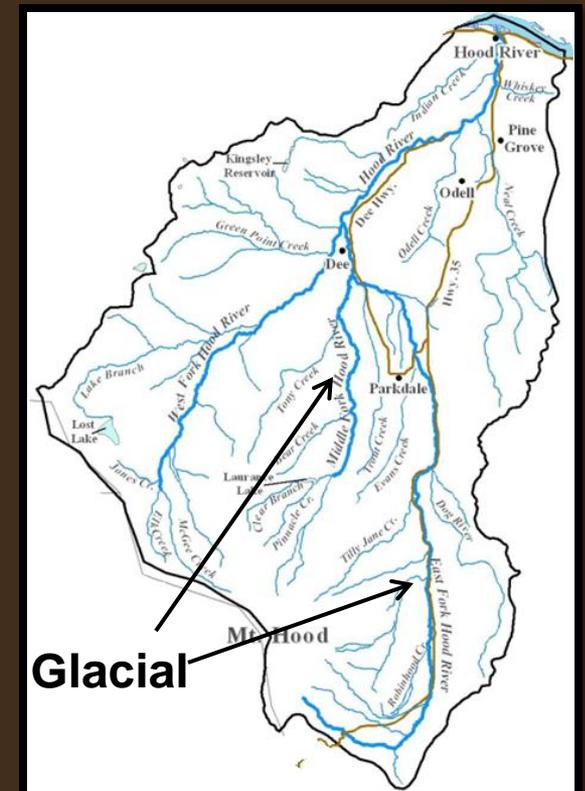
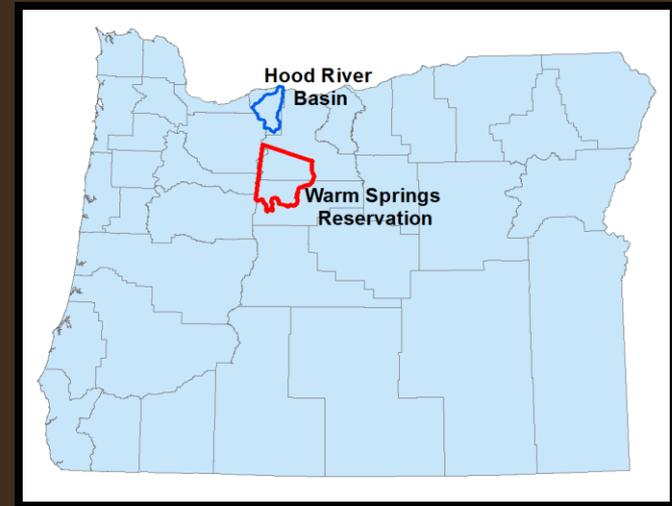
The Hood River Basin

Watershed area: 339 square miles

- Eastside/Westside transition zone
- High gradient - flashy flow regime
- Glacial influences

Salmonids present: *Fall and spring Chinook, *summer and *winter steelhead, *coho, *bulltrout, and searun cutthroat

**listed stocks*



The Hood River

Historic Impacts:

flow diversions for agriculture
and hydro power

timber harvest - *splash damming*



HRPP Recovery Strategy



Goals and Objectives

1. Re-establish naturally-sustaining spring Chinook runs.
2. Rebuild naturally sustaining summer steelhead runs.
3. Rebuild naturally sustaining winter steelhead runs.
4. Maintain the genetic character of naturally producing populations of salmonids.
5. Protect high quality habitat and restore degraded fish habitat.
6. Contribute to Columbia River tribal and non-tribal fisheries, and ocean fisheries.
7. Provide sustainable tribal and non-tribal harvest of salmon and steelhead.

from 2008 Master Plan

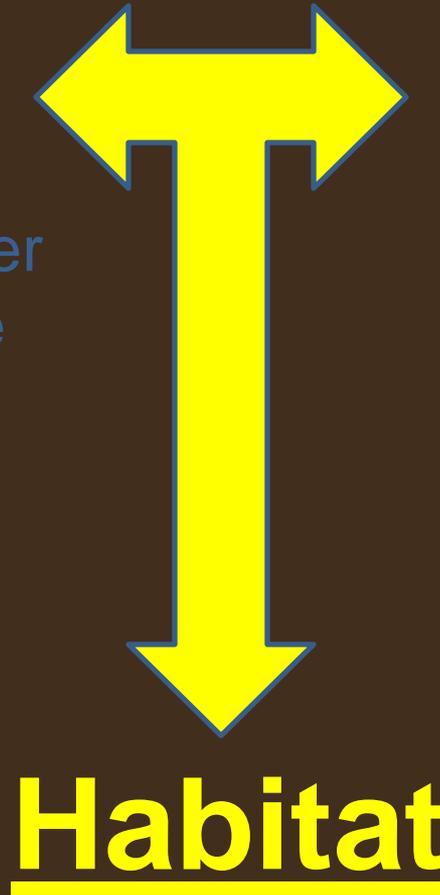
CTWS Recovery Strategy

Reintroduction

Spring Chinook and winter steelhead smolt release

M & E

Evaluate program effectiveness



Limiting Factors



Stream Flow – main limiting factor in basin

Passage – diversions

Habitat Complexity – lack of LWD



Stream Flow

Increase irrigation efficiency

instream flow restoration

Eliminate interbasin transfer

*improved water quality in
conveyance streams*

8.5 miles of canal piped



Passage

8 passage barriers removed

diversion and screen upgrades

Passage restored to 50 miles
of stream



East Fork Irrigation District Diversion Upgrade - 2013

Replace push up dam with
Obermeyer weir & vertical slot
fish ladder

EFID/CTWS minimum flow
agreement for fish passage



Habitat Complexity

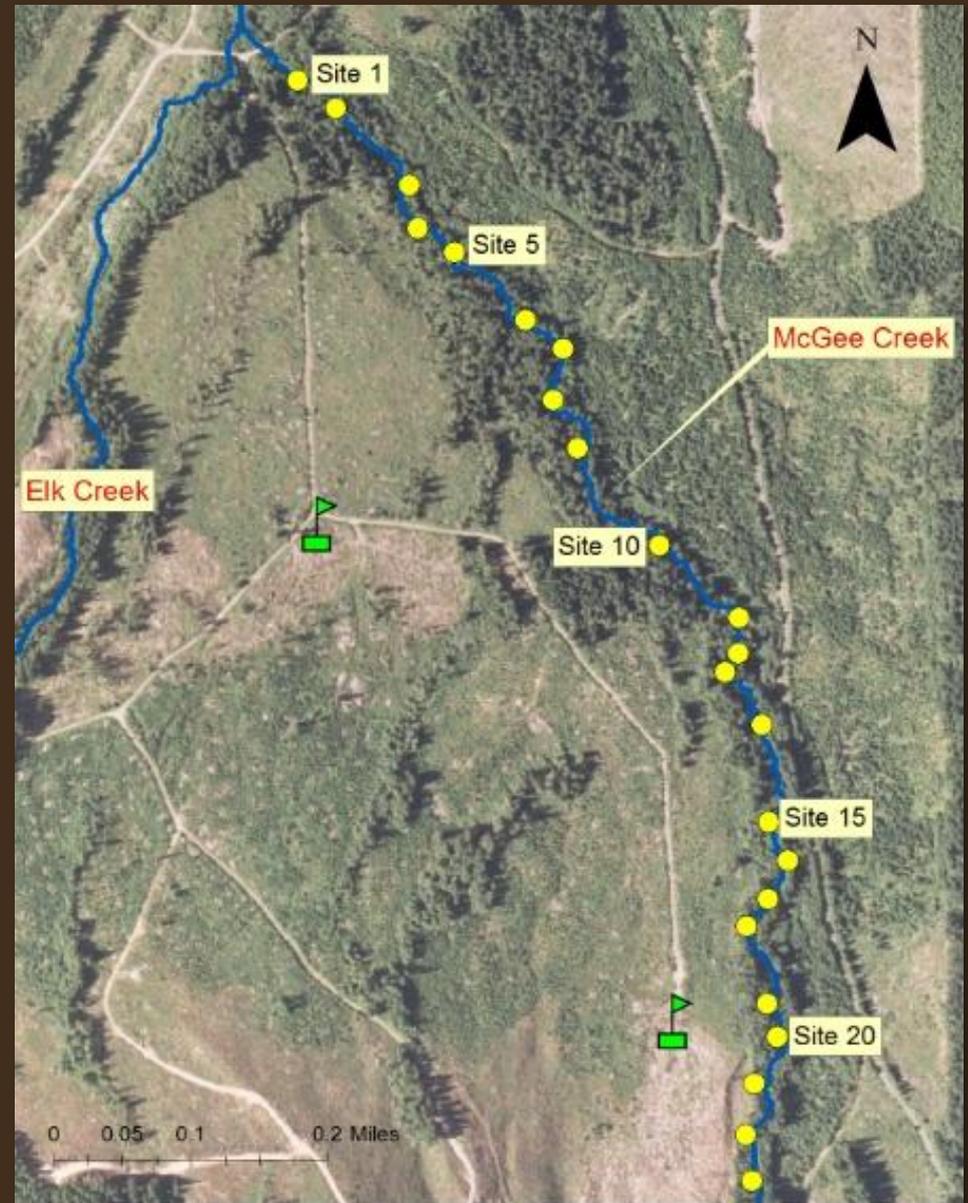
Large Wood

- 6 LWD projects, 3.3 miles restored
- 1,700 logs, 80 structures placed
- 34 floodplain acres treated



Large Wood McGee Creek - 2011

- 1.3 miles restored
- 23 structures, 800 logs



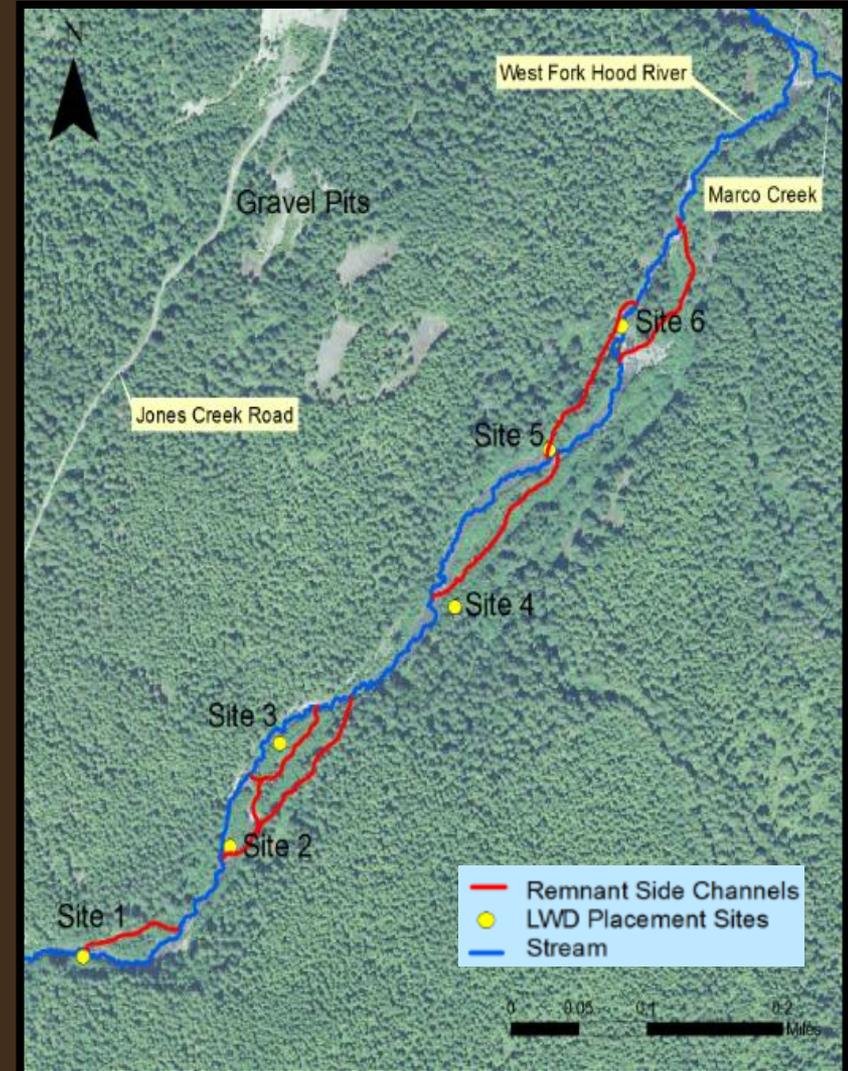
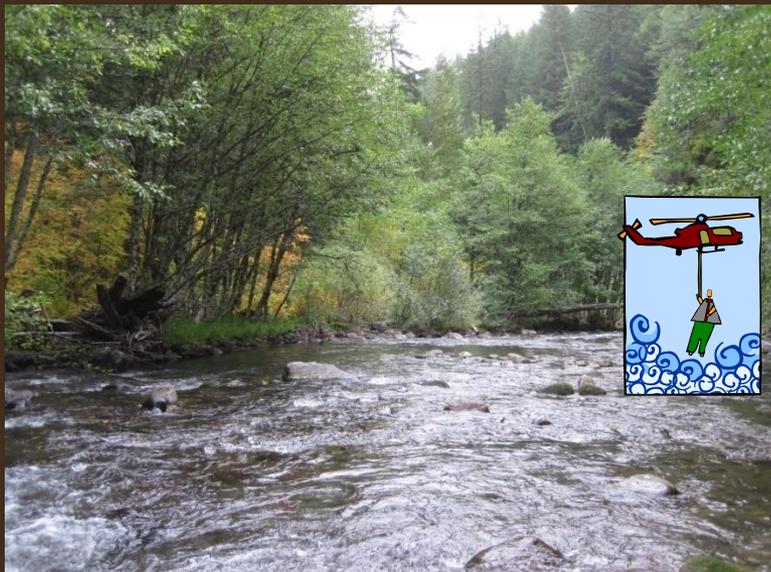
McGee Creek



WF Hood River - 2012

“Marco Creek”

- 0.7 miles to be restored
- 6 sites, ~13 structures
- 600 logs



West Fork Riparian Management

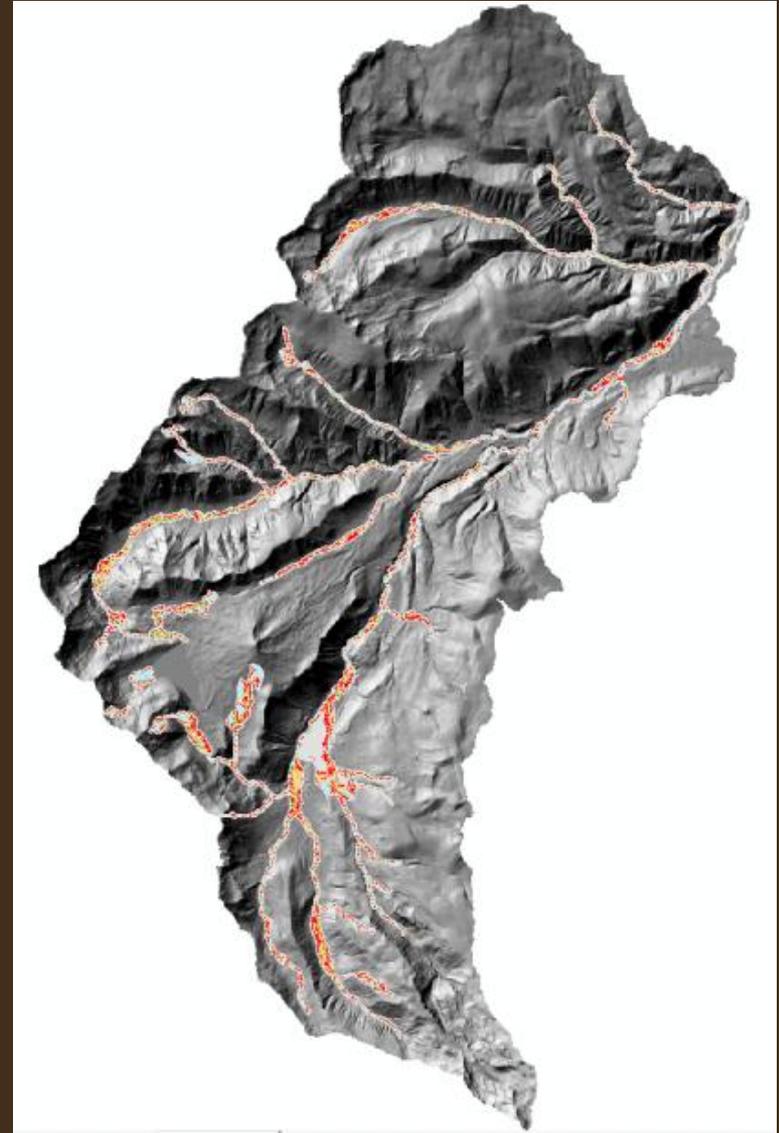
Large Wood Recruitment Study

LiDar flown in 2009

Analyzed by Watershed Professionals Network

Purpose

Develop a riparian large wood recruitment model for the major fish-bearing streams of the West Fork Hood River basin, with a focus on potential future conditions and potential actions in the basin.



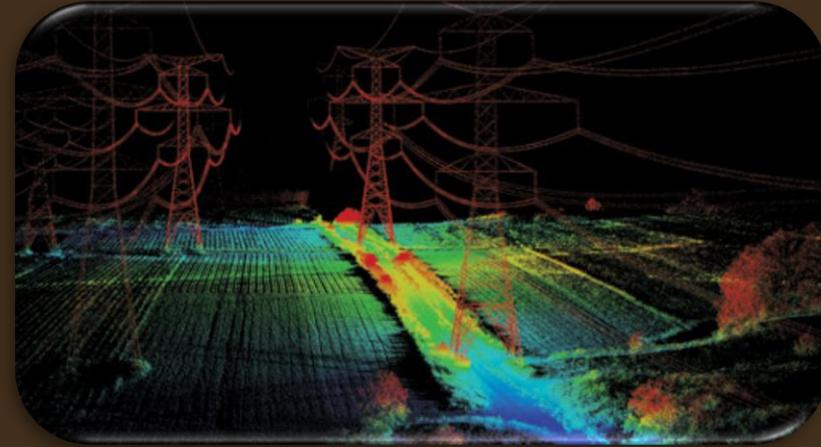
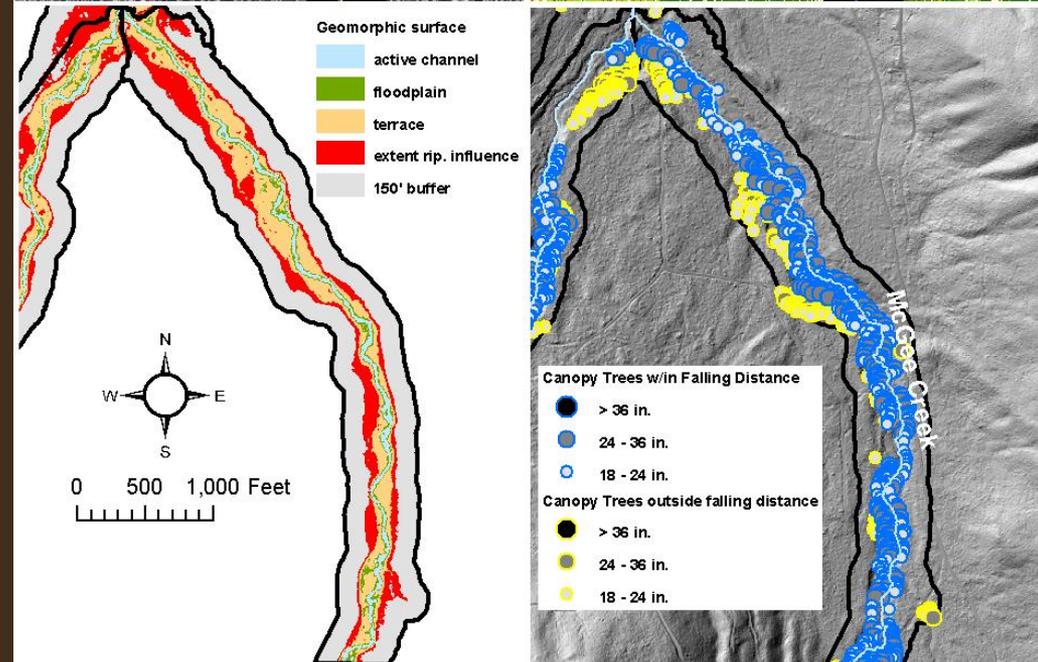
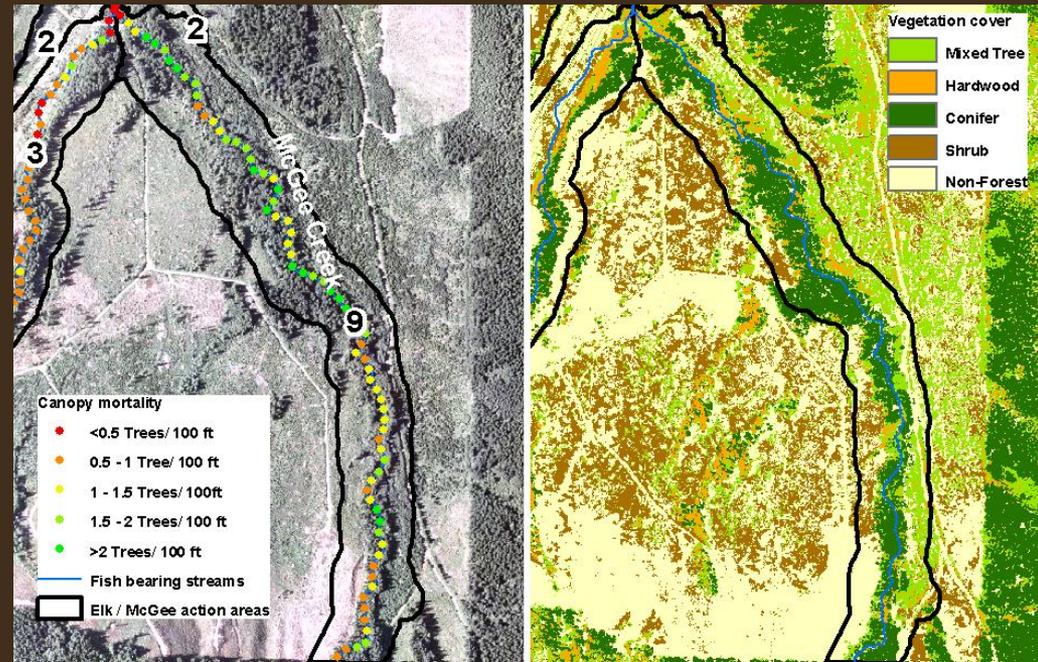
Defined riparian area by geomorphic surfaces

Characterized vegetation

tree height/size

96,000 trees $\geq 18''$ dbh

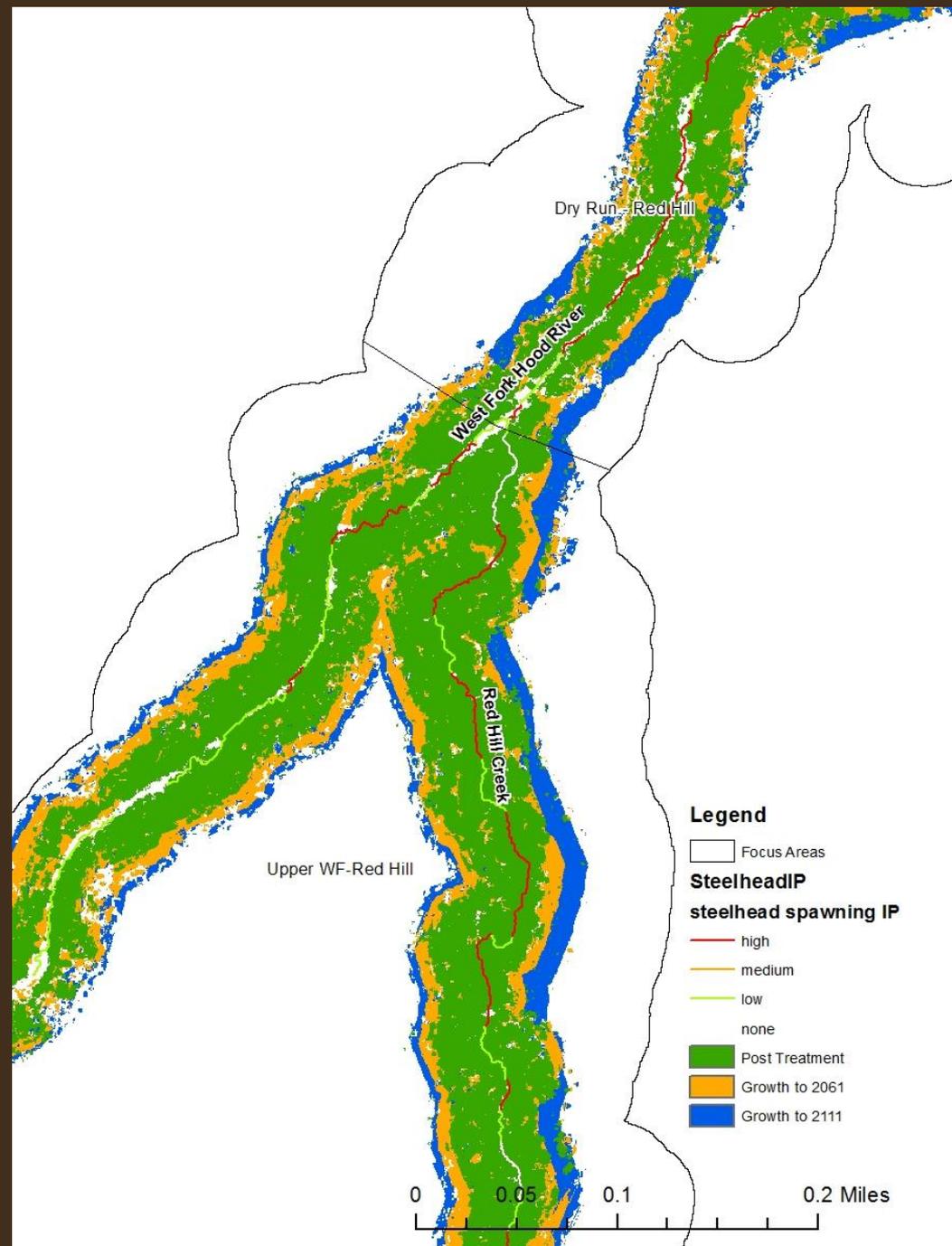
Modeled tree growth and mortality over time



Identified spawning areas
through intrinsic
potential analysis

Modeled traditional
silviculture methods to
predict tree growth and
potential LWD
recruitment

*54,000 trees $\geq 12''$ dbh
immediately available*





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