

Lower Sleepy Hollow Preserve Riparian Restoration and Education

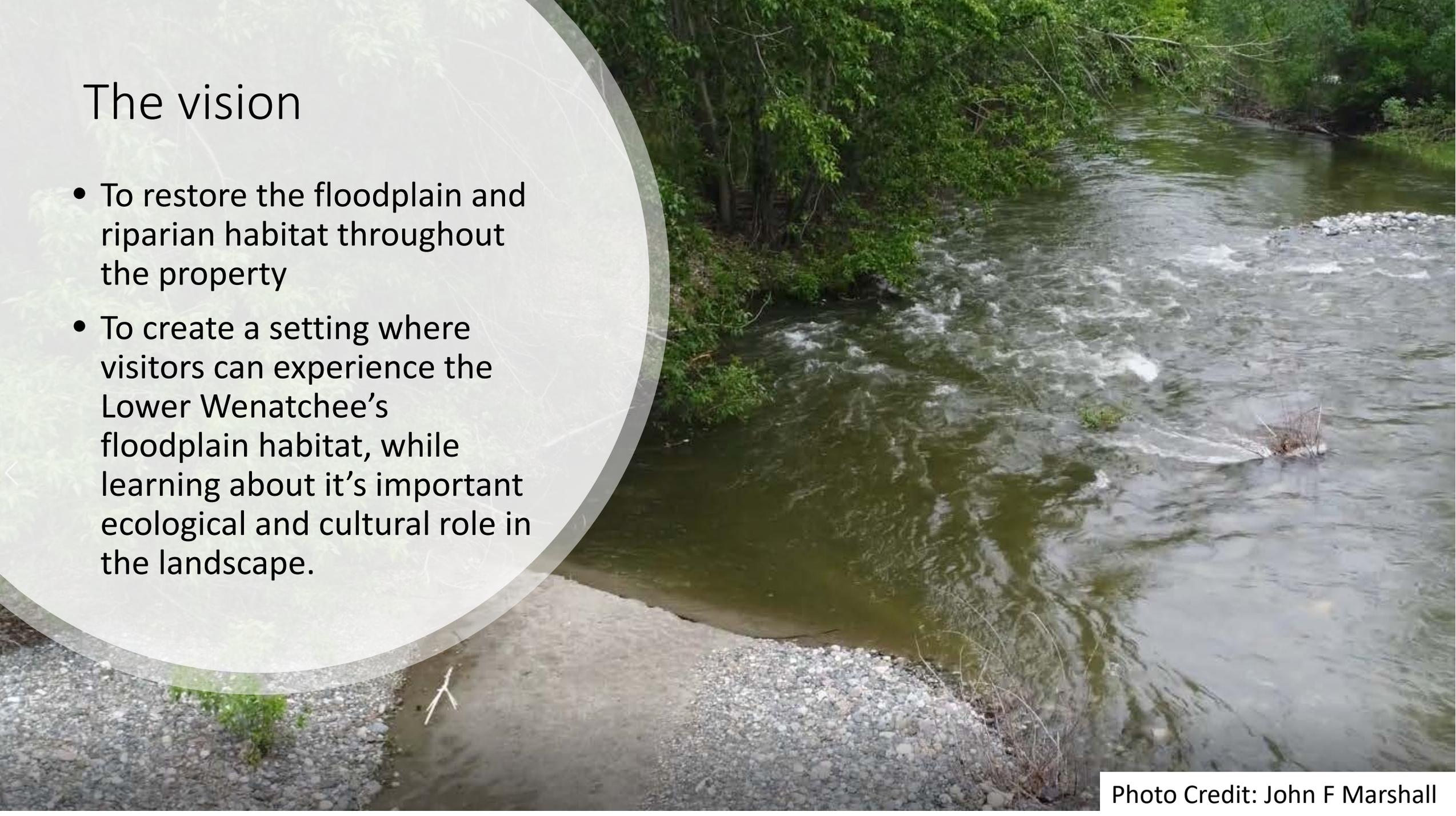
Cascade Fisheries
and the
Chelan Douglas Land Trust

Aaron Rosenblum
Project Manager

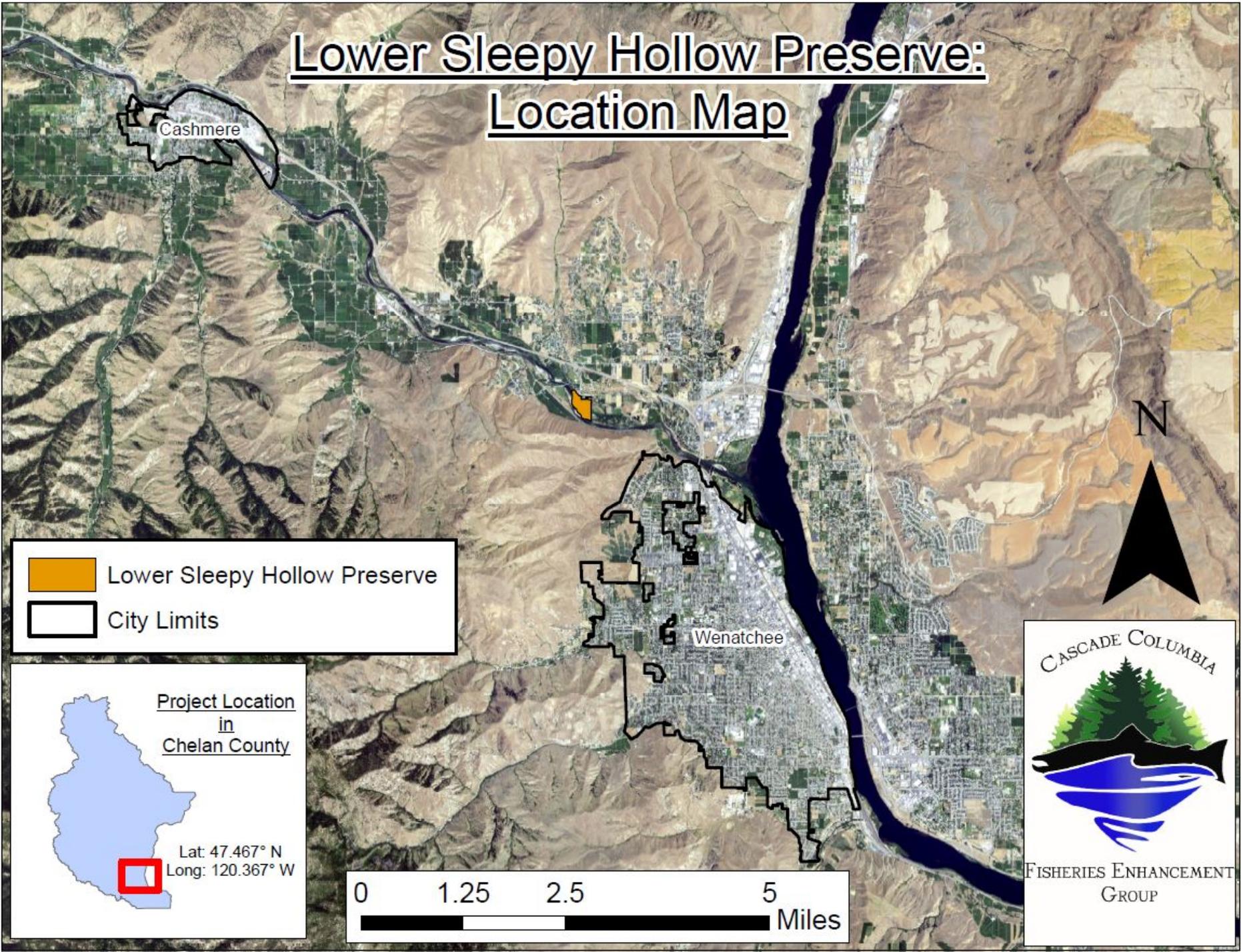
Photo Credit: John F Marshall

The vision

- To restore the floodplain and riparian habitat throughout the property
- To create a setting where visitors can experience the Lower Wenatchee's floodplain habitat, while learning about its important ecological and cultural role in the landscape.



Lower Sleepy Hollow Preserve: Location Map



Cashmere

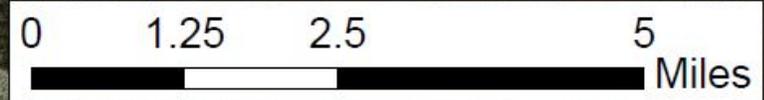
Wenatchee

 Lower Sleepy Hollow Preserve

 City Limits

Project Location
in
Chelan County

Lat: 47.467° N
Long: 120.367° W



CASCADE COLUMBIA



FISHERIES ENHANCEMENT
GROUP

Lower Sleepy Hollow Preserve: Detail Map



 Lower Sleepy Hollow Preserve

0 0.125 0.25 0.5
Miles



Planting Zones



Zones 1, 2 and 3 = 6 acres

1 acre already planted

This proposal = 5 acres

Legend

-  planting_zones
-  Parcels

0 0.05 0.1 0.2 Miles



7'-8' on center spacing =
750 stems/acre

1 gallon stock

Each plant gets:

- Wood chip mulch
- Irrigation
- Fertilization
- Deer exclusion fencing



Columbia Basin Foothill Riparian Woodland or Shrubland
WA DNR Natural Heritage Program – Critically Imperiled
Ecological Systems of Washington State. Rocchio and Crawford. 2015

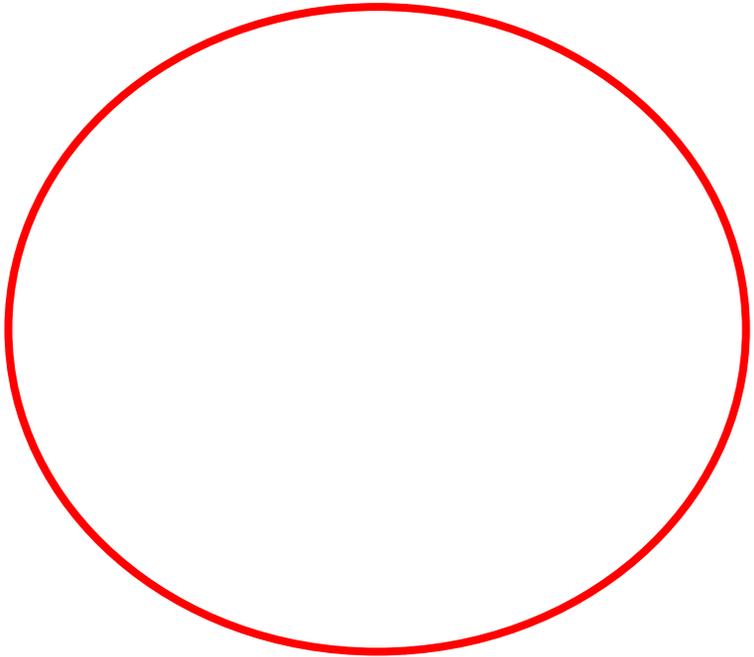
Sleepy Hollow Riparian Plants

Mtn alder	<i>Alnus incana</i>
Serviceberry	<i>Amalanchier alnifolia</i>
River birch	<i>Betula occidentalis</i>
Douglas hawthorn	<i>Crataegus douglasii</i>
Oregon grape	<i>Mahonia aquafolium</i>
Mock orange	<i>Philadelphus lewisii</i>
Aspen	<i>Populus tremuloides</i>
Black cottonwood	<i>Populus trichocarpa</i>
Common chokecherry	<i>Prunus virginiana</i>
Woods rose	<i>Rosa woodsii</i>
Peach leaf willow	<i>Salix amygdaloides</i>
Pacific Willow	<i>Salix lasiandra</i>
Coyote willow	<i>Salix exigua</i>
Snowberry	<i>Symphoricarpos alba</i>

Photo Credit: John F Marshall

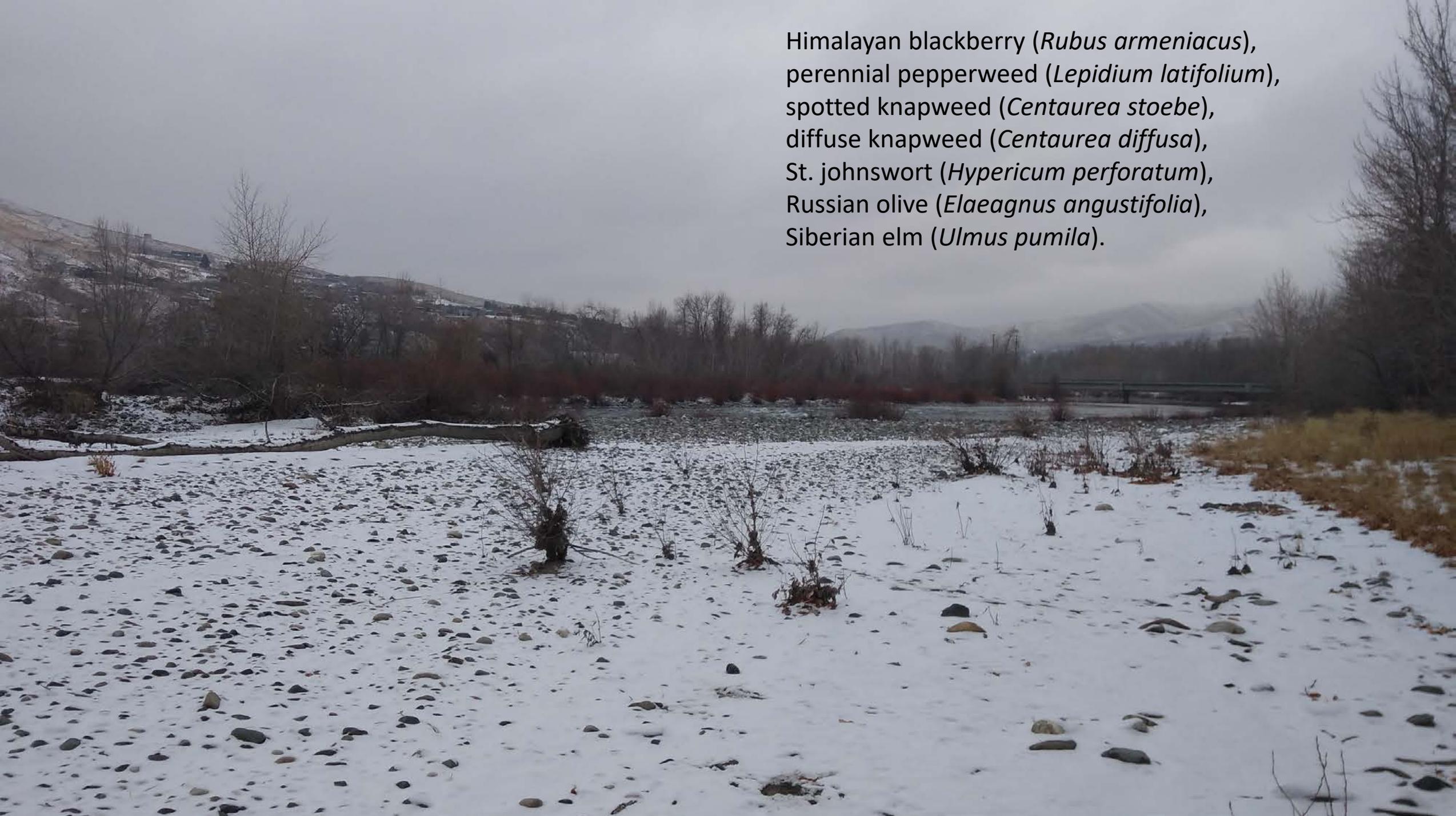


26th highest priority out of 576 in the Lower Wenatchee sub-watershed for riparian restoration by the *Wenatchee River Riparian Prioritization Final Report*



Control noxious and
non-native invasive
weeds throughout the
40-acre parcel

Himalayan blackberry (*Rubus armeniacus*),
perennial pepperweed (*Lepidium latifolium*),
spotted knapweed (*Centaurea stoebe*),
diffuse knapweed (*Centaurea diffusa*),
St. johnswort (*Hypericum perforatum*),
Russian olive (*Elaeagnus angustifolia*),
Siberian elm (*Ulmus pumila*).



Sagebrush Country

The sagebrush grasslands around Saddle Rock might look sparsely vegetated to an untrained eye. Surprisingly, this shrub-steppe ecosystem teems with plants, animals, bacteria, fungi, and lichens. Each living organism is specialized to thrive with as little as nine to eleven inches of precipitation a year. Believe it or not, 200 years ago the land around Saddle Rock was part of 200,000 square miles of shrub-steppe covering the western United States.



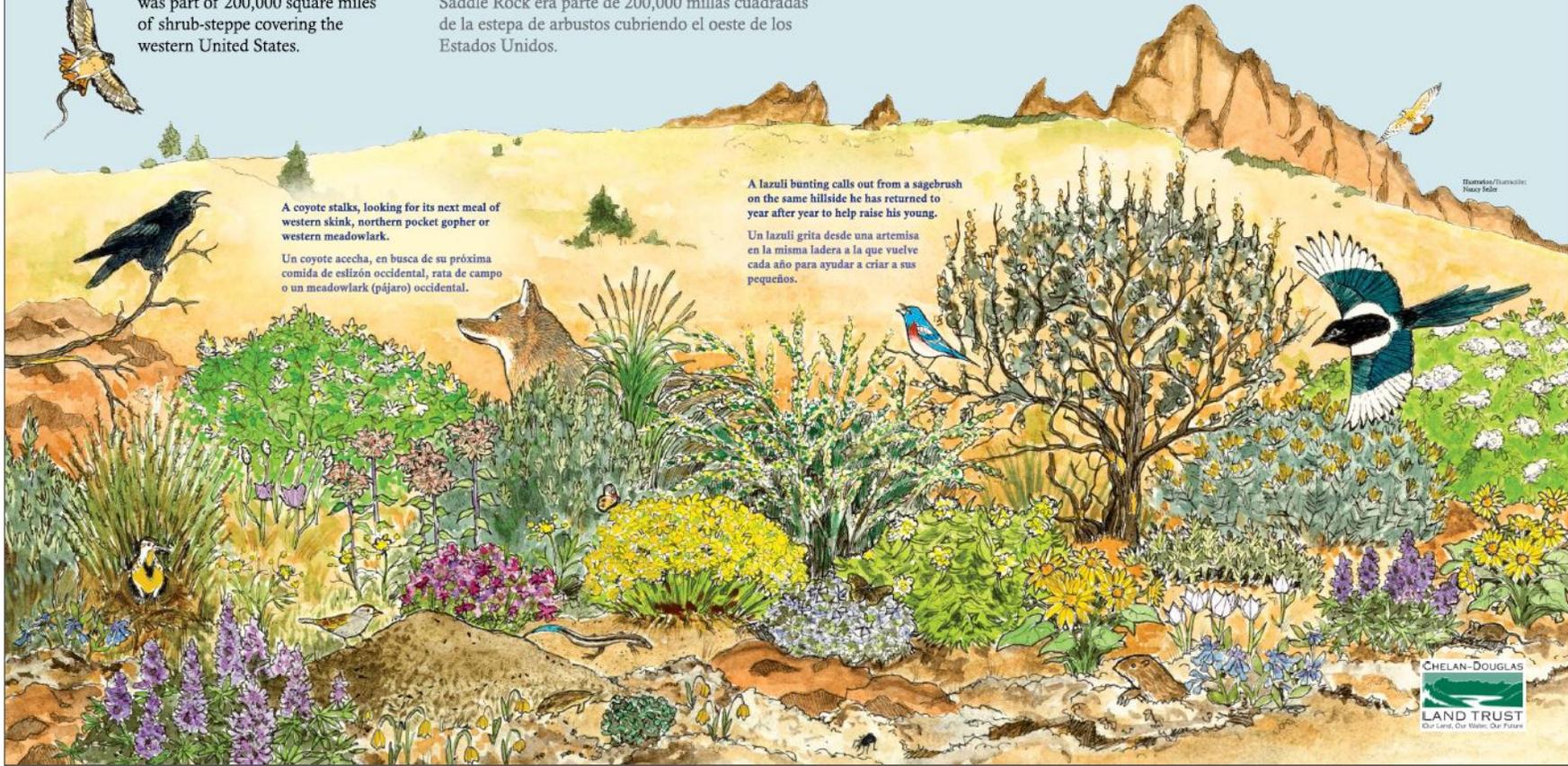
País de Artemisa

Los pastizales de artemisa alrededor de Saddle Rock parecen estar escasos de vegetación para un ojo inexperto. Sorprendentemente, este ecosistema de la estepa de arbustos tiene plantas, animales, bacterias, hongos y líquenes. Cada organismo vivo está especializado para prosperar con tan poco como nueve a once pulgadas de precipitación al año. Créalo o no, hace 200 años la tierra alrededor de Saddle Rock era parte de 200,000 millas cuadradas de la estepa de arbustos cubriendo el oeste de los Estados Unidos.



Fun Fact! Lifting its twisted trunk above most other living things, sagebrush provides food and shelter to many organisms – from tiny gall midges whose eggs trigger the formation of sagebrush galls (photo, left), to a Pacific gopher snake seeking shade on a scorching afternoon, to mule deer that bed down below its branches.

¡Fato Curioso! Levantando su tronco trenzado por encima de la mayoría de los seres vivos, la artemisa proporciona alimento y refugio para muchos organismos, desde diminutos mosquitos cuyos huevos desencadenan la formación de artemisa hasta una serpiente del pacífico buscando la sombra en una tarde calurosa, o ciervos que buscan refugio debajo de sus ramas.



A coyote stalks, looking for its next meal of western skink, northern pocket gopher or western meadowlark.

Un coyote acecha, en busca de su próxima comida de eslizón occidental, rata de campo o un meadowlark (pájaro) occidental.

A lazuli bunting calls out from a sagebrush on the same hillside he has returned to year after year to help raise his young.

Un lazuli grita desde una artemisa en la misma ladera a la que vuelve cada año para ayudar a criar a sus pequeños.



Potential Themes:

- Cultural significance of the Wenatchee and Columbia confluence area
- Cultural significance and use of native plants
- Climate change, and carbon sequestration of riparian forests.

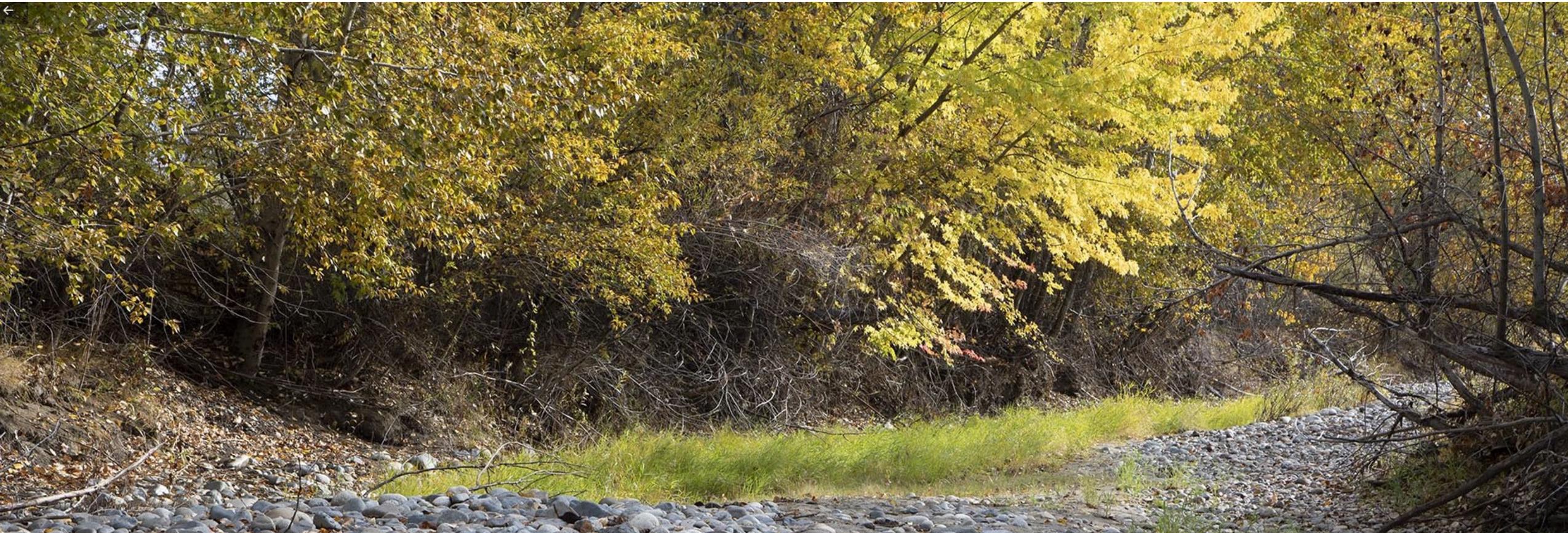
Timeline (2020 – 2025)

Riparian Planting: Years 1 - 4, approximately 1-1.5 acres/year
Years 2 - 5, maintenance and adaptive management

Weed management: Years 1 - 5
Years 2 – 5, learn, adapt, adjust

Interpretive signage: Year 1, final layout, artwork, and design
Year 2, Fabricate and install





Expected measurable benefits and accomplishments

- 5 acres (217,800 sq. ft.) of pastureland restored to native floodplain habitat.
- Noxious and invasive weed control across the entire 40-acre property
- Native planting/seeding following treatment of localized heavy weed infestations
- Adaptive management of restoration actions to increase project efficacy
- The fabrication and installation of 2 interpretive signs



Strong Community Support:

- Wenatchee School District
- Wenatchee Valley Museum and Cultural Center
- Team Naturaleza
- Wenatchee River Institute
- North Central Washington Audubon Society
- Washington Native Plant Society

QUESTIONS?

TASK	ACTIVITY	COST/UNIT	UNITS	TOTAL
Weed Control	Weed control CDLT staff/contractor	4,000/year	5 years	\$20,000.00
	CF staff	45/hour	100 hours	\$4,500.00
Riparian and Floodplain Revegetation	Pasture	18,000/acre	5 acres	90,000.00
	In areas following weed control/Adaptive management	lump		10,180.00
	CF staff	45/hour	150 hours	6,750.00
	CDLT staff	lump		5,000.00
Environmental Education	sign design	2500/ea	2	5,000.00
	fabrication and install	1000/ea	2	2,000.00
	CF staff	10 hours	45/hour	450.00
Administration	Project Manager, Financial Manager, Executive Director salaries			4,500.00
	Project overhead/indirect	10% of CF salaries		1,620.00
Project Total				150,000.00