### **Beaver Creek**

A Natural Riparian Corridor

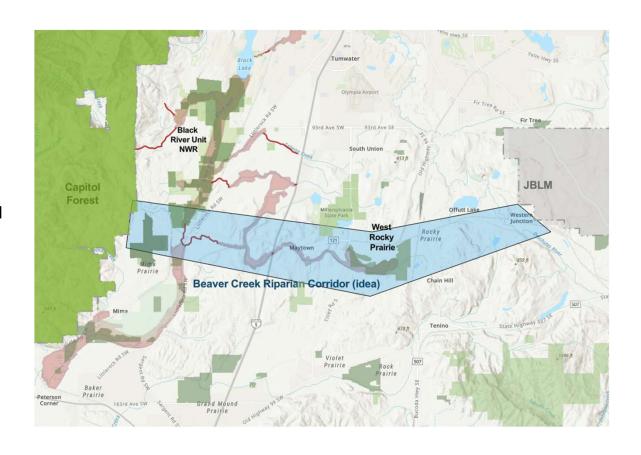
#### Gentle Stream

Beaver Creek is a gentle stream flowing east to west through the grasslands/prairies and forests of south Thurston county.



#### A Natural Riparian Corridor

This natural riparian corridor is rare to Western Washington and rarer still because the 12 miles between the significantly large land holdings of JBLM and Capitol Forest remain mostly undeveloped.



#### A Natural Riparian Corridor – aerial view

Beaver Creek connects key conservation areas within Thurston County, both prairies and wetlands.



## East of I5: Headwaters of Beaver Creek originate in West Rocky Prairie

View upstream of Beaver Creek from Tilly Road, into West Rocky Prairie Wildlife Area.



## East of West Rocky Prairie, North of Maytown road: Millersylvania State Park



Millersylvania park has 900 acres with one of the last remaining old growth forest in this area.

Its streams support beavers and otters, and its forests and lake support many bird species.



Rural Character - Along Beaver creek west of I5, east of Littlerock.





#### **Black River NWR**

The confluence of Beaver Creek and the Black River is near Littlerock.

The Black River National Wildlife Refuge flows south from Black Lake towards Rochester.



#### Mima Mounds at Glacial Heritage Preserve

Black River flows along the Glacial Heritage Preserve, south and east of Littlerock.



The wetlands and prairies at the toe of the last glacial period in Thurston county make our prairie habitat unique to the world with its beautiful and rare species.

Garry Oak with Camas.

Oaks are a keystone species of prairies, offering habitat for birds.



#### Indian paintbrush

Glacial Heritage, near Black River, has fostered the renewal of several native plant species, including types of Indian Paintbrush over the years. It is a feast for pollinators and birds.



#### **Black Tailed Deer**

Black-tailed deer and Elk are present on either side of I-5, traversing some of the same prairie habitat where Oregon Spotted Frogs reside.



# The Beaver Creek Watershed is an excellent habitat for Coho Salmon

Beaver Creek has always been a passageway for animals, especially aquatic species.

Beaver Creek has an extensive tributary system that serves many species.

Significant funds have been dedicated to improving the culvert system to enhance the Coho populations in the watershed.



#### **Oregon Spotted Frogs**

Oregon Spotted Frogs frequent Beaver Creek, drainage ditches in the Salmon Creek Basin, and in wetlands along the Black River.

OSF are a Federally Listed Threatened Species. Their numbers have declined drastically.



#### OSF lay eggs in shallow flooded areas, and migrate after metamorphosis

At right: egg masses observed by Elizabeth Roderick on a field trip led by Bonnie Blessing.



#### **OSF** Habitat continuity

Continuity exists between OSF populations residing in Beaver Creek, West Rocky Prairie, the Black River and its tributaries.

This diagram (from research in 2015) shows genetic connections among the frog populations in the areas described (East and West of I5).

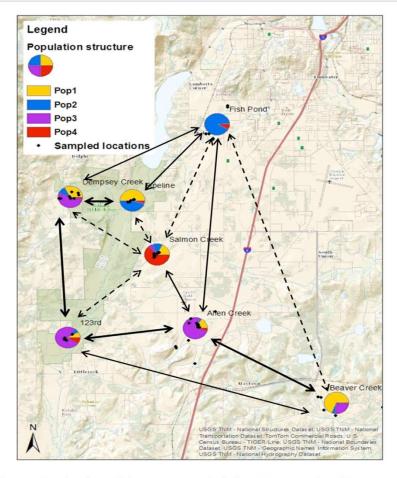


Figure 1. Results of population structure analysis for 205 egg samples of Oregon spotted frogs in the Black River area of Washington. Thickness of lines between neighboring populations reflect G'st values presented in Table 3, with thicker lines representing higher levels of gene flow (connectivity) and dashed lines representing very little or no gene flow. Colors reflect results from program Structure analysis, with each color representing similar ancestry.

For several decades, wildlife and habit scientists have dreamed of improving connectivity for wildlife over and under the continuous I-5 barrier in Thurston, Lewis and Cowlitz counties.

Conservation Northwest, who have built crossings under and over I-90, are looking at providing connectivity between the Olympics and the Cascades through Thurston, Lewis and Cowlitz counties.

This is important for Washingtonians who cherish their wildlife.





#### **Protect Beaver Creek habitat!**

The natural connectivity of Beaver Creek will be compromised significantly if megawarehousing is allowed to go forward at the Maytown intersection with I-5.

In the 21<sup>st</sup> century, we should be restoring and nurturing high quality habitat, rather than paving over such lands and introducing harmful contaminants.



New, empty warehouse at the I-5 exit just north of Maytown at 93<sup>rd</sup>.



Proposed Rezone to RRI at Beaver Creek, overlaying USFWS designated critical habitat.





Fredrickson warehouse complex, near Puyallup, Which is one of the 'model' warehouse sites mentioned in rezone discussions.

#### And of course, Protect and enjoy the birds in this region!



Western Meadowlarks are abundant at Glacial Heritage, Mima Mounds and nearby prairie habitats.

Red-Winged Blackbirds are ubiquitous in the wetlands

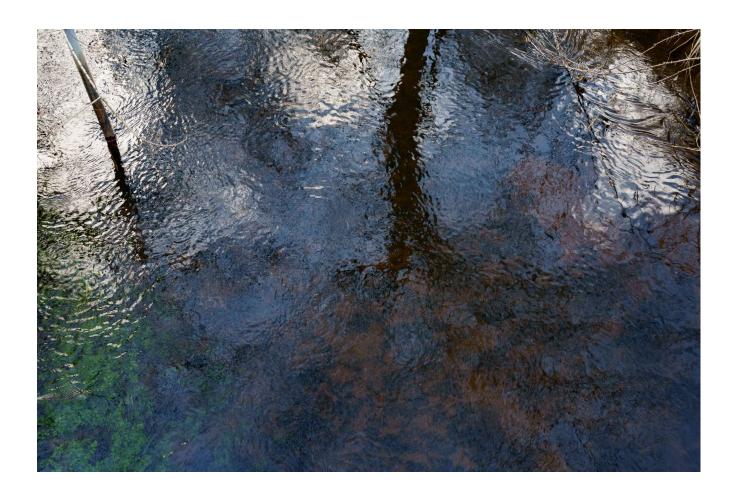




American Bittern is a rare find at West Rocky Prairie)
Photo courtesy of Cornell labs



Beaver Creek near the proposed rezone



#### Thank you!

Thank you – from the Oregon Spotted Frogs, the Coho Salmon, the American Bittern (West Rocky Prairie)

Many thanks to Dennis Plank and Rod Gilbert for photos