

Black River Ecological Region Overview

What are important/unique features and functions within this Ecological Region?

- Extensive low-gradient wetland complexes found in the Black River Ecological Region are currently unique in the Chehalis Basin (some may have historically existed in the Skookumchuck River area). Springs and groundwater inputs may be occurring.
- State wildlife lands and extensive marsh systems limit land development in much of this Ecological Region, which offers important protections to aquatic species.
- The presence of Oregon spotted frog is unique to this Ecological Region. Olympic mudminnow is also widespread and has frequent co-occurrence with Oregon spotted frog.
- West Rocky Prairie is a unique area with several types of headwater prairie habitats that support multiple threatened species.
- Stream temperature is not well understood but may be particularly important to summer habitat for juvenile coho salmon and summer holding habitat for adult spring Chinook salmon (note adult spring Chinook salmon have been reported in the Black River by landowners but not recently confirmed). Temperatures in the lower mainstem are quite warm during the summer, but there has been minimal spatial coverage to document temperatures or identify coho salmon summer rearing areas.

What is working? What is broken?

- The Ecological Region is lacking wood nearly everywhere.
- Substantial channel length lacks stable gravel.
- There are invasive exotic plant species including reed canarygrass.
- The extensive, relatively intact marsh habitat and lakes are high protection priorities.
- The upper Black River is vulnerable to development impacts from the greater Olympia area.
- The Black River has been channelized and widened, and possible impacts of those modifications have not been evaluated.
- Scatter Creek instream flows may be impacted by groundwater pumping and the historical diversion of one of its headwater tributaries outside of the Basin.

What are your thoughts about some of the protection and restoration strategies and actions we feel are important for this Ecological Region?

- Ensure continued protection and restoration/management of Oregon spotted frog habitat.
- Identify and protect areas with cool-water inputs.
- Reduce or prevent surface or groundwater withdrawals that could decrease instream flows, including reconnecting diverted tributaries, particularly in systems like Scatter Creek.
- Identify effects of channelization in the Black River and other systems and restore if needed and possible, with the objective of restoring anabranching channel patterns where appropriate. Add instream structure to increase the number of pools and promote anabranching/island formation.
- Protect functioning wet prairie, floodplain, and marsh habitats, especially in the Allen Creek area.



The low-gradient and meandering Black River, along with Scatter and Prairie creeks, formerly supported significant runs of chum and coho salmon but these populations are reduced now.



A mosaic of riparian areas and palustrine forested, scrub-shrub, and emergent wetlands in the ecological region represent one of the largest remaining relatively undisturbed freshwater wetland systems in the Puget Sound region. The extensive associated wetland system should be further protected and enhanced.



The Black River Ecological Region is the only known occurrence of Oregon spotted frog in the Chehalis Basin, and one of only six known locations in Washington. West Rocky Prairie, a known Oregon spotted frog-occupied site, is an example of glacial pond habitats that should be targeted for protection and restoration.



Scatter Creek was an important historical habitat for salmon and other indicator species. This area is currently threatened by impaired riparian function, loss of floodplain habitats, and low flows. Scatter Creek could be enhanced by protection of flows and restoration of beaver habitat and wood.