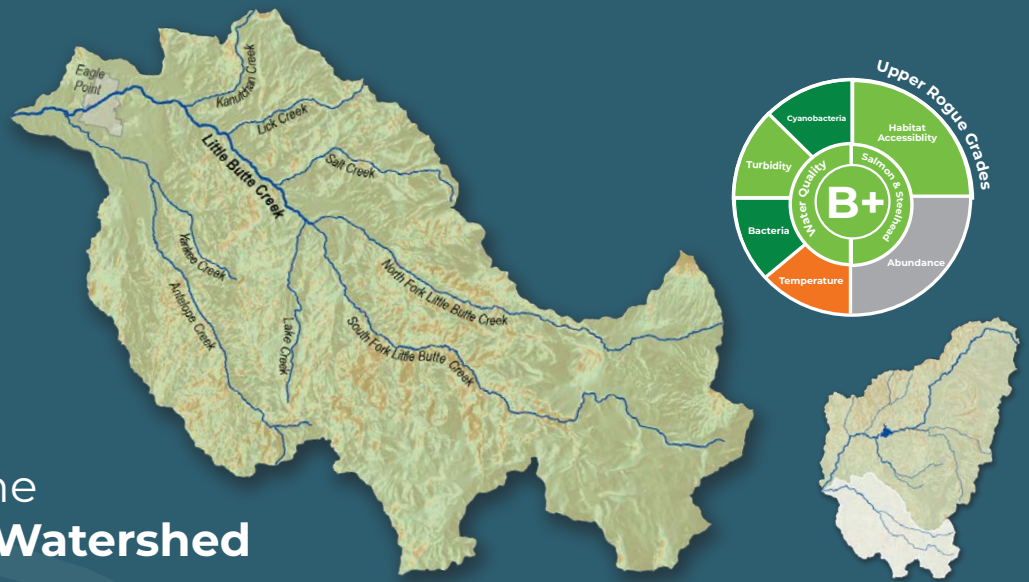
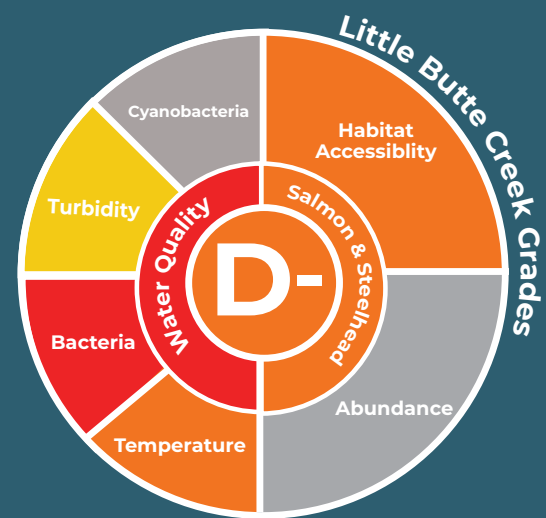


# Little Butte Creek Watershed Report Card

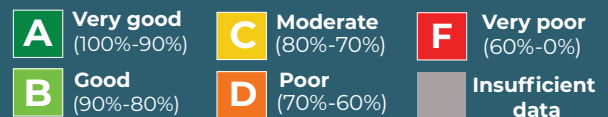


## Characteristics of the Little Butte Creek Watershed

Little Butte Creek originates from the flanks of Mt. McLoughlin, Brown Mountain, and Brush Mountain in the West Cascades Ecoregion and flows through the Klamath Mountains Ecoregion on its way to the Rogue. The South and North Forks of Little Butte Creek meet near the town of Lake Creek to form Little Butte Creek. It is one of the largest watersheds in the Upper Rogue sub-basin and is comprised of equal acreage of federal and private lands with diverse land uses. Agriculture (primarily cattle ranches and hay pastures) is a principal economic driver. For much of the year, the Little Butte Creek watershed is a main contributor to drinking water for 150,000 people of the Rogue Basin's population.



## Little Butte Creek Watershed Impacts Upper Rogue



This Little Butte Creek Watershed Report Card is made up of indicators, or key aspects, of environmental health that, when analyzed and assessed, provide insight into the watershed's condition. This report card analyzes data from five indicators that were assessed with additional indicators in 2021's Rogue River Basin Report Card (<https://www.rogueriverwc.org/what-we-do/rogue-river-basin-report-card>). We chose indicators that reflect the condition of two categories: "Water Quality" and "Salmon & Steelhead." The data used to assess these conditions are widely and regularly collected using common methods. We evaluated the status of indicators within these categories by comparing data to scientifically derived thresholds/goals based on state standards, or historical data comparison in conjunction with expert insight.

In the 2021 Rogue River Basin Report Card, the Water Quality category for the Upper Rogue had the second lowest grade, C+ (76%). The Salmon & Steelhead category scored a 78% (C+). Further analysis revealed that the Little Butte Creek watershed had a substantial negative impact on the sub-basin grade. Little Butte Creek on its own scored an overall 64% (D-). This overall score resulted from 59% (F) and 68% (D+) in the Water Quality and Salmon & Steelhead categories respectively. The *E. coli* data had the lowest score among indicators, earning an F in the Little Butte Creek watershed. For comparison, the rest of the Upper Rogue (without Little Butte Creek data) scored 85% for Water Quality and 88% for Salmon & Steelhead. The majority of these Upper Rogue indicator data came from the Little Butte Creek watershed, highlighting additional monitoring needs in other Upper Rogue watersheds.

## An Ongoing Need to Restore

As the report card highlights, there is a substantial need for condition improvement in Little Butte Creek. Actions to improve water quality, increase instream flows, and protect riparian areas are a major restoration focus throughout the watershed, especially in the agricultural sector. Piping large irrigation canals and improving on-farm water use efficiency (e.g., converting from flood to sprinkler or drip irrigation) provides opportunities to increase and protect instream flows and is being implemented in the watershed.

Reducing water pollution is also an objective for restoration in rural residential and municipal lands in the watershed. Current conservation projects are addressing water quality by decreasing water temperature, turbidity, *E. coli* presence, while also enhancing aquatic and riparian habitat in Little Butte Creek. Similarly, enhancing the ability for migratory fishes to reach productive habitats and increasing the quantity and quality of rearing areas is a key focus. Despite a long track record of restoration action, however, more collaborative work is needed to “turn the corner” on water quality and habitat conditions in Little Butte Creek.

Partners involved in Little Butte Creek restoration are grateful to the community and funders, such as the Oregon Watershed Enhancement Board, for supporting the restoration and monitoring efforts in Little Butte Creek. While the need for more restoration is high, support ensures that progress toward achieving a healthy and resilient Little Butte Creek will continue for the people, plants, and animals that call it home.

## Fish Passage Improvement Benefits Farmers & Fish

The Rogue River Basin supports internationally-valued salmon and steelhead (salmonid) populations including the federally-listed Coho Salmon. The National Marine Fisheries Service identifies Little Butte Creek as a core watershed for Coho recovery. Coho, other salmonids and Pacific Lamprey use the creek to lay eggs and grow up before migrating to the ocean to mature into adults. As the D+ report card score indicates, habitat accessibility is severely compromised for migratory fishes. All of the Oregon Department of Fish and Wildlife priority fish passage barriers in the Little Butte Creek watershed are associated with irrigation infrastructure. Removing these irrigation diversions and replacing them with fish-friendly irrigation infrastructure (shown in photo) improves irrigation efficiency for agriculture producers/landowners and native fish access.



## We All live Upstream

No matter where you live, the surrounding waterbodies near you flow into a larger system. Take some actions to protect the waterways in your backyard, and your neighbors downstream.

**Volunteer your time and/or donate to support conservation organizations and community groups.**



**Use sulphate and phosphate-free detergents and soaps.**



**Regularly monitor irrigation systems, sprinklers, and faucets for leaks.**



**Always pick up animal waste and dispose of it properly.**

