

= Potlatch River =

The Potlatch River is in the state of Idaho in the United States . About 56 miles (90 km) long , it is the lowermost major tributary to the Clearwater River , a tributary of the Snake River that is in turn a tributary of the Columbia River . Once surrounded by arid grasslands of the Columbia Plateau adjacent to the western foothills of the Rocky Mountains , the Potlatch today is used mainly for agriculture and irrigation purposes .

Its name derives from potlatch , a type of ceremony held by the indigenous people of the Pacific Northwest ; one such tribe lived along the river for hundreds of years before the arrival of whites . Pioneers settled the watershed and established farms and ranches in the late 19th century . After that , logging eliminated most of the forests within the watershed and the ecology of the river is still in the process of recovery . Fishing , hiking and camping are popular recreational activities on the river ; 14 percent the watershed lies on public lands . Before logging and agriculture , many varieties of riparian and forest plants once populated the catchment , and several species of fish still swim the river and its tributaries .

= = Course and drainage = =

The Hoodoo Mountains are the source of the Potlatch River . The Potlatch 's course traces a southwesterly line across the eastern Columbia Plateau in the arid Rocky Mountain foothills . Two forks form the river 's headwaters in the southern part of the Idaho Panhandle . The West Fork drains part of Latah County and the East Fork is in Clearwater County . These two forks combine near Helmer , and soon the river descends into a canyon that continues all the way to the mouth . While in the canyon , it receives Pine , Big Bear , Middle Potlatch and Little Potlatch Creeks from the north , and Boulder and Cedar Creeks from the south . Idaho State Highway 3 follows part of the lower canyon , and the town of Juliaetta is located at the Middle Potlatch Creek confluence . The river merges with the Clearwater at the elevation of 801 feet (244 m) between the towns of Myrtle and Spalding . Its average discharge at the mouth , according to a USGS stream gauge , is 379 @. @ 8 cubic feet per second (10 @. @ 75 m³ / s) . A peak flow of 8 @, @ 150 cubic feet per second (231 m³ / s) was recorded there in 2006 . The river reaches its highest peaks in the winter and early spring , while it reduces to a trickle by summer and autumn . The river mainly flows over and through coarse Columbia River basalts that comprise the Columbia Plateau , similar in geology to the Palouse River farther west .

= = History = =

Native Americans of the Nez Perce tribe have lived along the Potlatch River for hundreds of years . The Potlatch River area was once a broad sweep of dry grassland bordered by forested mountains , on the eastern edge of the arid Columbia Plateau . Because of its location just southwest of the foothills of the Rockies , the Potlatch River receives much more rainfall than watersheds just to the west , such as the Palouse and Tucannon Rivers . In 1805 and again in 1806 , the Lewis and Clark Expedition passed the mouth of the Potlatch River while traveling down the Clearwater River . They referred to it as " a large creek " and named it Colter 's Creek , in honor of John Colter , a member of the expedition . It is not known if they were the first whites to see the river . The modern name of the river was adopted in 1897 .

The native environment stayed relatively intact until settlers began to arrive in western Idaho in great numbers in the 1870s , and miners also were attracted by a gold strike at nearby Orofino , on the banks of the Clearwater River . Many of these emigrants set up dryland farms and ranches in the prairies surrounding the Potlatch River . Soil conditions generally improve as one travels southwards through the watershed , but there was a major drawback to growing crops in the southern part of the basin : the inaccessibility of water . Already scarce in the arid Potlatch River drainage , the river 's water was hard to reach because of the steep canyon it passes through in most of its lower course . Farmers were restricted to growing crops that did not require irrigation ,

and many of the lands that did not have access to abundant @-@ enough water were relegated to pasture or hay producing status .

At first , the forests of the watershed were not significantly affected , but after logging operations sprung up near the start of the 20th century , most of the virgin timber in the watershed was cleared . The first sawmills were built to provide lumber for local uses , such as building houses and barns . Soon , however , the Washington , Idaho and Montana Railway extended its tracks into the area , allowing lumber to be exported out of the basin . Logging turned out to be a very profitable industry but had a lasting negative effect on the ecology of the Potlatch River watershed .

Splash dams , greased chutes , railroad landings , railroad branch lines and steam donkey operations were among the strategies utilized to exploit the watershed 's resources of timber . Unfortunately , railroad embankments and fills used to build up tributaries had artificially straightened them in the process , and erosion increased dramatically on the barren hillside , causing many streams to become much siltier than they naturally would be . Nearly all the old @-@ growth forest in the watershed is now gone , and the forests that remain are mostly second @-@ growth stands .

= = Ecology = =

At one time the river 's watershed was dominated by grassland mostly consisting of Idaho fescue and bluebunch wheatgrass . Cottonwoods , quaking aspen , maple , and alder formed the riparian zone along the Potlatch River . In the foothills , a meadow steppe environment abounding with black hawthorn , snowberry and small conifers flourished , while along the banks of smaller tributaries , hawthorn and mock orange grew . Camas and forbs thrived in the thinly distributed seasonal wetlands along the river and its larger tributary creeks . The forests were mainly a mix of Douglas fir and ponderosa pine , interspersed with rare stands of grand fir , western redcedar , western white pine , and larch , and an understory of oceanspray , ninebark , serviceberry , wild rose and snowberry . Wildfires burned through the watershed from time to time , clearing the way for new growth . After human intervention , these vegetation communities continued to persist , but in lesser numbers , and the grasslands have mostly been wiped out by farming . The average annual precipitation ranges from 15 to 50 inches (380 to 1 @,@ 270 mm) per year , and annual variations in temperature are around 25 to 100 ° F (? 4 to 38 ° C) .

According to a study from 2003 ? 2004 , there were 13 different species of fish in the Potlatch River watershed , including speckled dace , longnose dace , rainbow trout (both wild and farm @-@ raised) , brook trout , largemouth bass , pumpkinseed , northern pikeminnow , redbreast shiner , sculpin , bridgelip sucker , largescale sucker , and yellow perch . Migration of steelhead , the anadromous phase of rainbow trout , has been impacted by the construction of dams downstream on the Snake and Columbia Rivers . The two species of dace were cumulatively the largest individual fish population in the watershed , while steelhead accounted for 58 @.@ 4 % of the biomass . Of all the streams sampled during the study , the West Fork Potlatch River had the highest diversity because of its relatively pristine condition . The lower section of the river suffers from chronic pollution caused by agricultural runoff . From 2005 to 2008 , the population of steelhead (rainbow) trout in the watershed was recorded by the Potlatch River Steelhead Monitoring and Evaluation Program (PRSME) . There was no data for steelhead populations in the main stem but 197 adult steelhead were recorded in the East Fork of the river , while an average of 226 was recorded annually in one of the river 's larger tributaries , Big Bear Creek . Over 1 @,@ 000 steelhead are estimated to return to the Potlatch drainage in strong run years . Outmigration of steelhead smolt from the East Fork was estimated at 6 @,@ 976 fish while the average for Big Bear Creek was 9 @,@ 491 . The Idaho Department of Fish and Game began a series of seven projects in 2009 in order to conserve fish habitat in the Potlatch .

= = = Land use = = =

Forests cover about 57 % of the Potlatch River watershed , while about 38 % is used for agriculture

and ranching . 78 % of the land is privately owned while 14 % lie within national forests . 7 % is owned by the state , while the Bureau of Land Management and Bureau of Indian Affairs each have a 1 % share .

= = Recreation = =

Many of the mountainous and forested sections of the drainage basin lie protected under national forest lands . There are several campgrounds overseen by the U.S. Forest Service in the headwaters of the Potlatch River watershed . Fishing is also good in the Potlatch River and many of its tributaries . Anglers are only permitted to catch brook trout , cutthroat trout , and rainbow and steelhead trout . The Department of Fish and Game annually stocks fish in the river . Fishing is permitted on the Potlatch from its mouth upstream to where Moose Creek joins the river near Bovill , as well as on the East Fork .