

= Adams River ( British Columbia ) =

The Adams River is a tributary to the Thompson and Fraser Rivers in British Columbia , Canada . Beginning in the Monashee Mountains to the north , the Upper Adams River flows mainly southward and eventually reaches Adams Lake . The Lower Adams River begins at the southern end of the lake and flows into the extreme western end of Shuswap Lake . The river is one of the most important sockeye salmon breeding areas in North America . The run occurs in mid @-@ October and can bring millions of fish to a concentrated area near the river mouth . Excavations of Secwepemc villages on the river have shown a long tradition of habitation and salmon fishing in the area . The river also served as an important transportation route for early logging operations in the watershed .

= = Course = =

The headwaters of the Adams are several unnamed glaciers at roughly 2 @, @ 000 metres ( 6 @, @ 600 ft ) elevation in the north @-@ east region of the Monashee Range of the Columbia Mountains . The upper portion of the river flows roughly south and southwest through wetlands and passes through two small lakes , Tumtum and Mica . It has sections of rapids and whitewater , and flows over cataracts below Tumtum Lake . Its flow drops by 5 metres ( 16 ft ) per kilometre in certain sections . After travelling for 94 kilometres ( 58 mi ) and entering the Shuswap Highland , it enters the northern end of Adams Lake .

Adams Lake is roughly 72 kilometres ( 45 mi ) along its north @-@ south axis , and reaches a maximum depth of 457 metres ( 1 @, @ 499 ft ) , making it the 24th deepest lake in the world . The Lower Adams issues from the extreme southern end of the lake and travels 11 kilometres ( 6 @. @ 8 mi ) through a narrow valley . It empties into Shuswap Lake near the community of Squilax . From Adams Lake to the Shuswap , the Lower Adams drops 60 metres ( 200 ft ) in elevation .

= = = Tributaries = = =

Tributaries of the Upper Adams include :

Oliver Creek

Dudgeon Creek

Sunset Creek

Fisher Creek

Adams Lake and the Lower Adams are fed by :

Cayenne Creek

Sinmax Creek

Momich River

Hiuihill ( Bear ) Creek

Nikwikwaia ( Gold ) Creek

= = History = =

= = = Secwepemc = = =

The Secwepemc people have lived in the Adams River valley for millennia . A 1977 study by the provincial government along the lower river found sixty @-@ six sites with evidence of habitation dating to 2000 BCE . The abundance of the salmon run made the river an important food source and trade commodity for First Nations people in the region .

Ethnographer James Teit records that the people of the Adams River area formed a sub @-@ group of the Secwepemc called the " Sxste 'lln " , now known as the Adams Lake Indian Band . The Sxste 'lln moved between summer and winter camps at the outlet of the lower river and the Little

River area near Chase . The river 's namesake , Chief Sel @-@ howt @-@ ken ( baptized as Adam by Oblate missionaries ) was a Sxste 'lIn leader in the 1860s . Like more than 200 of his people , he died in the 1862 smallpox epidemic .

= = = Adams River Lumber Company = = =

Although prospectors , surveyors , and trappers had travelled the region in the 1800s , the first large scale activity in the river valley by Europeans was logging . J.P. McGoldrick , an experienced lumberman from Spokane , established the Adams River Lumber Company in 1909 . He licensed large tracts of timber along both the Upper and Lower rivers , as well as the surrounding plateau . McGoldrick 's company is described as the first major industrial operation in the British Columbia Interior .

A camp was built on the upper river and logging operations began at Tumtum Lake . The cut logs were run down the river , then towed in booms by the company owned sternwheeler Helen down Adams Lake . The logs then were run down the Lower river to the mill at Chase . In 1908 , Adams River Logging constructed a " splash dam " at the outlet of the Lower Adams . This dam allowed operators to raise the water level of Adams Lake . When sufficient logs had been collected above the dam , the gates were opened and the resulting flood carried the logs to Shuswap Lake . This proved to be destructive to the salmon run as it damaged the gravel beds the fish use to spawn .

In order to move logs from the plateau above the Lower river , Adams River Lumber constructed several flumes . The flumes were elevated wooden troughs filled with water that floated logs down to the valley bottom . The largest of these was at Bear Creek . It incorporated trestles up to 25 metres ( 82 ft ) high and was capable of moving 3 @,@ 000 @,@ 000 metres ( 9 @,@ 800 @,@ 000 ft ) of logs per month . It was the largest flume in North America at its peak . The structures were dismantled after the areas became logged out .

Although logging continues in the region , the Adams is no longer used for log transport .

= = Ecology = =

= = = Flora = = =

Much of the ecology of the watershed has been affected by wildfires and forestry , and is considered to be in a seral phase . The river travels through several different vegetation zones . In its upper reaches , the Adams flows through the Interior Cedar Hemlock zone . These forests are similar to the coastal forests of British Columbia and contain old @-@ growth trees up to 1000 years in age . Old @-@ growth stands along the river also contain rare species of lichen , likely isolated by the last Ice Age . The floodplain of the Upper Adams contains wetland species of deciduous trees such as black cottonwood as well as a dense layer of shrubs including black twinberry , red @-@ osier dogwood , and thimbleberry . The lower river is dominated by the drier Interior Douglas Fir vegetation zone . Other conifer species present are Ponderosa pine , Engelmann spruce , and alpine fir . The area around the river mouth has been altered by human activities such as farming and livestock grazing .

= = = Fauna = = =

= = = Sockeye salmon = = =

Adams River sockeye travel from their spawning grounds to the South Thompson River , then into the Fraser River , and enter the Pacific . From the Strait of Georgia , they spend three years in the open ocean following Arctic currents to Alaska and the Aleutian islands . They then retrace their route to the Adams , completing a round trip of over 4 @,@ 000 kilometres ( 2 @,@ 500 mi ) . They

complete the arduous trip upstream , including navigating the swift waters and rapids of the Fraser Canyon , in just seventeen days . They do not eat during this period ; instead they rely on fat reserves stored up from heavy feeding in the Strait of Georgia in the late summer . It is at this point that the salmon take on their distinctive red hue , with the male fish also developing large humped backs and aggressive hooked mouths . How they are able to navigate back to their natal river is not fully understood , but a highly developed olfactory system is believed to play a part .

The alluvial gravel deposits that form the Adams river bottom are ideal for the development of salmon roe and alevins . The temperature and neutral Ph of the water is also well @-@ suited to the sockeye . Shuswap Lake , below the river , is called a " nursery lake " by biologists due to its high concentration of picoplankton , a food source for young salmon .

= = = = Dominant runs = = = =

The Adams River run occurs every year , but every fourth year ( called a " dominant " year ) , the numbers are much higher . 2014 was the most recent dominant run . According to Canada 's Department of Fisheries and Oceans , the Fraser River sockeye run of 2010 was the largest since 1913 , numbering an estimated 34 million fish . At least 3 @, @ 866 @, @ 000 of these fish returned to the Adams River to spawn . There is no clear consensus as to why the Adams stock has rebounded so remarkably ( 1991 saw an estimated return of 718 fish ) . In the Globe and Mail , Simon Fraser University biologist John Reynolds said ? [ predicting salmon numbers ] is massively complex , even for a scientist . ?

= = = = Other fauna = = = =

The Adams River valley supports large populations of mule deer , with smaller herds of white @-@ tail deer . Black bears are common in the watershed . The bear population grows substantially during the fall as they gather from adjacent valleys to feed on the spawning salmon . In the upper river valley , moose are common , and the headwaters of the river contain grizzly bear habitat . Several species of aquatic mammals are found on the river , including beaver , mink , and river otter .

The river 's mouth has populations of Canada geese and swans . Other waterfowl include mallards , green @-@ winged teal , and goldeneye . The river supports Bald eagle and osprey populations , whose eyries can be seen high up in black cottonwood and dead conifers . Grouse , especially ruffed grouse , are numerous throughout the valley .

= = Protected areas = =

The Adams passes through the 5 @, @ 733 hectare Upper Adams River Provincial Park and the 1 @, @ 076 hectare Roderick Haig @-@ Brown Provincial Park , which provides trails and platforms for salmon viewing . Human visitors to Roderick Haig @-@ Brown Provincial Park were estimated at 160 @, @ 000 in 2010 . Haig @-@ Brown was a Canadian conservationist , writer and a member of the International Pacific Salmon Fisheries Commission .