

DESCRIPTION OF THE CHELAN RIVER

The following information contains excerpts from the [Whitewater Boating Feasibility Study](#) conducted on the Chelan River in July, 2000.

The Chelan River begins below the dam and continues for approximately 4 miles until it joins the tailrace of the powerhouse near the Columbia River (Figure 1). For planning purposes, Chelan PUD has divided the bypass reach into four distinct sections, as shown on the map.

Section 1 is 2.29 miles long, and is characterized by a relatively wide flood plain, low gradient (approximately 55 feet/mile), and substrate comprised of large cobble and boulders.

Section 2 is 0.75 mile long and is a transition zone between the wider floodplain and the Gorge. It is characterized by a narrow channel, canyon walls, moderate gradient (approximately 57 feet/mile), and larger cobble and boulder substrate than Section 1.

Section 3 is “Chelan Gorge,” and is 0.38 mile long. The canyon walls in this section are very steep and narrow, and the gradient of the channel is steep (approximately 480 feet/mile). The channel is characterized by cataracts from 5 to 20 feet high, numerous cascades, bedrock chutes, and large, deep pools. The substrate is very large, with some boulders exceeding 20 feet in diameter.

Section 4 is located below the Gorge area and is 0.49 mile long. It is characterized by a wide flood plain, gravel/cobble/boulder substrate, and low gradient (approximately 22 feet/mile). This section extends from the bottom of the Gorge downstream approximately 2,600 feet to the confluence of the powerhouse tailrace.

The Gorge (Section 3) has been further divided into three areas based on the type of specific rapids:

Entrance Exam (a complex, multi-drop rapid at the start of the Gorge)

Central Gorge (the series of drops downstream)

Lower Gorge (the lower gradient boulder gardens at the end of the Gorge)

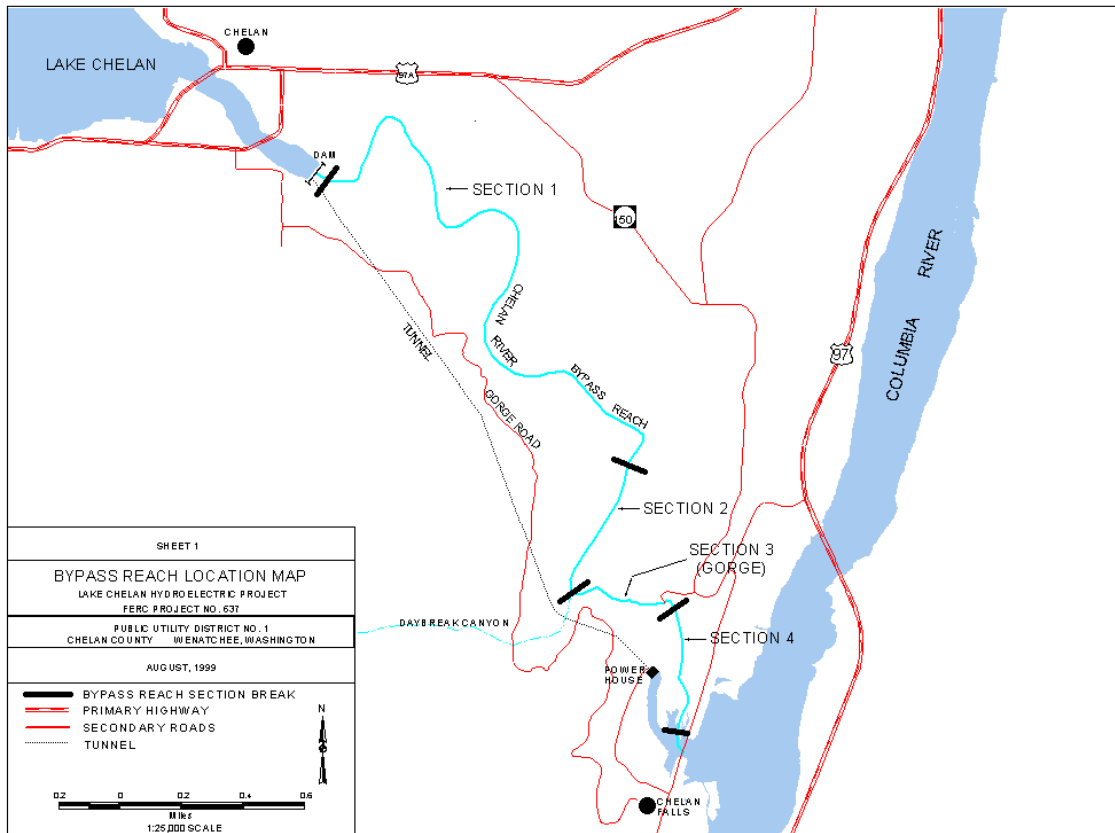


Figure 1: Chelan River And Vicinity, Including Chelan PUD Section Designations *Whitewater Boating Feasibility Study conducted on the Chelan River in July, 2000*

Launch and Take Out Facilities

Put-in. Just below the dam on river-left, an undeveloped road and short trail approach the river. The trail ends on a wide gravel bar that provides a suitable staging area for kayaks and other similar craft. There are parking and restroom facilities at a nearby City park.

Mid-river take-out. For boaters interested in avoiding the Gorge (or starting their trip immediately at the top of the Gorge), it is possible to leave the bypass reach at the mouth of Daybreak Canyon. There is an eddy above the Entrance Exam, and at observed flows there is a relatively flat area on rocks next to the river. However, there is no established trail or access, and the climb from the river to the Gorge Road is steep and potentially hazardous, particularly in the first few hundred feet. Hauling a boat up this route would present a significant challenge.

Take-out. There is a developed boat launch at Powerhouse Park at the confluence of the Chelan and the Columbia. The park also has extensive parking, restrooms, a large picnic shelter, and an extensive lawn for organizing/drying gear.

Specific Descriptions of Major Rapids in the Chelan River Gorge

Entrance Exam (Class V). This rapid has a series of four drops in short succession at the start of the Gorge. It is identified by a large rock about 100 feet upstream of a sharp left bend at the mouth of Daybreak Canyon. There is a large pool at the top of the reach, allowing boaters to scout and portage the entire rapid, as well as a smaller

eddy downstream of the first drop where boaters can also get out of the river. However, once boaters commit themselves to the second drop in the series, they probably have to run the rest as a group.

First Drop. This initial challenge is a short waterfall with a strong hydraulic at the bottom. The hole appears weaker in the center, and was weaker at the lower two flows (273 cfs and 391 cfs). This hole is not the main problem in the rapid, but it requires a clean run because of the drops that lie ahead. Boaters pushed off line here face a more difficult run.

Second Drop/Punch Bowl. The second major challenge in this rapid features a steep, horseshoe shaped falls immediately above a turbulent re-circulating eddy (the “Punch Bowl”) that extends below an undercut rock. The more “clean” boating line at all three flows is just left of a distinct flatter rock on river-right.

Pile Up. The third challenge in the rapid is immediately downstream of the Punch Bowl, and features a river-wide hole. This hydraulic appears weaker in center-right. There is a small eddy on river right against the cliff after Pile-up.

Final Plunge. This last challenge is a sharp drop and hole between two pinching walls; much of the current is directed at the right hand wall, where there is also considerable turbulence. Boaters generally run it after catching the small eddy below Pile-up, moving strongly from right to left-center.

There are scouting and portage options along Entrance Exam from river-right. Boaters who portage can seal launch into the pool below Final Plunge. Boaters can access the area from the Gorge Road (via the steep route down Daybreak Canyon) as well as from the eddy upstream of the rapid. There are options for establishing safety along the rapid, particularly below Pile-up and Final Plunge, the two holes where boaters are more likely to become stuck or have to swim.

Central Gorge. A few hundred feet downstream of Entrance Exam are a series of five major rapids in the Central Gorge. Unlike Entrance Exam, each of these are separated by pools with less turbulent water, and each can be scouted or portaged independently.

Double Slide (Class V). The first major rapid in the Central Gorge is “Double Slide,” which features a boulder field and swift currents leading to side-by-side chutes. The river-left slide is longer, more gradual, and ends in a less turbulent pool. The river-right slide (labeled “Chelan Chute”) is more abrupt and concentrated, and ends in turbulence against the mid-channel dividing rock, which is undercut. A short drop and hole, followed by an exposed rock and the right-to-left current, make access to the river-left slide more difficult.

There are good scouting options for this rapid on the river-right side. There is a portage route on river-left, well upstream of the entrance into the left hand slide. The portage option on river-right would involve a very difficult seal launch into the pool below.

Super Boof Falls (Class IV/V). The next rapid is a pour-over falls directly downstream of Double Slide; during an on-land assessment it was named “Car Wreck Falls” after an abandoned car in the cliffs (this has since slid into the river and is out of sight). All boaters ran this rapid “boofing” off a rock at the top of the falls on river-left to avoid heavy turbulence at the bottom of the falls. There are scouting options on both sides of the falls. There are portage options on river-left.

Throne Falls (Class V). This is another steep drop with strong turbulence at the bottom; the rapid is named for a distinctive boulder shaped like a throne downstream of the falls. Boaters generally run center-right but with varying bow angles. There is heavy turbulence on both the right and left sides of the falls.

Pinnacle Falls (the pool before the falls). The pool between Throne and Pinnacle Falls can be smaller narrowing the margin of error if boaters fail to have a clean run. Scouting and portaging options are on river-right. There is a good eddy upstream of the falls. Portage options are available from river-right that ends with a short seal launch.

Pinnacle Falls (Class VI). This falls is immediately downstream of the Throne and is identified by a tall pillar of rock on river-right. The falls is steep and high (probably over 20 feet), concentrating the entire flow of the river through a single slot. The bottom of the falls is very turbulent. Boaters often portage this area. The portage is rated “slightly difficult” by all boaters and involves a short carry over the saddle between the pinnacle and right canyon wall, and then a short seal launch into the pool below. There are good scouting options from the river-right eddy above the falls.

Boulder Sieve. The final major rapid in the Central Gorge occurs downstream of Pinnacle Falls, and is identified by several large boulders that act as a sieve in the river; there are at least two distinct chutes through undercut rocks; the total drop is about fifteen feet. Boaters generally do not run this rapid, choosing instead to ground themselves on a rock on river-left, then seal launch down a partially wetted incline to the side of the slots and their heavier turbulence. One boater often gets out of his boat to assist the other kayakers onto the rock and then shove them over the other side. As a result, many boaters do not even get out of their boats for this portage. The ride down the incline on the other side is steep and bumpy and ends in turbulent water that masks rocks that can easily be hit by boaters. Scouting appears best from the left side. A longer portage to avoid the seal launch may be possible on the left side as well, but might require ropes to bypass larger boulders.

Lower Gorge (Class IV/V). Downstream of Boulder Sieve, the river becomes less constricted and has a slightly lower gradient. There are several significant drops and boulders in this reach, but the rapids generally have less powerful hydraulics than those upstream. The rapids above the Old Highway Bridge have been collectively labeled “Extra Credit,” while the series of larger boulders and constricted routes downstream of the bridge have been collectively labeled “Fat Lady,” a reference to the colloquialism, “the opera isn’t over until the fat lady sings.” There were at least two routes in Fat Lady that were very constricted and cause boaters to hit large rocks as they passed by. One opening was less than the width of a kayak and stopped some boaters’ momentum. At another drop at the very end of the run, all boaters chose to avoid the center route (where most of the water went) in favor of narrow, shallower routes on the sides because of a sieve with potential pinning hazards.

In Extra Credit, kayakers found at least one good play hole for rodeo maneuvers (endos, cartwheels, pirouettes, etc.) There are numerous opportunities for boaters to get out and scout either Extra Credit or Fat Lady from the various boulders, and numerous portage and rescue options are also available if needed.

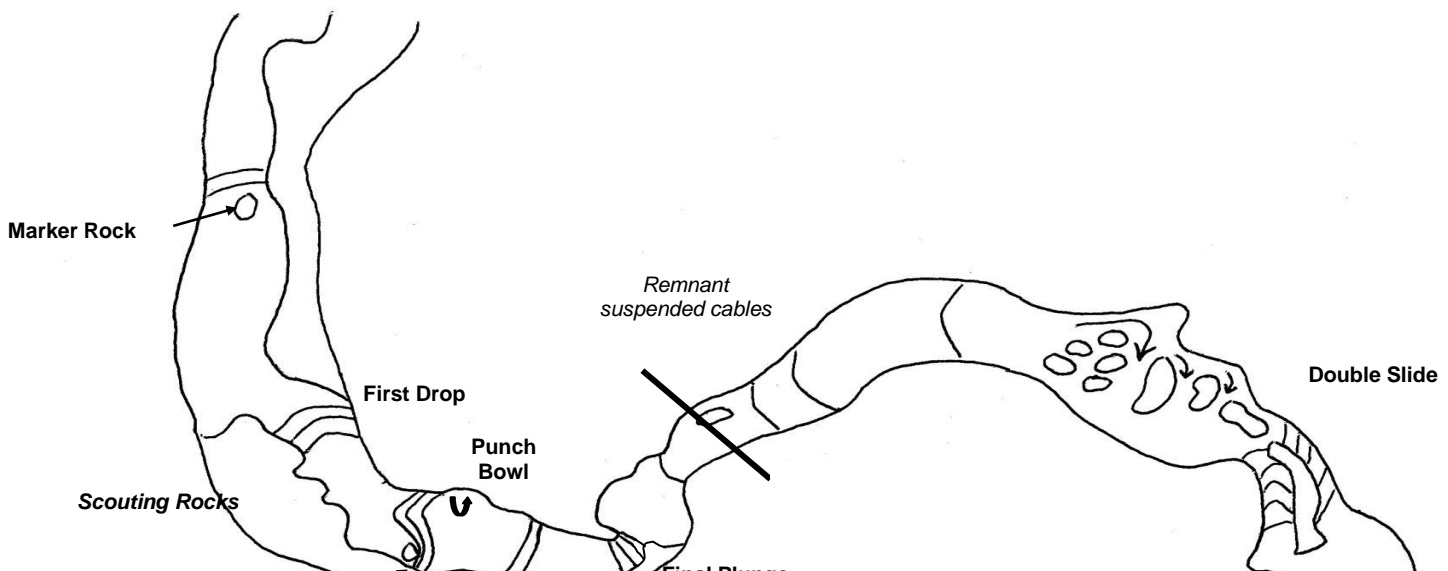


Figure 2: Map Of Key Rapids In The Central Gorge In Section 3 (Chelan Gorge).

Whitewater Boating Feasibility Study conducted on the Chelan River in July, 2000

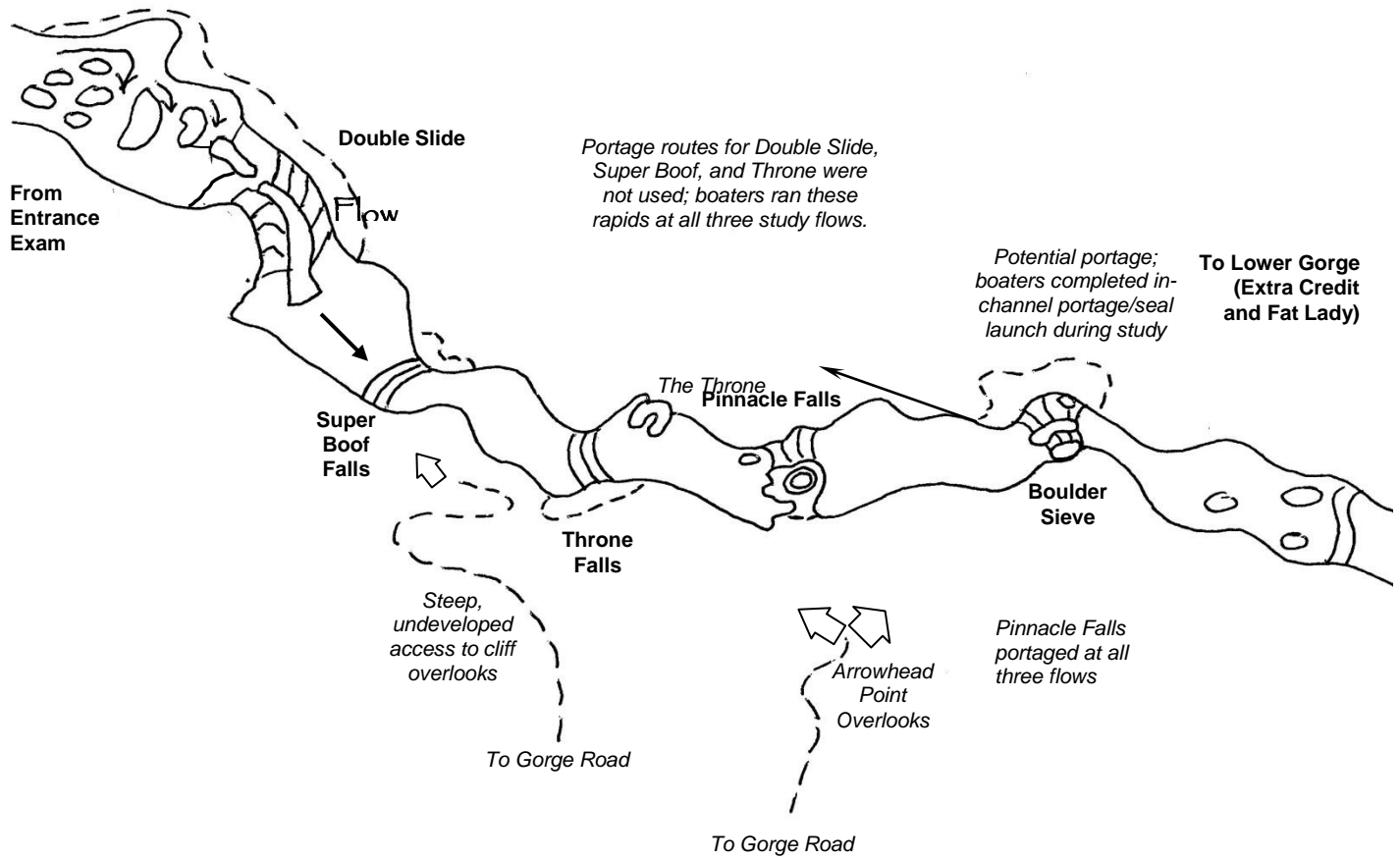


Figure 3: Map Of Key Rapids In The Central Gorge In Section 3 (Chelan Gorge).

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