

**Native Village of Napaimute
Salmon River Weir Report
Audrey Leary**



Leaving for the Aniak River.

Imagine you're sitting in a boat at the mouth of the Aniak River, mentally preparing for the two-hour long boat ride up one of the Kuskokwim's most unpredictable, swift, and tree covered waters. It's just you and another team member leaving for a summer of isolation, simple living, and repetitive fish counting. Once you take the first turn into the Aniak River you know there's no turning back. As the minutes pass, the bends become swifter, turns become tighter, and the River channel starts to break into different forks making it easy to get lost, miss a turn, or lose the main channel. You wonder to yourself, "how do fish know how to navigate such a complex river just to get to the place where they were born...the Salmon River." The complexity of the Aniak River, blended with the fresh water's of the Salmon River, a camp quietly sitting on the right side bank only a few short minutes inside the Salmon, and a crew of two people are part of the puzzle piece encompassing the magnificence and importance of a weir operation.

Prior to traveling the Aniak River, the most complex River I have been inside of was the Holokuk River, or in other terms known as Alugak. I grew up on that river, and was reminded every summer how strong and erratic river's can be. It wasn't, however, until I traveled the Aniak River that I truly grew an understanding of the terms strength and volatility when referring to a river's characteristics. It had been years since I traveled the Aniak River, and the trip to the Salmon River Weir was the first time I traveled that far up her waters. It was an amazing experience, and one I'm glad to say was shared with

Napaimute's Environmental Director, Dan Gillikin, and Napaimute employee and tribal member, Ben Leary.

The Aniak River encapsulates everything that makes a river beautiful. From its bluffs, cotton, spruce, and birch trees, to its broad width, gravel bars, and instantaneous current, the Aniak River is one of uniqueness. Throughout our two-and-a-half hour journey a few slight detours caused a pause in direction, and rain poured so hard we had to stop in fear of hitting a gravel bar. I have never seen a river so easy to take a wrong turn on, and unfortunately, its creativity got ahold of us a time or two. As a back seat driver, I tried to keep track of the main channel Dan was traveling on, but again, that too is easy to lose track of. Often times there were trees stuck in the water, breaking apart the river into two's, three's, and sometimes even four sections, and traveling down stream with the current only required a more keen awareness to the river and its own mind. I'm amazed at the ability some people have to read rivers as such, and am even more dumbfounded by the knowledge fish have when traveling a river. It's another reminder of why the food we eat should be respected and thanked for giving themselves to us. In truth, I thought we entered the Salmon River about an hour before we actually did, and can only laugh at myself as I write this. Initially, I hadn't realized the Salmon River was only going to be a small section of our travel, and that most of our travel would be along the Aniak River. When you come to the Salmon River it's easy to zoom past it if you don't know where you're going. At the Salmon River you come to three forks, much like the rest of the Aniak River; one of the forks continues as the Aniak River, and the other two forks take you into the Salmon River. Mistakenly, we took the first fork into the Salmon River (the right side), and later had to turn around once co-captain Ben Leary told us the fork taken wasn't narrow enough to be the correct one. After turning around, we took the far left fork, and again, I was amazed at how narrow the opening of the Salmon River was. We had trees hitting the boat on both sides of the canopy and trees sticking out of the water required many sharp and drastic turns. Once you've successfully entered the Salmon River, the river eventually starts to look like a normal river (a good comparison for me was the Alugak River), but it wasn't long until we saw three tents lining the right side of the bank, and the Salmon River Weir holding steady right above the camp. It was then that I began to understand how isolated working on a weir is.

There are two employees currently at the Salmon River Weir—Napaimute employee, Dakota Phillips of Aniak and Crow Village, and state employee, Kenny Kinzy of Aniak. Ben Leary of Napaimute is the alternate and switches with crewmembers when one take leave. At the camp there are two small wall tents for each of the crewmembers, and a Weather Port tent sitting between the two small wall tents. Here you can find the cooking stove, refrigerator, electricity powered by solar panels and a generator, camp chairs that act as a living room, food storage, and a wood stove. The Weather Port is the main tent used by the employees. Located at the far back of camp is also an outhouse and a small cabin used for weir storage supply. A portable tent where a shower hangs (it's simply a bag shower meaning you have to heat up water and pour the water into a bag that has a connecting shower hose) also sits in between the Weather Port and far right side wall tent.



View of the camp from the River.



Inside of the Weather Port.



Inside of the Weather Port.



Dish washing featuring Weir Life and Audrey. With a view like this I could do dishes all the time!



Salmon Weir camp coffee pot. Add some creamer and a drop of sugar and it beats a Starbucks!



Cabin used for weir supply storage.



Salmon Weir outhouse. Cozy!

A trip made to the Salmon Weir was organized because the camp Internet had been down for a few weeks causing a lack of communication between weir employees and those in other locations. In an attempt to fix it, as well as help with a tree that got caught in the weir, Dan, Ben, and I traveled to the Salmon Weir. As a council member I wanted to see what a weir was like, and never in my life did I think I would get an opportunity as such. During our first few hours at the weir, Dan worked with Dakota, Kenny, and Ben on getting the Internet back up and running. Although efforts were unsuccessful, we ended up taking the entire dish down to Aniak to be looked at.



Dan, Dakota, and Kenny busy working on the satellite dish used for the Internet.

Our trip to the Salmon River Weir was only an overnight stay, and because of the increase of rain in our area, the weir became inoperable. I learned that weirs cannot operate under water conditions that are too high, and because of this I was not able to see a fish count conducted. During our visit to the weir, the crew had to take out the panels and wait for the water to drop to 30 centimeters to avoid the weir becoming jumbled and scoured. Once the water dropped, which can happen fairly quickly, the panels will be replaced. Working in high water conditions also puts the crew at a safety risk due to the increase in water force. Although I wish I had seen a fish count, experiencing the Salmon Weir crew remove panels was a learning experience in itself.



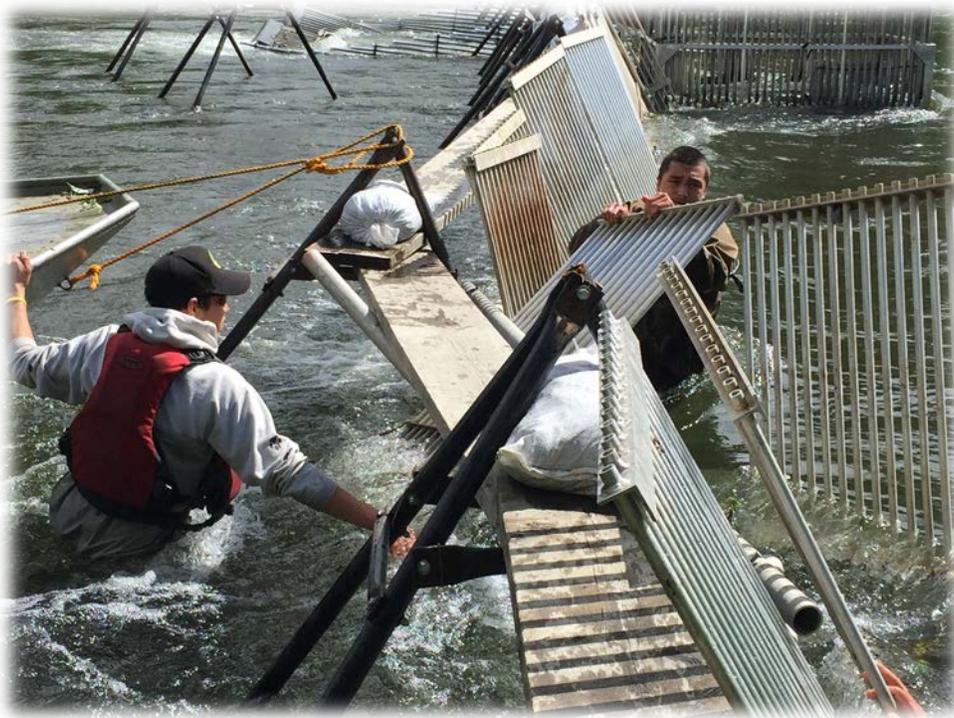
Device used to measure the water depth.



Because of his experience with weir work, Dakota Phillips is the camp lead. Here he drives the boat as Kenny Kinzy and Ben Leary begin to pull panels from the weir. The panels are made of aluminum.



The crew working to pull panels from the weir. The Salmon Weir is a picket weir, which is the oldest style weir used. Picket weirs are often put into small river systems like the Salmon River. All other weirs along the Kuskokwim River are floating weirs. In the picture Kenny and Ben were fighting against the power of the current.



Teamwork and communication is key in this type of work. Here, Dakota Phillips and Kenny Kinzy work to remove a panel, while the current continues to work against them.



Ben Leary puts his wet suit and goggles to use as he removes sticks from the weir. The wet suits that Kenny and Ben are wearing also act as a floatation device.



Dan Gillikin overlooking the crews work. On the far left you can see panels already removed from the weir. The panels are shoved directly into the gravel of the Salmon River, providing a foundation of support and making for fairly easy removal.



Manning, the weir dog. Here she waits for the workers as she does for them every day. Kenny Kinzy is holding metal stakes in his hands used to help keep the weir stable. The white bags are filled with gravel to provide additional support for the stakes. In order to free the tree stuck in the weir, the crew had to remove stakes and the aluminum panels before the tree could continue its flow down the river.



Kenny Kinzy and Ben Leary walking across the weir after a successful day of work.



The Salmon River Weir. The first opening in the weir is where boats and rafters can easily slide through the weir, while the second opening is where the crew removed panels as they await the level of the water to drop. Employees at a weir can do a minimum of 4 counts a day for 4 hours; however, the employees at the Salmon Weir do 6 counts a day when the weir is operable. When operable, the weir is usually closed when not counting. Sometimes the weir will be left open when water is low, and those counts are then estimated.

The Salmon River Weir has been in operation for roughly 7 years. Its uniqueness is one I'm proud to associate with the Native Village of Napaimute and our decision to partner with the Alaska Department of Fish and Game. It takes a level head, and a strong mindset to be able to successfully complete work in an environment so isolated. Without Internet, the crew of two relies on movies, cards, and cross word puzzles to get them through days where the weir is inoperable or evenings when counting is not being conducted. The time, efforts, and people it takes to labor the demands of a weir are astonishing. It's often easy to forget the people behind the data used to evaluate salmon escapement numbers, and all the work and thought put into gathering the data used to determine regulations and how much fish we can put away for the winter. It's another reminder of the complexity behind the fish hanging in the smoke houses of families up and down the Kuskokwim River. It was a rewarding experience to see a weir in action, and get to know one of our employees—Dan Gillikin—outside of merely a voice heard on the other end of a phone. He's a knowledgeable person, and his personality, I believe, helps the employees enjoy the work they do. It's a proud feeling knowing our Tribe contributes to a field of work that plays a significant role in issues, and topics embraced regionally and state wide.