

Thirteen participants met at Zim's Hot Springs and went on a field trip to the Rapid River Fish Hatchery. Captured minutes are from speaker presentations and group discussions. Photos of the areas and additional resources from this meeting are available at <u>https://littlesalmonriverwatershedcollaborative.com</u>.

Participants:

Al Becker Amelia Dale Brown Dani Gary Thompson Jeff Luff Keisha Miller Kelly Owens Kiana Ziola Madison Gates Thea Vanessa Wes Keller

Rapid River Hatchery Tour – Joel Patterson, Rapid River Hatchery Manager

Overview

- The Rapid River Hatchery was built in 1964 by Idaho Power Company as mitigation for Idaho Power Dams- Hells Canyon, Oxbow, and Brownlee
- The purpose of this hatchery is to produce 3.2 million spring Chinook salmon smolts per year
- Idaho Power also owns the Oxbow Hatchery, Pahsimeroi Hatchery, and the Niagara Springs Hatchery
- An expansion is planned in the next couple years which will increase the number of fish produced by 800,0000 to 4 million.
- The hatchery currently has a water right of 30 cfs which will be doubled when the expansion occurs

Tour Stops:



Hatchery Intake

- In 2017, a new, five-million-dollar intake was installed. The section of Rapid River where the intake occurs must maintain a constant water level regardless of flow in Rapid River
- A constant water level is achieved using three weir panels. The level of the weir panels are controlled by bladders that inflate and deflate based on sensor readings

- A fish ladder also allows fish to pass by these weirs
- As seen in photos, only one weir panel is currently activated (allowing flow). This is the panel located next to the fish ladder and is also farthest from the intake. This directs debris away from the intake and allows for adequate fish passage
- The water also passes through a screen which includes a wiper system (photo) that cleans the screen when it gets dirty with leaves, sand, and other debris

Incubation Area

- The incubation area can house up to four million eggs, with each tray (photo) containing 4,000-4,500 eggs from a single female
- There is also a silt tray at the top of each stack of trays that prevents silt from being deposited onto the eggs
- The eggs hatch in the trays and when their yolk sacks are absorbed, they are moved the early rearing area



Early Rearing Area

- Includes 11 raceways at this hatchery, each one containing ~300,000 fish
- Fish are measured like shrimp, by how many of them it takes to make one pound
- When fish are placed in the early rearing area, they are 1,200-1,300 per pound
- When fish reach the size of 100-125 per pound, they are marked, their adipose fin is clipped, and they are moved the final rearing pond

Final Rearing Area

• There are six holding ponds that can hold ~600,000 fish in each pond

- One pond below the hatchery holds ~500 rainbow trout that are brought in from another hatchery for youth fishing, this pond also acts as a settling pond
- Fish are held in the final rearing area until mid-March
- At this time, the gates are opened and the fish are released

Adult Holding Pond

- The adult holding pond holds up 3,000 adults, including about 1,300 females which produce the eggs that are used to fill the incubation trays
- These fish are captured at a separate site (Rapid River weir) and brought by truck to the hatchery. Only hatchery fish are brought to this holding pond, all natural-origin fish are released upstream of the weir



Importance of Rapid River - Wes Keller, Nez Perce Tribe Watershed Division Project Leader

- Rapid River (Yáwwinma) was always known to the Nez Perce Tribe to be an important watershed for fisheries.
- Yawinme (pronounced Yah-win-me, meaning a very cold tributary or canyon), coming from the word "yaw'n" meaning coldspell. The creek is known as Rapid River and has been used for fishing purposes from time immemorial
- Adult salmon returning from juveniles reared at Rapid River Hatchery provide important harvest for treaty and non-treaty fisheries from the mouth of the Columbia River to Rapid River itself. Rapid River Chinook salmon account for the majority of fish harvested during the Tribe's spring fisheries management period. On average, 70% of all Nez Perce tributary harvest occurs within the Rapid River/Little Salmon subbasin.
- Rapid River was added to the national Wild and Scenic Rivers (WSR) system in 1975. The purpose of the WSR Act was to recognize and protect selected rivers through appropriate land use management.
- Rapid River has exceptional water quality, relative to other streams in the area, it has high summer and fall flows. Rapid River helps reduce summer water temperatures in the Little

Salmon.

- Riparian health in Rapid River is of the highest quality
- Working to improve water quality and reduce water temperature in the upper portion of the Little Salmon will help downstream fisheries and water quality.