

Tyson Creek is a tributary of the Tzoonie River at the head of Narrows Inlet about 20 miles from Sechelt. Directors of the SCCA were invited by Renewable Resources Hydropower Company (RRH) to take a tour of their Tyson Creek lake storage/run-of-the-river project, which is now nearing completion. We were also invited to view the location of the RRH's proposed project at Ramona Lake/Creek, which empties into Narrows inlet just west of the Tzoonie River estuary. SCCA Vice Chair Jason Herz viewed the site with company personnel on November 5, 2009.

A word about the project; at the head of Tyson Creek is a small lake which we call "Tyson Lake". We use the term "lake storage" to describe this project because the lake is used as the head pond of the penstock. Incidentally, a "penstock" is a pipe used to deliver water to a generating station. A tunnel was bored underneath the lake and the penstock pipe was installed in the tunnel, which was then opened into the lake. This pipe carries the water for 4.2 kilometres and down an 865 meter elevation drop into the power house (generating station). After leaving the powerhouse, the water is directed through a tailrace back into Tyson Creek. Tyson Creek then empties into a salmon spawning reach of the Tzoonie River, historically one of the most important and productive salmon streams in the Sunshine Coast Forest District.

An important point to note is that as the lake is drawn down, the natural outflow to Tyson Creek becomes dry. Therefore, to keep water flowing in Tyson Creek, it is necessary to reroute water taken from the bottom of lake, through a 10" inch pipe back up to the lake's natural out flow. In this way, the legal obligation to maintain 5% of the mean annual flow is achieved.

The SCCA has a number of general concerns about run-of-the river hydroelectric projects. During this tour, a number of specific concerns having to do with storm water management during the construction period were noted. Company personnel have responded and a dialogue is ongoing.

[Enjoy the tour!](#)

**Statistics:**

- Penstock is 0.75 meters in diameter at the top end 0.6 meters in diameter at the bottom.
- Penstock is 4.2 km long
- Re-watering pipe is 10" inside diameter
- The top to bottom elevation drop is 865 meters
- Powerhouse clearing is 1.9 hectares
- Entry point for re-watering of the creek is at the original out fall at end of the lake. No part of the creek is left dry.