

Ruth Lake Hydro



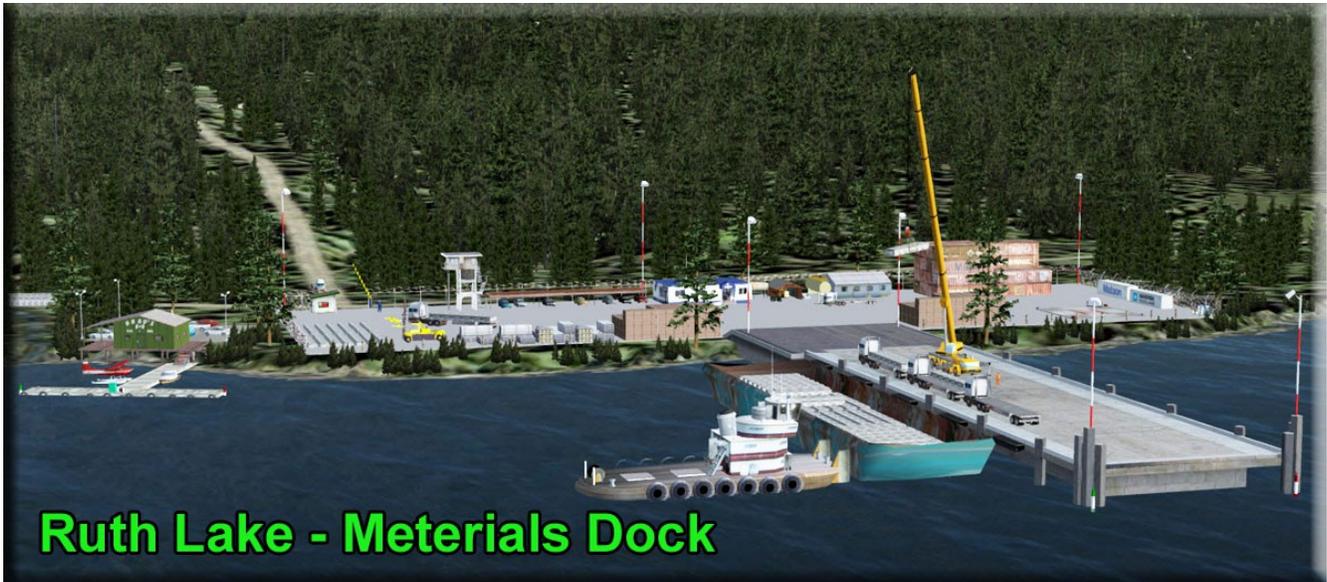
In another attempt to replace diesel generators, the City of Angoon proposed a dam at Lake Ruth. The RTMM Alaska Power Project depicts the dam as it might look under construction. But the project has actually “expired” and will not happen unless a new permit is created and accepted.

Proposed Specifications and Planning

*170-foot-high, concrete dam (length not specified);
12,600 -foot-long penstock;
20 mile-long, 138 kV transmission.
Generating Capacity: 20.00 MW*

his Project would develop the hydro potential at Ruth Lake, increasing the total installed capacity of the powerhouse of 20 MW. The proposed Ruth Lake Hydroelectric Project would be interconnected to the existing transmission infrastructure currently owned and operated by the FDPPA. Ruth Lake would be a major addition to the energy resources to serve communities in an interconnected Southern Southeast Alaska grid. Petersburg is providing matching funds of \$540,000 for the two phases. Phase 1 funding request from the city of Petersburg for the pre-feasibility is \$160,000 and phase 2 permitting is \$2 million.

The proposed location is a good one. There is a small hill that “holds in” Ruth Lake from flowing to the sea. This is the lowest barrier for the water. If that hill were raised, then a very large reservoir would be created behind the dam.



RTMM envisions a materials receiving dock would be necessary to support the construction of the dam. This was placed at the shoreline. There is a connecting access road from this site to the construction site.

The location has two helipads and two places for float plane docking.

- Helo: Materials Receiving Dock: N56 58.3471 ... W132 47.2505
- Helo: Dam Construction Site: N56 59.2855... W132 44.5997
- Float: Brad's BBQ: N56 58.4482 ... W132 47.2118 ... Heading: 199.8
- Float: Ruth Lake Dock: N56 59.324'... W132 44.3362 ... Heading: 279.9

You can land a float plane on Ruth Lake and taxi up to the dam where there is a temporary dock. (We envision either the crane there would ferry people up and over the dam, or they could walk though the unfinished water tunnel leading into the power plant.

The only alteration we made to the scenery was in lowering the "hill" at the end of Ruth Lake and flattening that immediate area so we could place the dam and have room for construction work and a helipad.

Doug Linn/RTMM