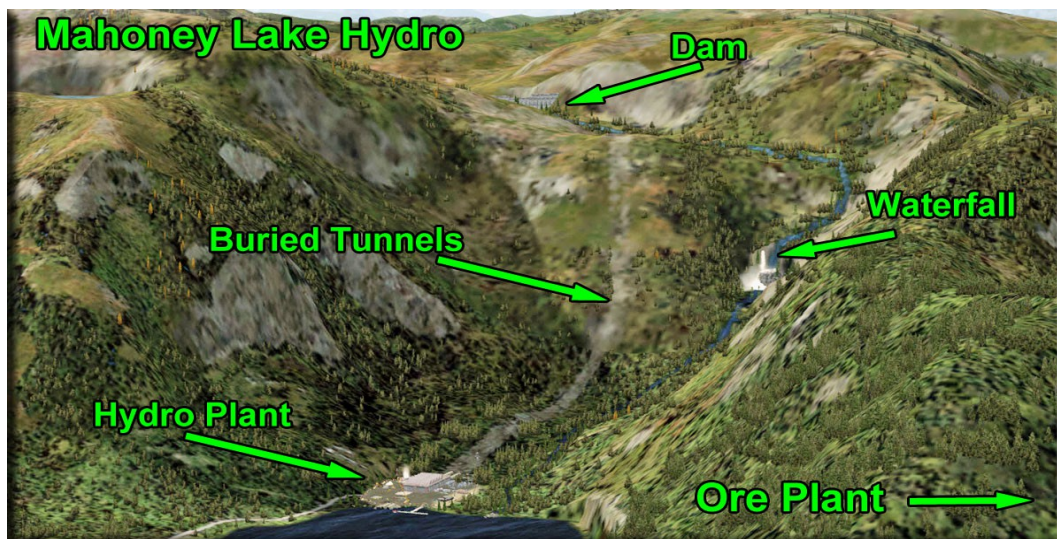


Mahoney Lake Hydro Proposed Facility under Construction

This plant is currently under construction near Ketchikan. Here are the specifications on the facility:

- *The Mahoney Lake Hydroelectric Project will provide ratepayers with 41,743,000 kWh of affordable, renewable electricity per year. The Mahoney Lake Partnership's current estimated busbar cost of power, assuming 50% State investment, is 7.3 cents per KWH. The project is capable of accommodating the Ketchikan / SEAPA region's growing load demands, while supporting economic growth and quality job creation in priority industries such as mining/ore processing, the marine industry sector, shipbuilding & repair, tech-based industries, and more. Performance of the tasks described above will help pinpoint Mahoney Lake's power costs and construction costs with greater accuracy, providing essential information which can inform future power sales agreements and decision-making by local and regional leadership.*
- *The 9.6 MW Mahoney Lake project can provide 41,743,000 KWH (41.7 GWH) of power per annum. The project is ideally sized to support rapidly-emerging economic opportunities in priority industries such as mining/ore processing, the marine industry sector, shipbuilding & repair, tech-based industries, the visitor industry, and more. Approximately 17,900,000 KWH (17.9 GWH) of power is available between November and April as winter storage. AP&T's 2012 cost estimate for the project is \$46,000,000, +/- 20% -- one of southeast Alaska's most affordable options for new hydropower.*

This location includes Several features:

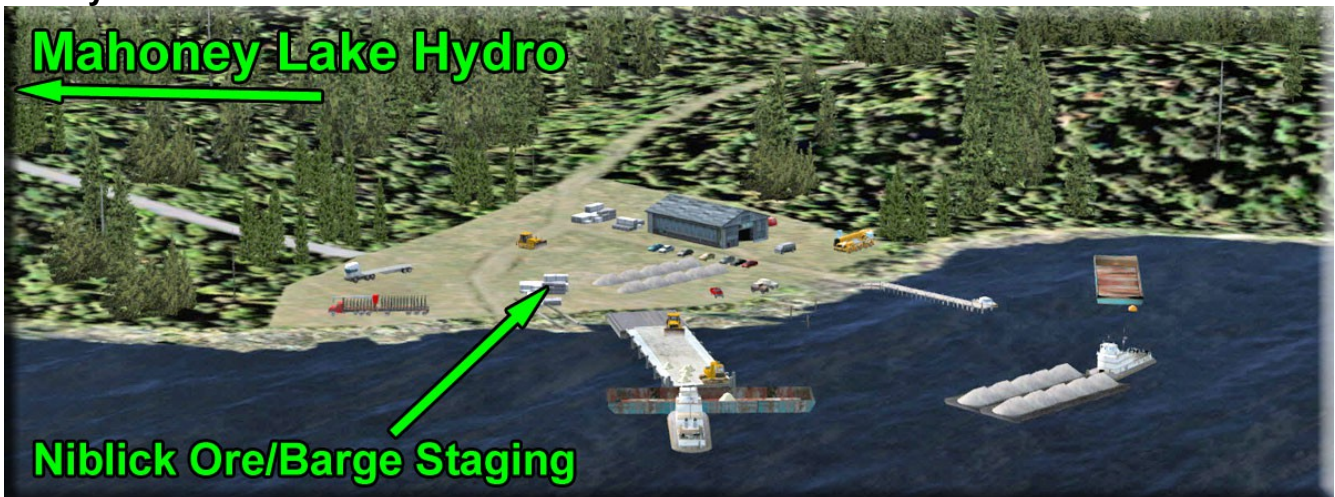


The dam is being constructed on Upper Mahoney lake some 600 meters above the proposed powerhouse. Two tunnels will bring the water down from the dam to the powerhouse. There presently is a river coming down the mountain from Upper Mahoney Lake to Lower Mahoney Lake. About half way down is a waterfall. The turbine plant will be at lake level below the waterfall.



Mahoney Lake Hydro Dam and Tunnels

About two miles away is an Ore Process and barging facility. This will be used for receiving receiving materials. A road has been constructed that will connect to this facility.



Mahoney Lake Hydro

Niblick Ore/Barge Staging

Author's Note:

The challenge for all of these hydro plants is “elevation” (which makes them work). So you are continually working with terrain changes to make the project seem feasible for the flight simulator.

The biggest challenge for this project was the river that runs from the dam down to Mahoney Lake. Half way down is a waterfall (you can see it in Google Earth). Creating this river, literally “point by point” and working with the terrain to create a waterfall took a lot of time. Also the twin tunnels to transport the water are seen in two places where they are not covered by the ground. We wanted people to know about the two tunnels, but did not want to build them on an angle coming down the mountainside, so we buried them except for two places.

There are three helipads and two float plane docks:

- Helo - Ore Plant (receiving): N55 28.0868 ... W131 31.9332 ... alt 2.7M
- Helo - Upper Mahoney Dam: N55 24.8475 ... W131 33.2533 ... alt 640 mtrs
- Helo - Hydro Plant: N55 25.1081 ... W131 33.9610 ... alt 29.7 M
- Float Plane - Hydro Plant: N55 25.1670 ... W131 31.9036 ... Heading: 151
- Float Plane - Ore Plant: N55 28.1101 ... W131 31.9245 ... Heading: 176

The document used for construction this can be found [HERE](#).

Hope you enjoy Mahoney Lake Hydro.

Doug Linn