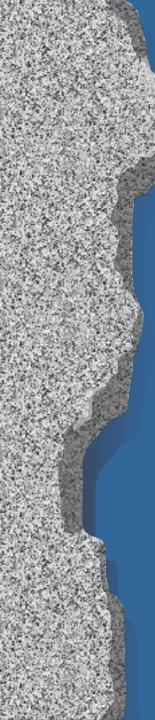


NORTHWEST ENERGY SYSTEMS SYMPOSIUM

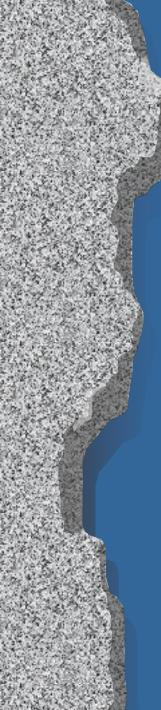
Hancock Creek & Calligan Creek Projects Construction

Danny Miles, PE.
Principal Engineer
Water Resources



Hancock and Calligan Creek Projects Time Line

Projects Licensed early 1990's to Hydro West Group Construction never started by Hydro West Projects were sold to Snoqualmie Creek Hydro 2010 PUD purchased lands and rights to construct both projects RFQ for Engineering Services Permitting and Environmental Studies Updated June 2015 FERC issued license for both Projects Fall 2015 Construction started March 29, 2018 Testing Completed and Commercial Operation Begins at Both Projects.



Hancock Creek and Calligan Creek Projects Details

Location – North Fork Snoqualmie River above Snoqualmie Falls

6,000 KW Capacity Both Projects

Hancock – 1117 Feet of head

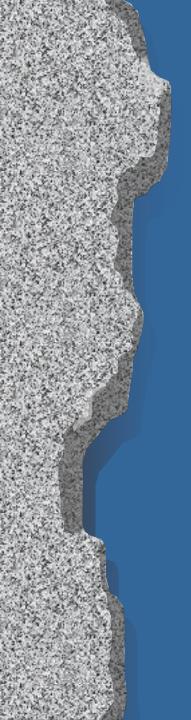
Flow Capacity - 81 CFS

Penstock – 1.5 Miles

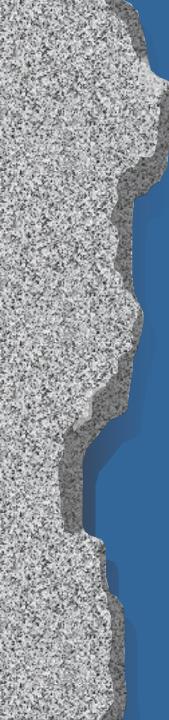
Calligan – 1036 Feet of head

Flow Capacity - 88 CFS

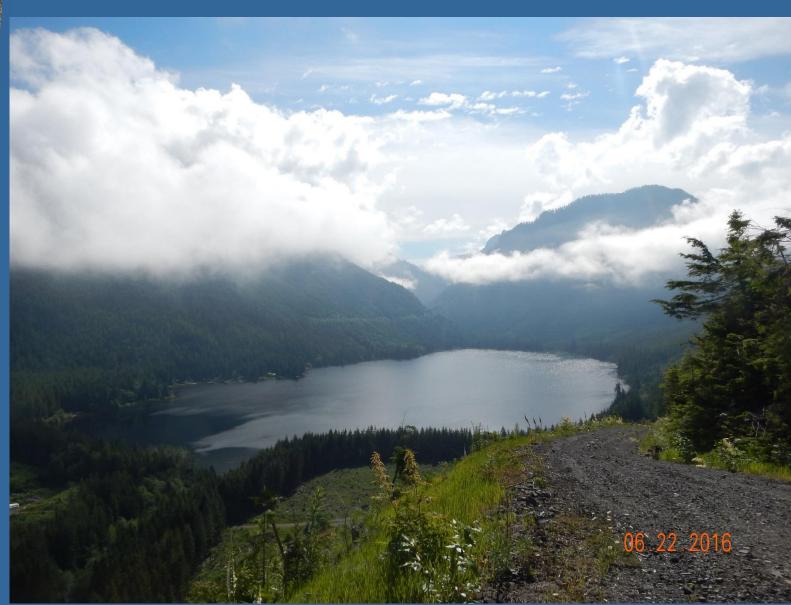
Penstock – 1.5 Miles



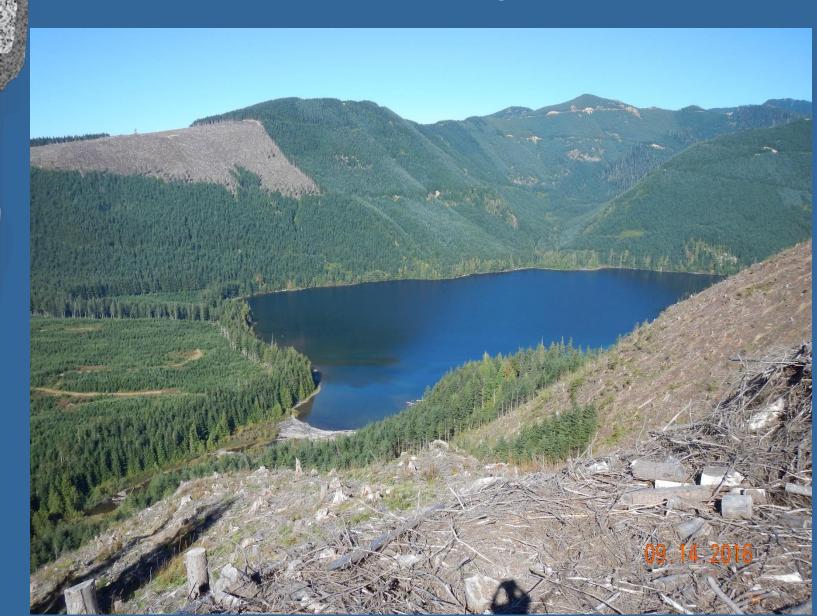
Water Source

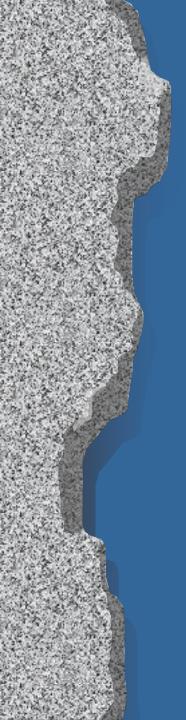


Hancock Lake



Lake Calligan





Intake and Diversion





























































Penstock































Powerhouse



















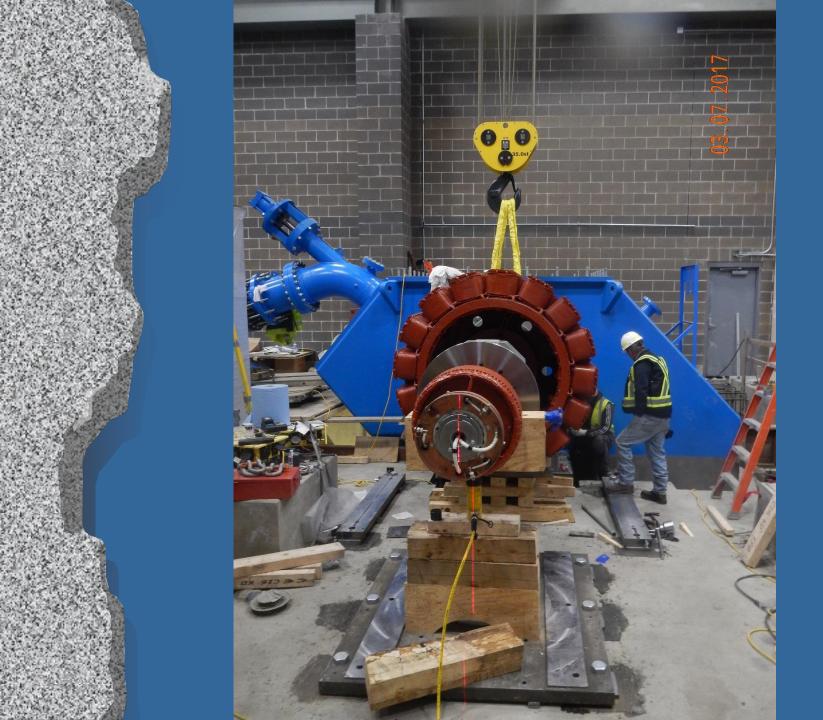






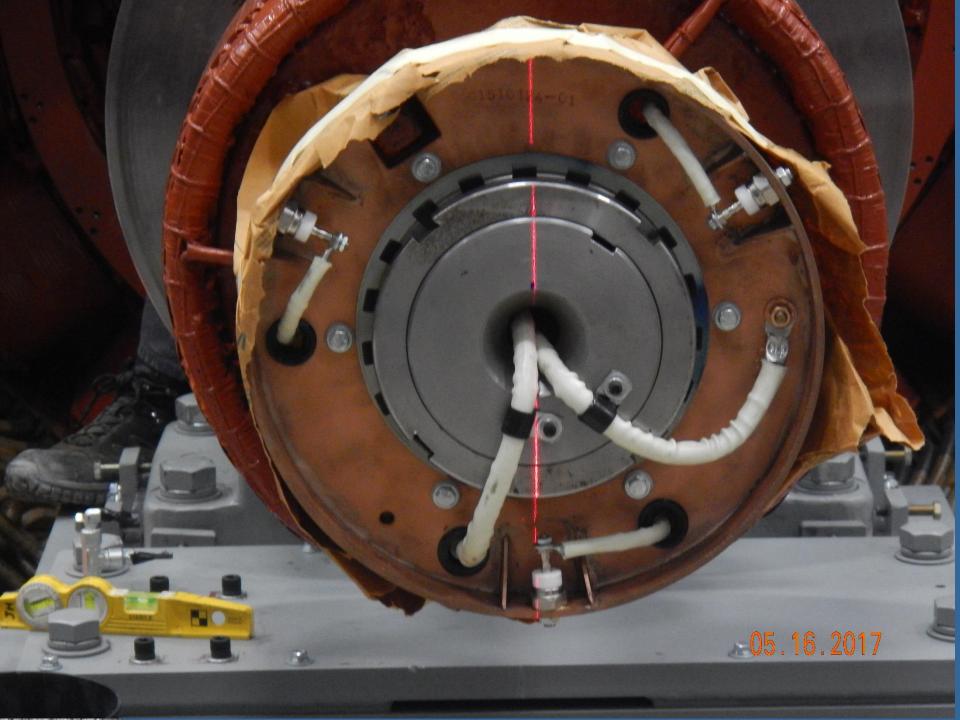






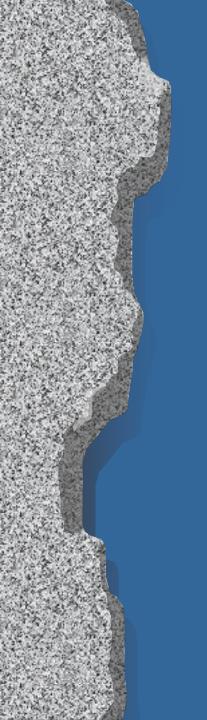




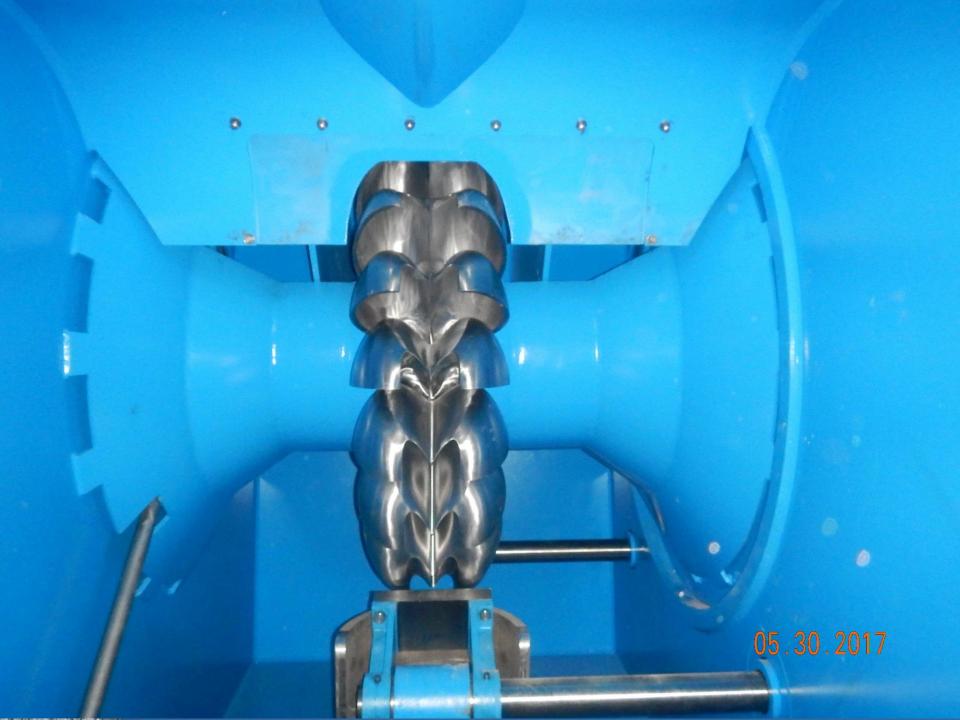










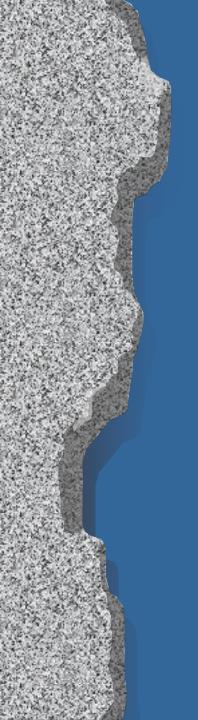












Questions?

Thank You!