

# Reynolds Creek Hydroelectric Project

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Project Status

November, 2011

By : Alvin Edenshaw, President  
Haida Corporation and Haida Energy, Inc.



# Haida Corporation

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- ↳ Located in Hydaburg on Prince of Wales Island in SE Alaska
- ↳ Hydaburg population = 350 people (called Kaigani Haida)
- ↳ Hydaburg is largest Haida Village in Alaska
- ↳ Subsistence and Commercial Fishing Lifestyle
- ↳ Substantial Timber Holdings
- ↳ Hydaburg has Excellent School System



# Haida Energy, Inc.

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- ❏ Joint Venture
- ❏ Incorporated October 15, 2009, in Alaska
- ❏ Ownership: 75% Haida Energy Corporation, 25% Alaska Power & Telephone Company (local utility)



# Reynolds Creek Project Team

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- ↳ Lead Consultant – HDR Engineering, Inc.
- ↳ Project Management – Hildenbrand Assoc. LLC
- ↳ Economic Feasibility/Financing – Financial Engineering Company
- ↳ FERC Licensing – GKRSE Law Firm, Washington, D.C.
- ↳ Joint Venture Agreements – Kemppel Huffman & Ellis, Anchorage

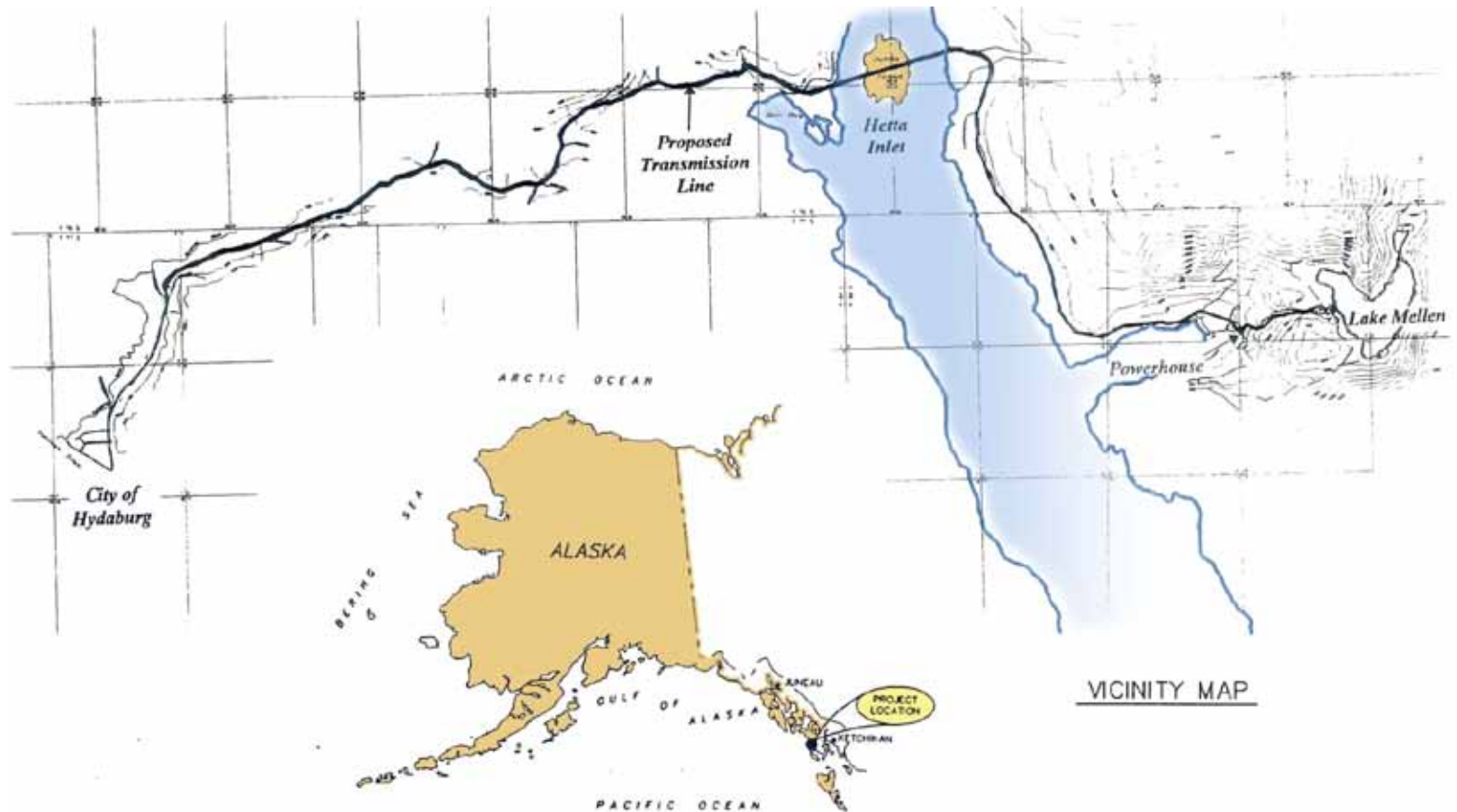


# Prince of Wales Island

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- Third Largest Island in United States
- 135 miles x 45 miles
- Population = 6,000
- Economy Centers on Fishing, Timber, & Tourism
- 2008 Energy Consumption = 26,313 MWh
- Two Existing Hydro Projects: Black Bear Lake (4.5 MW) and South Fork (2.3 MW)
- Remainder of Generation is Diesel-fired

# Project Location



Nov. 9, 2011



# Principal Project Components

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- ↳ 28-ft-long, 6-ft-high Diversion Structure at Outlet of Rich's Pond
- ↳ Lake Mellen/Rich's Pond provide 600 acre-feet of storage
- ↳ 42-inch diameter, 3200-ft-long Penstock
- ↳ Powerhouse (One 5 Megawatt Unit)
- ↳ 34 kV, 12-mile-long Transmission Line

# Lake Mellen Outlet



*June 9, 2010*



# Rich's Pond Inlet



*June 9, 2010*

# Rich's Pond



*June 9, 2010*

# Rich's Pond Outlet



*June 9, 2010*



# Snorkeling



*June 9, 2010*

# Grayling in Rich's Pond



*June 9, 2010*

# Upper Reynolds Creek





# Anadromous Barrier



*June 9, 2010*

# Lower Reynolds Creek



*June 9, 2010*



# Copper Harbor



*June 9, 2010*

# Powerhouse Access Road Pioneering



*October 4, 2011*

# Slide Repair Lake Mellen Road



*October 4, 2011*



# New Storage Containers on Project Site



*October 4, 2011*

# Copper Harbor Road Clearing



*October 6, 2011*



# Copper Harbor Temporary Float



*October 6, 2011*

# Pioneering on Powerhouse Road



*October 6, 2011*



# Drilling for Blasting on Powerhouse Road



*October 10, 2011*



Area perspective from above Lake Mellen on access road  
excavator is at start of dam access road



*October 10, 2011*

# Overburden Removal on Dam Access Road



*October 12, 2011*



# Overview of Powerhouse Road Construction



*October 2011*

# Contractor salvaging rock from "1-Mile Pit"



*October 2011*

# Overview of 1-mile Pit



*June 9, 2010*



# Hetta Inlet, Copper Harbor and Boat Ramp and Staging Area



*October 2011*

# Application of Straw Mulch and Fiber Log for Erosion Control



*October 2011*

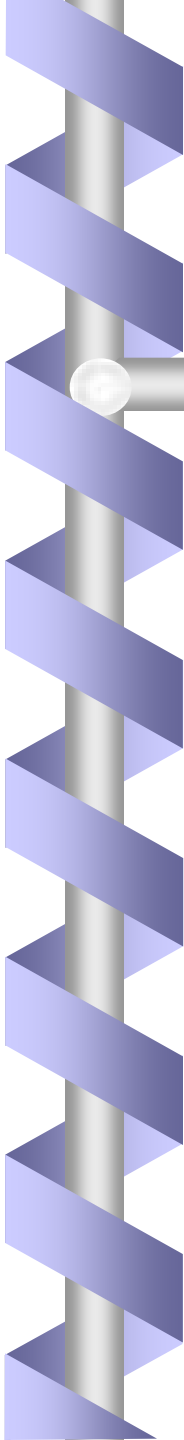


# Project Characteristics

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- ↳ Approximately 750 feet of Head
- ↳ Average Annual Energy Production = 19.3 million kilowatt-hours
- ↳ Land Owned by Haida Energy Corporation and Sealaska – both Alaska Native Corporations
- ↳ Alaska Power Company will Operate, and Purchase Power From Project
- ↳ Will Allow All Interconnected Portions of Prince of Wales Island to be Supplied by Hydropower





# Project Characteristics (Continued)

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- Minimal Environmental Impact
- Utilizes Existing Logging Roads for Access
- Fish in Reynolds Creek drainage = arctic grayling, Dolly Varden, cutthroat trout, pink and chum salmon, and steelhead
- Terrestrial Species include Sitka black-tailed deer and black bear



# Major Approvals Received

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- ↳ FERC License (Project No. 11480)
- ↳ Corps of Engineers Permit
- ↳ Fish Habitat Permit
- ↳ Coastal Zone Consistency Determination



# Current Activities

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- ❏ Construction of Access Roads to Powerhouse & Dam
- ❏ Repair Logging Roads to Lake Mellan and Jumbo Island T-line Crossing
- ❏ Construction of First Mile of Transmission from End of Existing Line
- ❏ Completing Project Financing Plan
- ❏ Complete Geotech Investigations At Dam & Powerhouse for Final Design



# Project Cost Estimate

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↳ Prepare for Construction	\$ 4,145,000
↳ Construction & Engineering	\$ 24,000,000
↳ TOTAL COST	\$ 28,145,000



# Major Milestones

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- ↳ Began Construction – October 24, 2010
- ↳ Began Civil Access Work – September 2011
- ↳ Began Transmission Line Const. – August 2011
- ↳ Order Turbine/Generator – November 2011
- ↳ Project On-line – Summer 2014