

The Business Case for the Export of Surplus Alaskan Energy





Alaska Canada Energy Coalition (ACEcoalition)

- **The ACEcoalition was formed in 2008 as an offshoot of the Wrangell Energy Committee**
- **Purpose to promote economic development in the Bradfield corridor focusing on the AK/BC Electrical Intertie**
- **Incorporated in the State of Alaska as a Non-Profit Corporation filed with IRS as 501 c 3 status pending**
- **Three tiered membership structure with members ranging from individuals to governmental units both United States and Canada**

The Big Energy Picture



- National energy demand will increase 30%-50% over the next 20 years. (US Department of Energy estimates)
- National renewable energy will grow by 50% over the next 20 years. (US Department of Energy estimates)
- Oil is projected to reach \$189 per barrel by 2030. (US Department of Energy estimates)
- International energy demand will increase 50% in the same period. (US Department of Energy estimates)

Consumer Concerns:

Reliability

Range

Fuel availability

Cost



Illustrations courtesy of AEL&P presentation "The Time is Now" 2/17/2011 Juneau, AK



Nissan Leaf at the 2009 Tokyo Motor Show (LHD)
Tennen- gas cc-by-sa-3.0

A Frightening trend

Population by Region		2009	2034	Percentage Change
Southeast Region		69338	59472	-14.2%
Haines Borough		2286	1422	-37.8%
Juneau		30661	30191	-1.5%
Ketchikan Gateway Borough		12984	9878	-23.9%
Prince of Wales		5392	3566	-33.9%
Sitka		8627	8000	-7.3%
Skagway -Hoonah-Anguon		2908	2100	-27.8%
Wrangell- Petersburg		5852	3828	-34.6%
Yakutat		628	487	-22.5%
		source:	State of Alaska Department of Labor	

NHA JOBS REPORT

Alaska Picture

NHA/Navigant Consulting Alaska Jobs estimate by 2025: ~ 108,000

Projects in FERC Licensing, Total MW: 2813.65

Pending Permits:	Conventional 70.85	Hydrokinetic Inland 0.3	Hydrokinetic Tidal 5.0
Issued Permits:	611.295	0.09	2202 (+0.25 wave)

While there are opportunities throughout Alaska, many of the proposed projects are located in the Southeast region of the state.

U.S. Energy Public Policy



- The 2009 economic stimulus package included \$6.5 billion for renewable energy and \$11 billion for energy transmission.
- \$150 billion for clean energy over 10 years.
- Administration goals include 10% of U.S. energy from renewable sources within 3 years, 25% within 15 years.
- Stated administration priorities include “Promoting the supply of domestic energy” (barackobama.com)

Alaska Energy Policy



- Hydroelectric power is the least expensive form of power in Alaska by 15% and the least expensive form of heat by a factor of 3.5-to-1. (Alaska Energy Authority)
- 2007 Energy reports states, “Thomas Bay/Swan Lake-Tyee are believed to be able to provide energy for all of Southeast's needs as well as export excess energy.” (alaskapower.org)
- State support of power sales agreements and state, public, and private partnerships
- State goal of 50% renewable power by 2025

Harvestable Surplus...it works in our seafood export business

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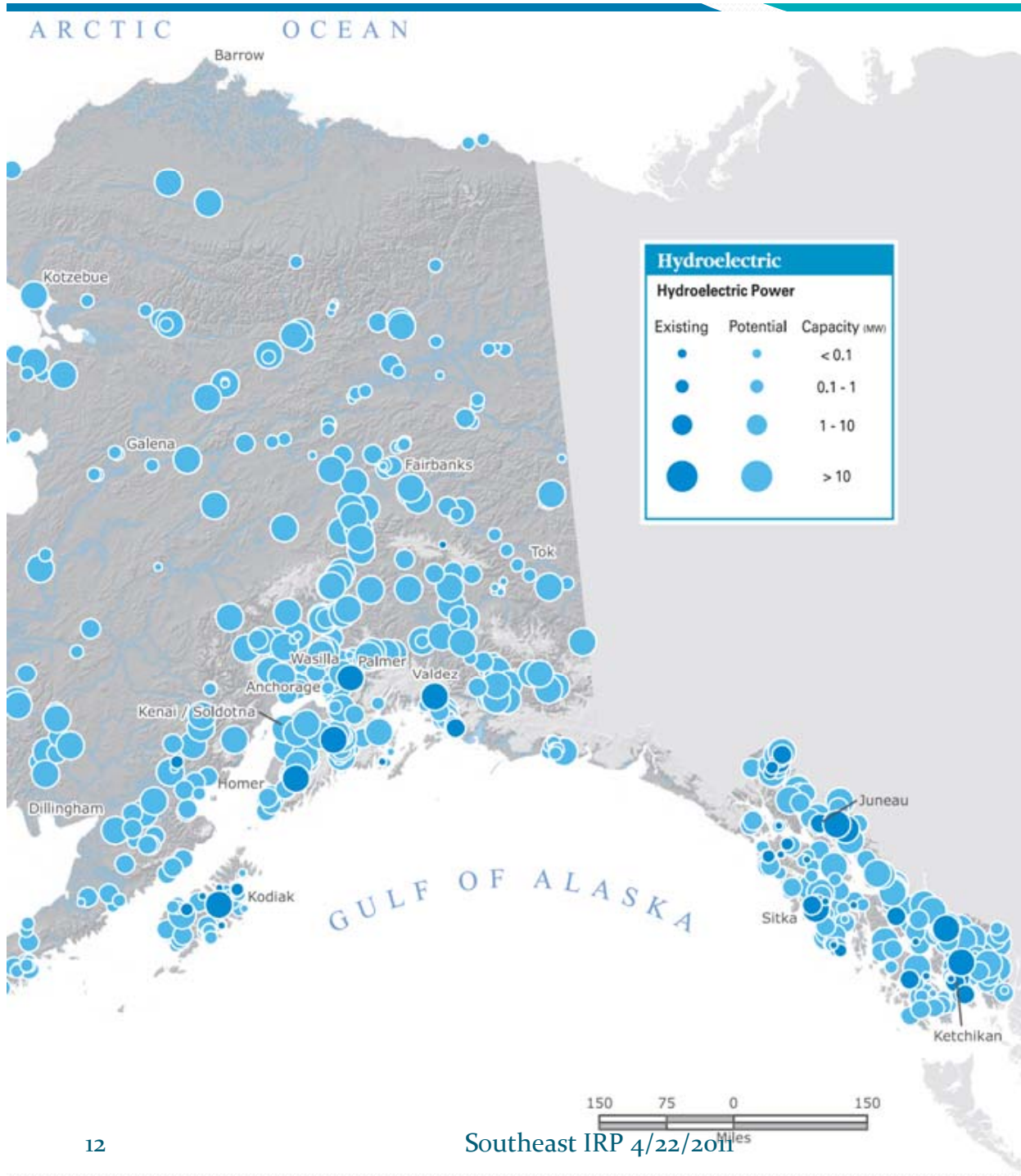
- For commercial use of seafood resources; surplus after desired level of escapement & allocation for higher priority uses
- Average SE harvest 274 million lbs
- SE region population 70,000
- 10.7 pounds per day...a whole lot of yum yum



Relevant Principles

- Interdependent sectors revolve around scale of key sector
- Value driven by external factors & access to external markets
- Key sector volume driven by utilization of harvestable surplus

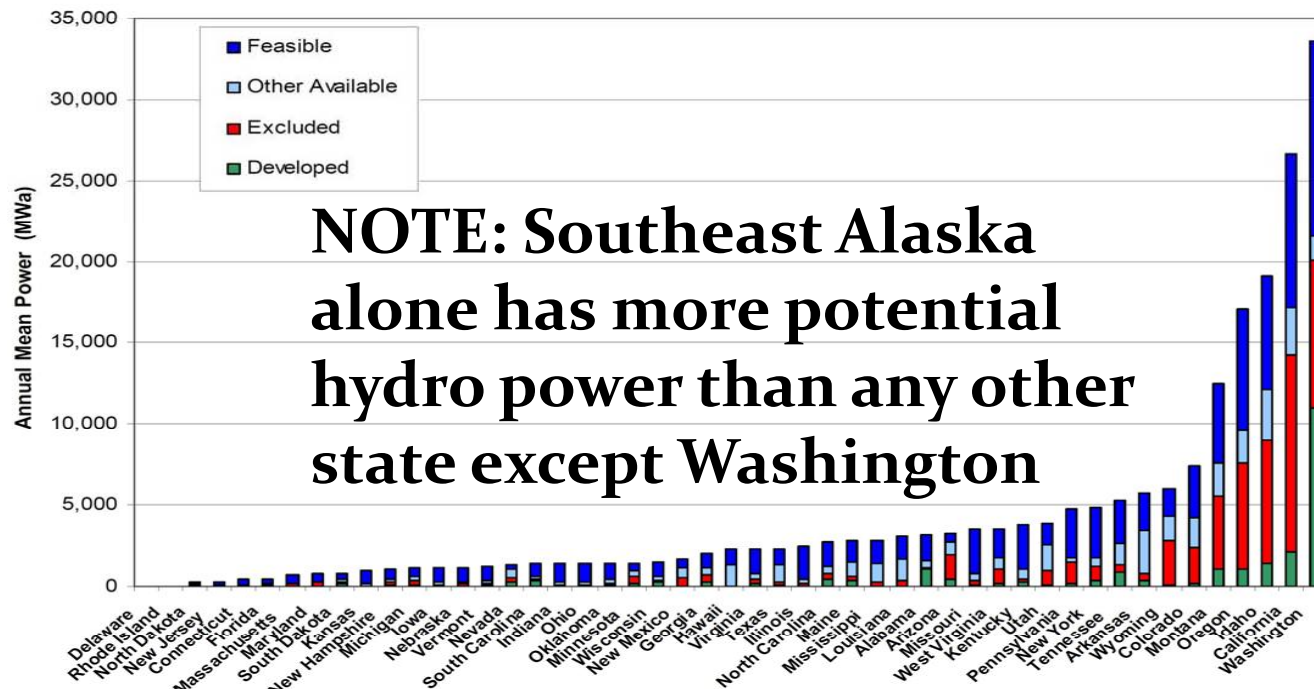




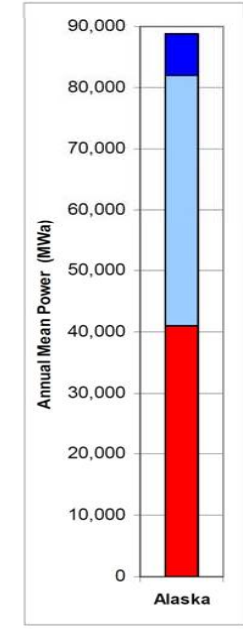
Hydropower in Alaska

Source: *Renewable Energy Atlas of Alaska*,
Renewable Energy Alaska
Project/Alaska Energy Authority, July
2007

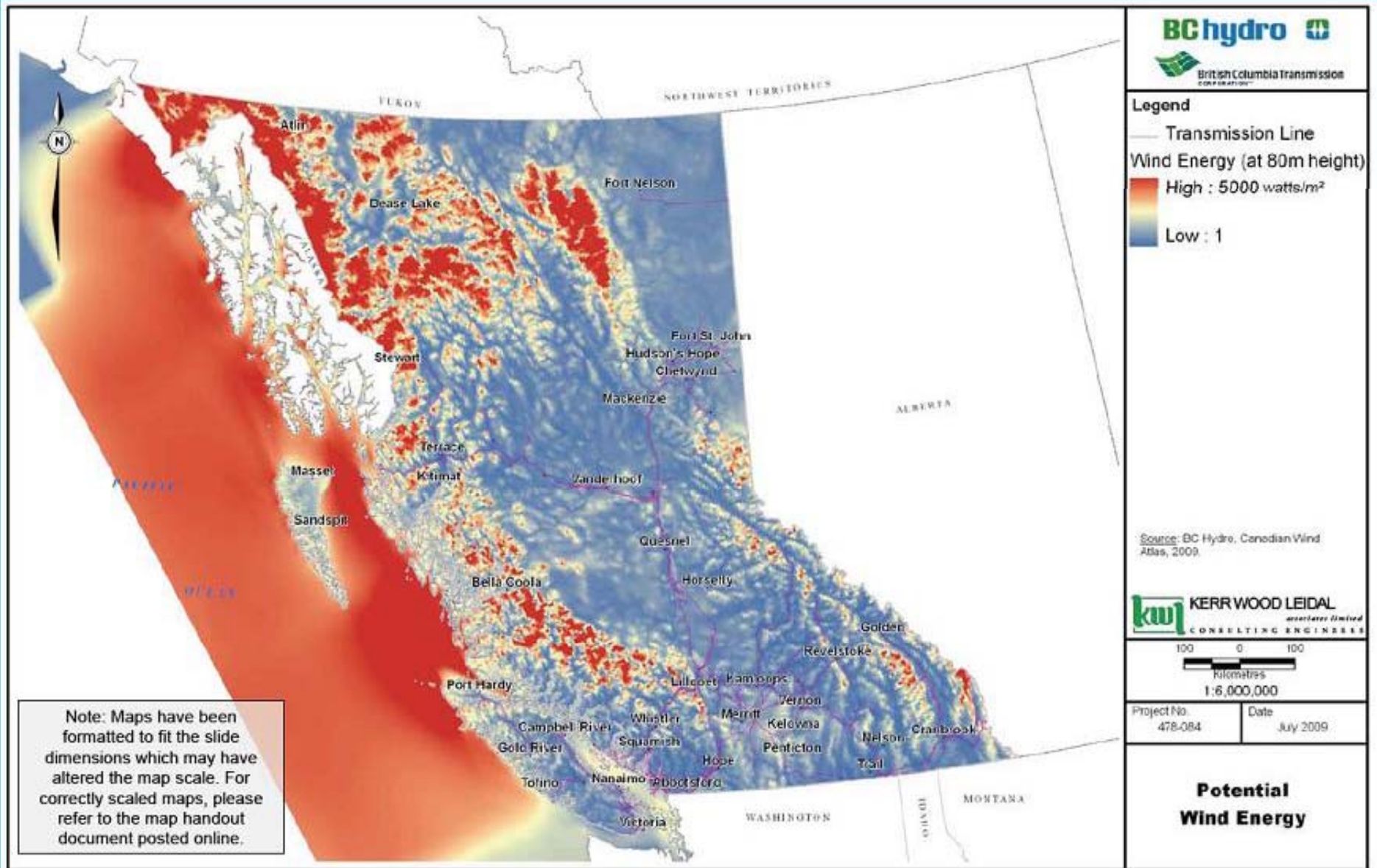
Hydroelectric Potential of US States



Source: US Department of Energy, Wind and Hydropower Technologies Program, Report: DOE-ID-11263, January 2006



Wind Energy Potential

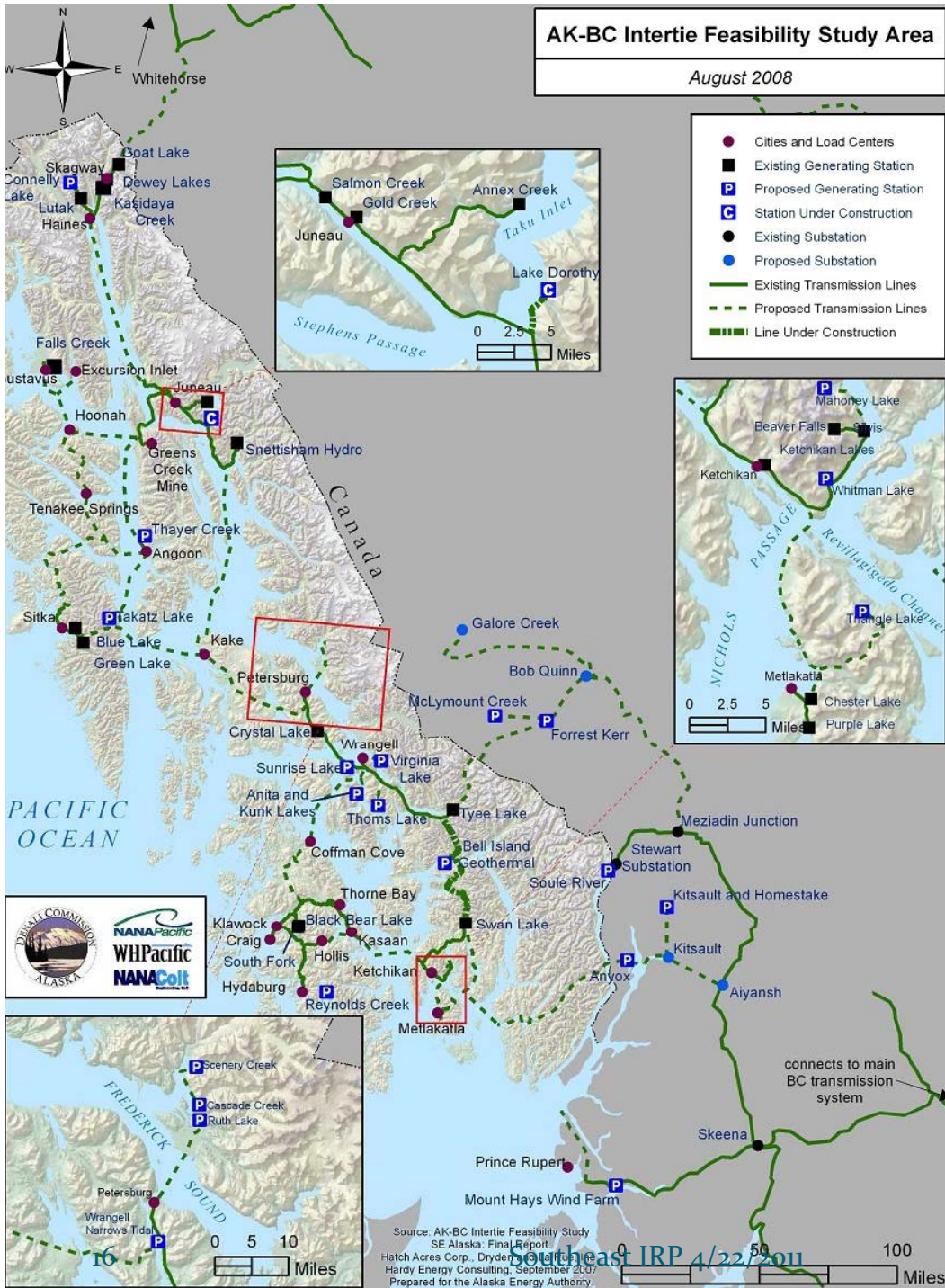




Alaska-British Columbia Intertie

- 62 miles of line to tie Southeast Alaska into the North American power grid
 - 27 Miles on the US side, 35 on the Canadian side
- \$26.9 million in costs on the US side (D Hittle Report)
- Canadian participation is already assured
 - BC Demand for renewable energy
 - Electrification for industrial development of Northern BC
 - Tahltan Nation approved by 82% landslide vote

**It's a reality coming to your paradigm
SOON**



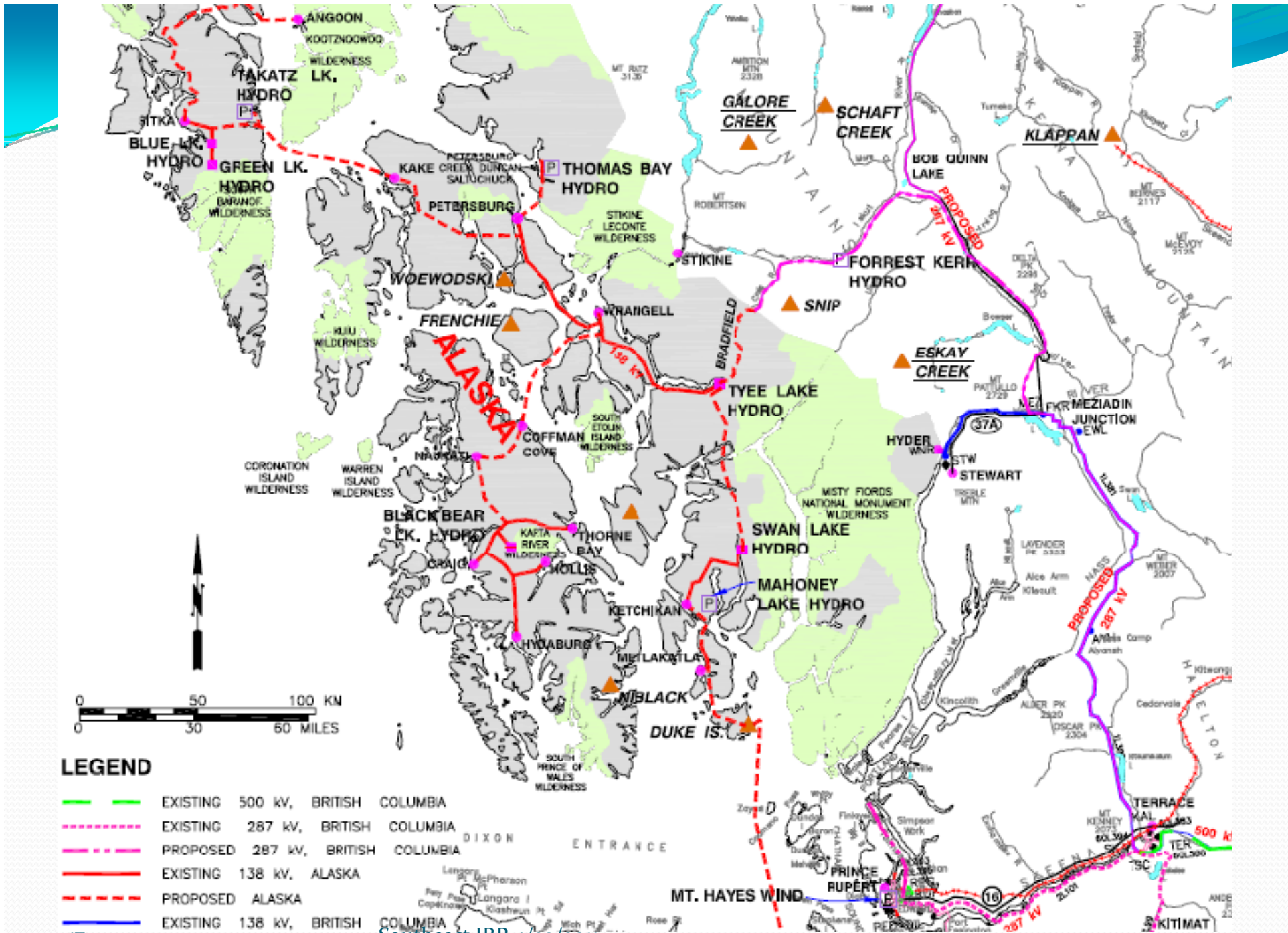
Present Installed Electric Generation Capacity in Southeast Alaska:

- 200 MW hydro
- 56 MW diesel

Hydro Projects Proposed or Under Construction:

- 400 MW estimated capacity
- Of 32 future hydro proposals, 26 projects would each have less than 20 MW of capacity

Map: Kelly Singh





ACE COALITION



What end of the telescope are you looking through?

Our federal government is broke and our State government is running out of oil money. Hope, wishing and stalling the inevitable by continued studies is not an option and is perhaps the largest contributing factor of what has got us into this energy development/transmission line mess in the first place.

What you can do-

- Support the already funded of the AK/BC planning.
- Support market driven and surplus export as a job creation and economic development opportunity that will make all our SE communities money and keep long term electrical rates low.
- Allow competitive energy development and market driven markets to work and together we will reverse the population decline, future redistricting and provide opportunity for our region.

Common Sense- Common Ground



Internet Server Farms



Google server farm in The Dalles, Oregon

Will eventually require over 100 MW of power;
adjacent to the US Army Corps' 1,800 MW Dalles Dam

Photo: Leah Nash Photography, from www.wweek.com