

# Sealaska Corporation

RENEWABLE ENERGY FEASIBILITY STUDY

Sealaska Project Manager: Russell Dick

Technical Contact: Bob Lynette

November 18, 2003





One of 13 Alaska
 Native regional
 corporations created
 under the Alaska Native
 Claims Settlement Act

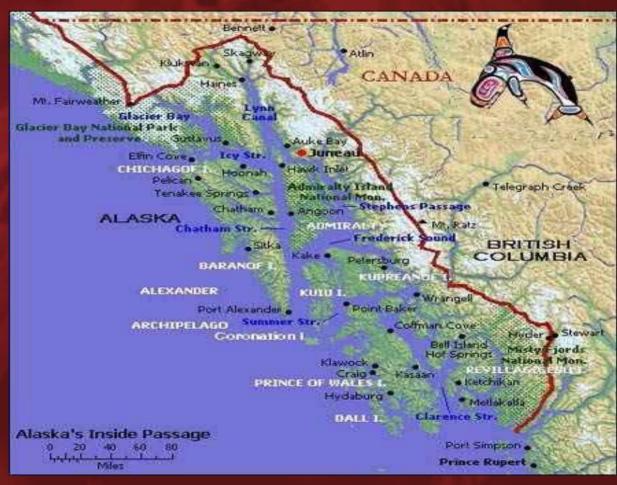
Represent over 17,000 shareholders, approximately half of whom reside in SE Alaska

Regional corporation for SE Alaska, which includes 12 village/urban corporations

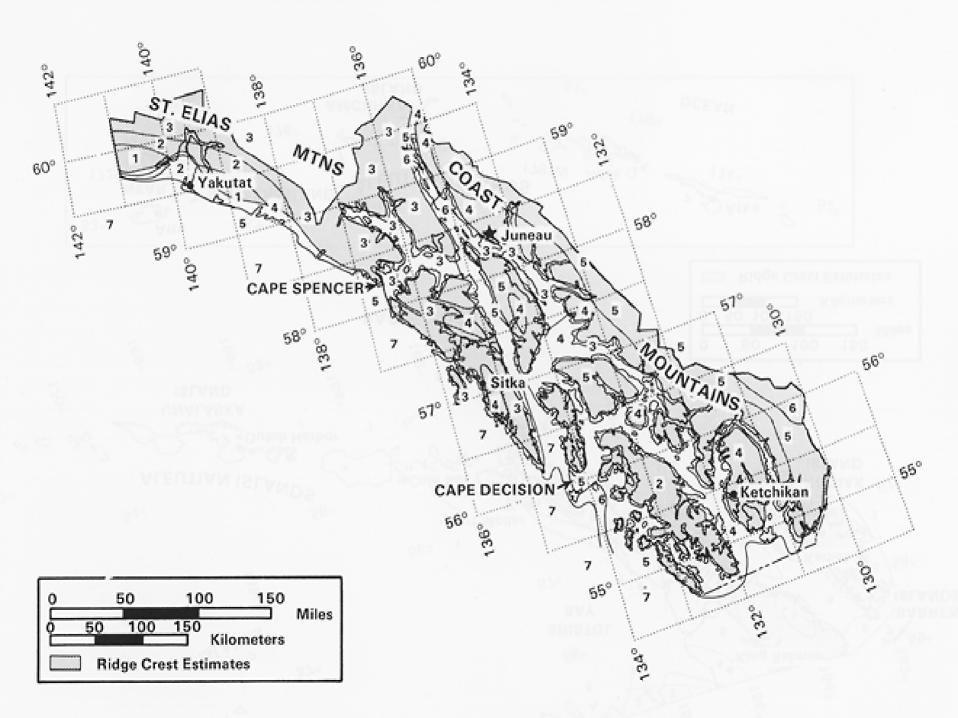




# Study Area – Southeast Alaska 12 Alaska Native Villages









## **Participants**

Project Participant	Contact	Role
Sealaska Corporation	Russell Dick	Project manager / liaison
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Springtyme	Robert Lynette	Technical contact, Wind
Company, LLC		consultant
AP&T Solutions,	Bob Grimm	Financial analyst
	Larry Coupe	Engineer, hydropower
John Wade Wind	John Wade	Meteorologist, wind power
Consultant LLC		analyst
Met Tower Services	Mike Sailor	Tower installation
HIV N		
Northwest Wildlife	Karen Kronner	Biologist
Consultants		Price & D

\*A subsidiary of Alaska Power & Telephone Company









### **Project Overview**

- **10** Objectives:
  - ✓ Determine if deploying wind turbines and/or small hydro facilities make sense for the Sealaska villages that are currently using diesel fuel for power.
  - ✓ If answer is positive, develop a business plan to implement development program(s).





• Collect feasibility reports for studies that have previously been conducted (10 known sites with potential).

 Evaluate whether application of newer technology or construction methods could result in cost savings.





Project Status – Micro-hydro

Study on-going –
 approximately ½ done

 Anticipate completion by February 2004





## The Work – Wind Energy

- Narrow to 3 or 4 potential sites based on:
  - Past wind resource assessments
  - Topography
  - Climatic conditions
  - Anecdotal information
  - Location of current and planned human activities
  - Transmission infrastructure





#### Wildlife Study

• Conduct a study to determine potential avian conflicts within the candidate sites.

• Identify areas where wind turbines should be prohibited based on potential conflicts with biological resources such as level of avian use or presence of unique habitat.





#### Wind Resource Assessment

- Based on previous work, narrow down to 2 sites
  - Primary site: 2 40 meter towers/ anemometers suitable for large WTGs.
  - Secondary site 1 10 meter tower/anemometer suitable for small WTG(s)
- Monitor for one year





#### Project Status - Wind

• Approximately 20 potential sites identified.

- Narrowed to 5 based on analysis of:
  - Existing power sources
  - Probability of intertie extension
  - Topography and existing wind data





### Project Status - Wind

- Field trips conducted in July 2003. Two potential sites identified:
  - Yakutat (2 potential sites)
  - Hoonah (2 potential sites)
- Applications for permits for anemometry completed.
- Approval to install 2 anemometer towers at Yakutat received. Hoonah still pending.



Install anemometer towers

Measure winds ~ one year

• Develop site preliminary site layout and business plan.





#### Conclusion

- Many potential sites tucked into sheltered areas without sufficient wind resources.
- Two candidates appear attractive and are scheduled for wind resource measurements (Yakutat and Hoonah).

