# Quil Ceda Power Bio-Gas Project







**November 18, 2008** 



#### Introduction

- **# Background**
- **#** Description of Project
- **# Partnership**
- #Feasibility Study/Business Plan
- #Creation of Quil Ceda Power
- **#** Funding
- **#Creation of Qualco Energy**
- **#Closing**



# **Background**

- **\*\*Land-Use Changes from Agriculture to Other Types of Development**
- **#Skykomish River WQ Problems** 
  - Bacteria
  - Nutrient Loading
- **\*\*Relationship Between Tribes and Dairies**
- **\*\*Poor Economy for Dairy Operations**



# **Project Description**

- **#Sewage Treatment for Cow Manure** 
  - Collect Cow Manure from Dairies
  - Flow into Anaerobic Digester







#### **Associated Products**

- **#Methane and/or Electricity**
- **#Bio-Solids for Compost and/or Fertilizers**
- **#Treated Effluent Water for Farm Irrigation**
- **\*\*Native Plant Nursery** 
  - Habitat Restoration Projects
  - Landscaping



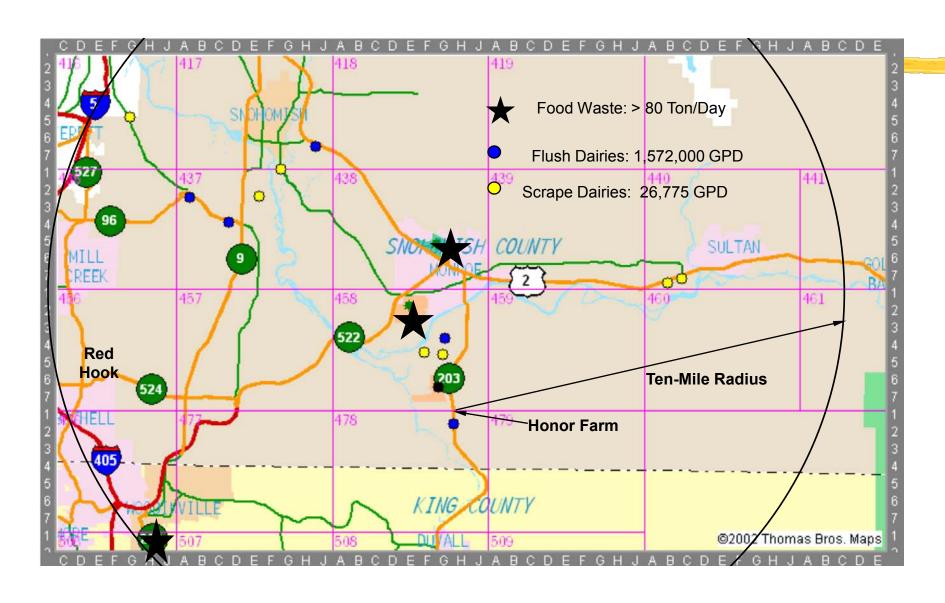
# **Partnership**

- Snohomish Basin Biogas Partnership Formed April 2, 2003
  - Lower Skykomish River Habitat Conservation Group
  - Northwest Chinook Recovery

  - Washington State Dairy Federation



#### Monroe-Snohomish Area, 10-Mile Radius





### Feasibility Study/Business Plan

#### #Initiated Study June 13, 2003

- Environmental and Tribal Benefit Analysis
- Biomass Resource Assessment
- Preliminary Design & Support Plan
- □ Funding Plan/Investors
- Funding towards Salmon Recovery



#### **Quil Ceda Power**

- #Incorporated as an extension of Tribal Government
- Board of Trustees

  - Chair of the Sno/Sky Agricultural Alliance



# **Funding**

- #Department of Energy Grant for Feasibility Study and Business Plan
- **\*\*Department of Agriculture Grant and CREB Bonds for Construction**
- **X**Tulalip Tribal Funds



# **Qualco Energy**

- #Formed as a non-profit organization to manage the Biogas project
- #Three-way partnership between the Tulalip Tribes, Sno/Sky Agricultural Alliance and Northwest Chinook Recovery



# Closing

- #Dairies and Tribes working together
- #Improved WQ for Fish and People
- **#Salmon Habitat Restoration**
- **\*\*Renewable Energy Supply**



