Seneca Nation of Indians

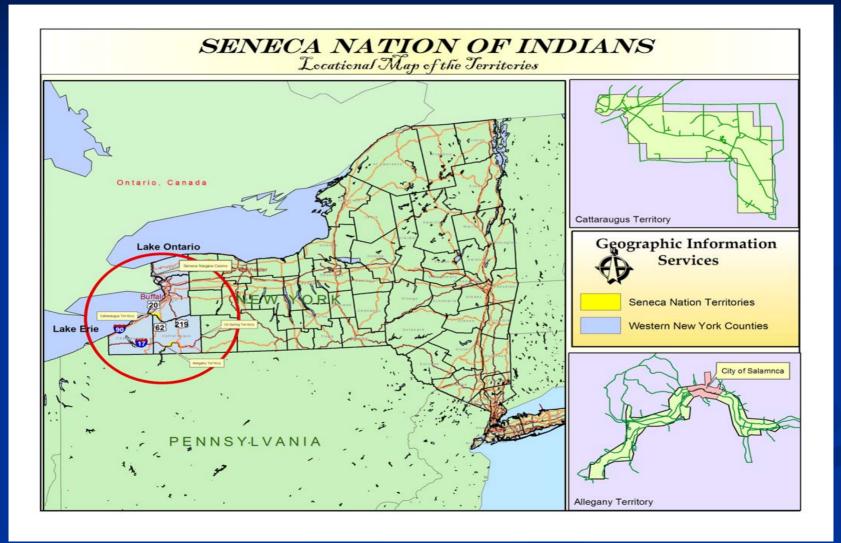
Strategic Energy Resource Plan

DOE "First Steps Towards Developing Renewable Energy & Energy Efficiency" Grant Project Review October 20, 2004 Golden, Colorado

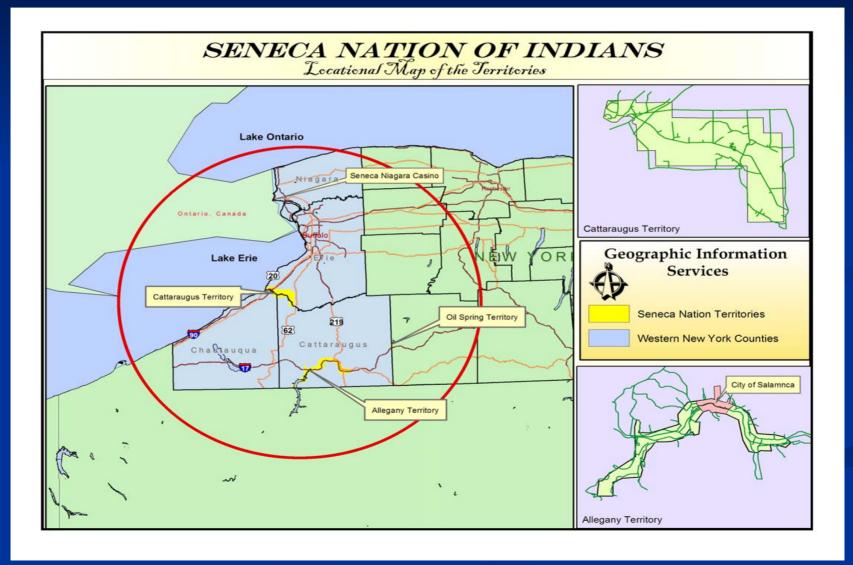
Project Overview

- Long Range Energy Plan Three Phase Development
 - Phase I Visioning Process Community/Stakeholders; SWOT Analysis
 - Phase II Energy Audit, Resource Assessment, Organizational Development
 - Phase III Generation Assessment & Development Plan

Project Location



Project Location



Project Partnerships

- Plan Developers
 - Seneca Nation of Indians Tribal Council
 - Tribal Councilor
 - Planning Commission representative
 - SNI Administration
 - Community Planning & Development Dept.
 - Utilities Dept.
 - Environmental Protection Dept.
 - US Dept. of Energy/EERE/NREL
 - Local Utilities
 - Consultants Nast a Peme Consulting
 - RJB Engineering

Objectives

- To develop a long range energy plan to guide the energy resource management, conservation, and development consistent with the Seneca vision for energy self-sufficiency & environmental stewardship.
 - Secondary Goals:
 - Economic Development
 - Heightened Quality of Life
 - Improved Revenue Streams

Planning Overview

- 1. Define Nation's Vision, Goals & Priorities
- 2. Identify/Inventory Resources
- 3. Complete Energy Audit
- 4. Develop Strategy to maximize responsible production of natural gas resources while addressing environmental concerns
- 5. Assess environmental and production issues pertaining to natural gas resources

Continued...

Planning Overview, cont.

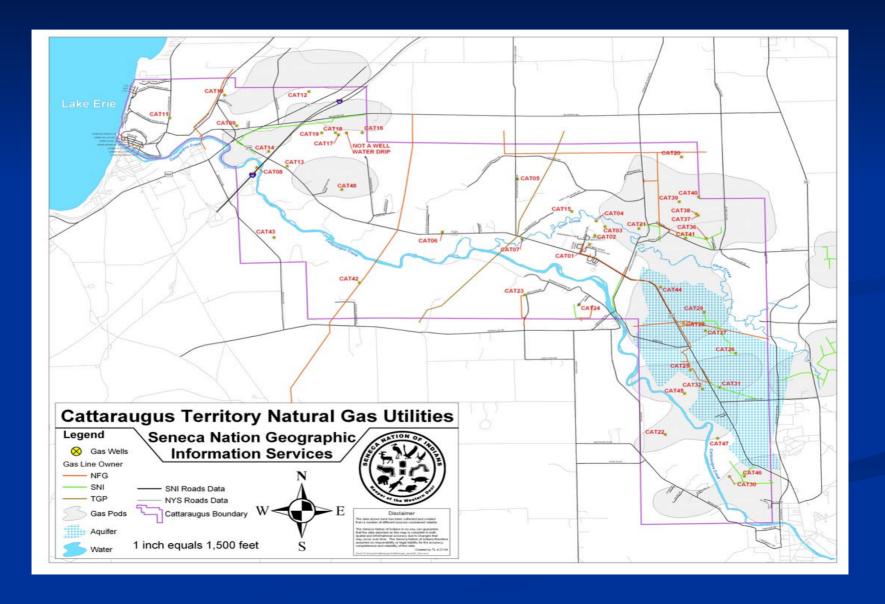
- 6. Define Development Portfolio renewables & non-renewables
- 7. Assess Economic Viability of generation/co-gen projects
- 8. Develop Org. Structure, policies/procedures, codes & ordinances to support long term goals
- 9. Create Action Plan for achieving long term goals

Project Status

- Visioning Process Complete
- Gas Assessment On-going
 - Well inventory
 - Remediation, P&A, Data Analysis
 - Review of provider Agrmts, ROWs
 - Assessment of Gas Dept. Privatization

Cont....

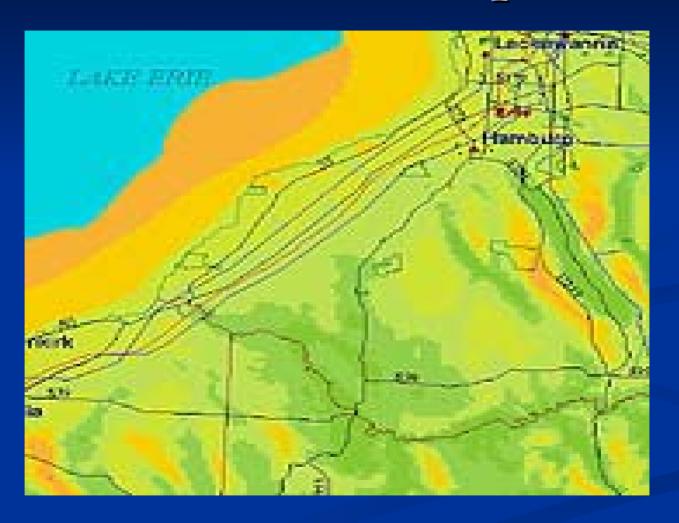
Natural Gas Resources



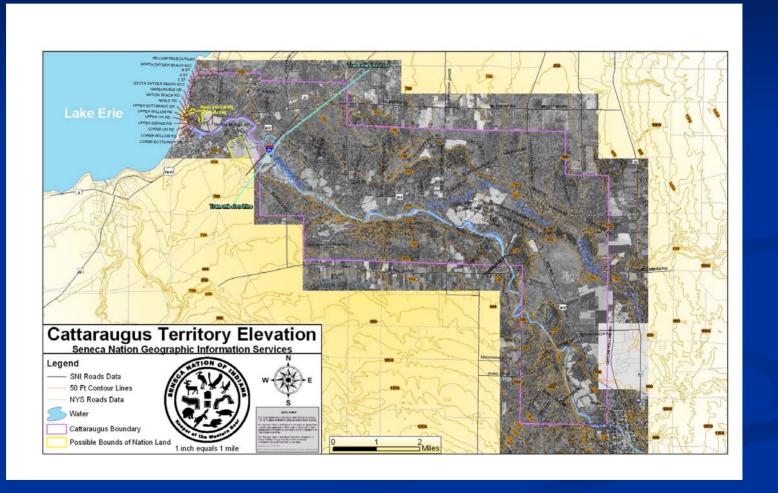
Project Status, cont.

- Energy Audit
 - Current usage, rate analysis
 - Projected Demand
 - Contingency Analysis (Hydro vs. NiMo)
- Renewable Assessment
 - Anemometer Loan App.
 - Industry/mkt overview
 - Maps

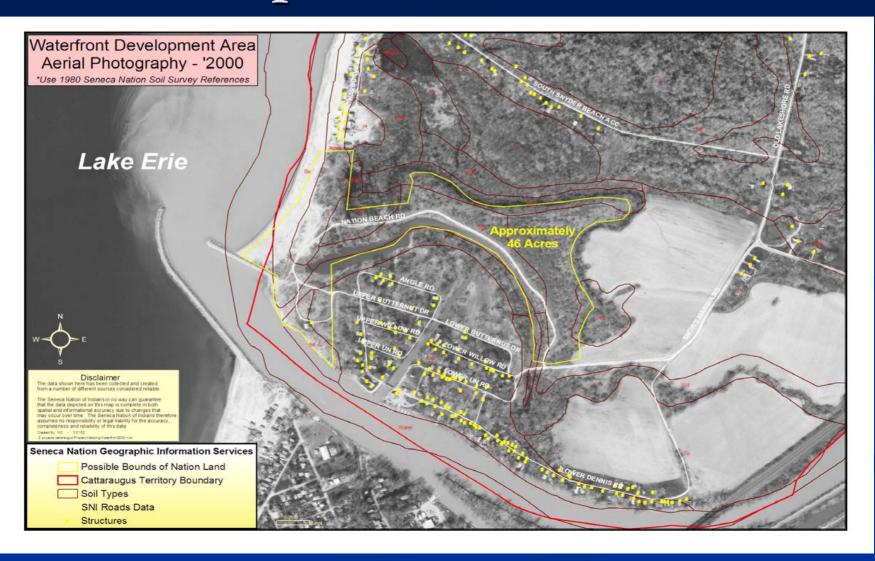
True Winds Map



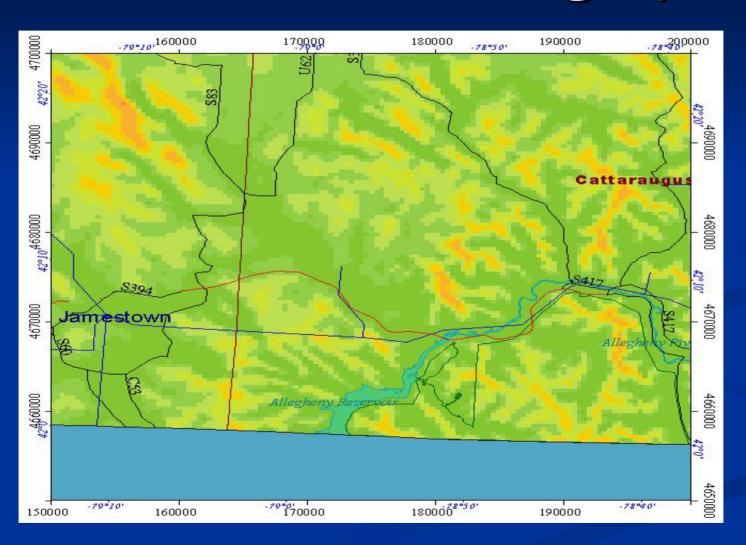
Cattaraugus Territory Site Map



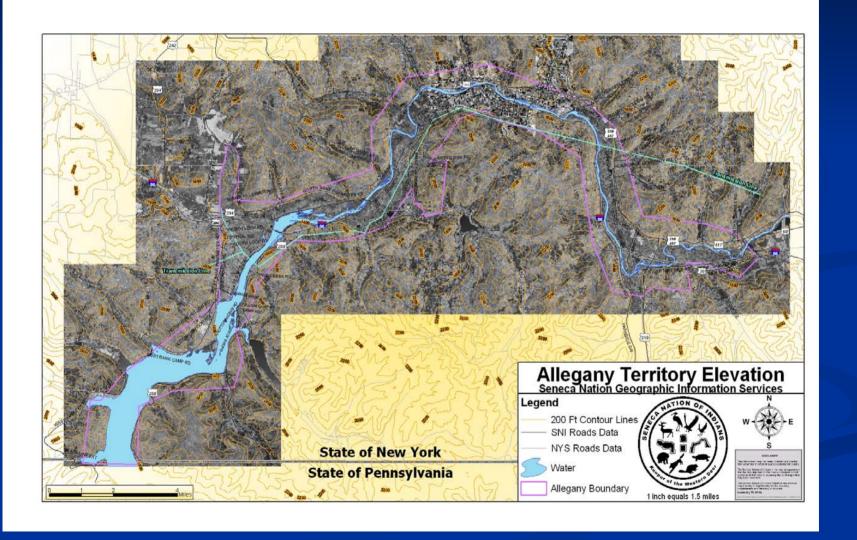
Proposed Beach Site



True Winds - Allegany



Allegany Territory Site Maps



Lieu Lands Site Analysis



Project Status, cont.

- Geothermal Assessment
 - SNI Preschool Project
 - Salamanca Central School District Project
 - Feasibility of Expanded Geothermal Use in Administrative Complexes, Resort Development

Issues/Challenges/Lessons

- Lack of personnel/technical knowledge
 - The wearing of many hats, juggling of many priorities
- Timelines
 - Need to have a champion in tribal government to help move process & engender cooperation
 - Things aren't always as straight-forward as they seem; figure in some extra time
- Technical Knowledge
 - Steep learning curve budget high for training
- Coordination/Cooperation
 - Can be an overwhelming issue

Technical Assistance Request

- Wind Resource Assessment
 - Micro-siting and prioritizing
 - Transmission study/Project scoping
- Geothermal Assessment
 - Issue identification & review
 - Preliminary Feasibility Analysis

Next Steps

- Continue Capacity Building
- Complete Renewable Assessments & Economics Studies
- Continue Gas well remediation & Increase Pdtn. Capacity
- Initiate Tribal Utility Formation & Long Term Plan
- Implement Energy Codes & Ordinances
- Renegotiate Purchase Agreements, ROWs, & hydro allocation
- Assess Generation Project Development