

Stockbridge-Munsee Health & Wellness Center

Renewable Energy
Feasibility Study.

Stockbridge-Munsee

Tribal Overview

- A Band of Mohican Indians
- From the Algonquin language group of Tribes.



Papscanee village site

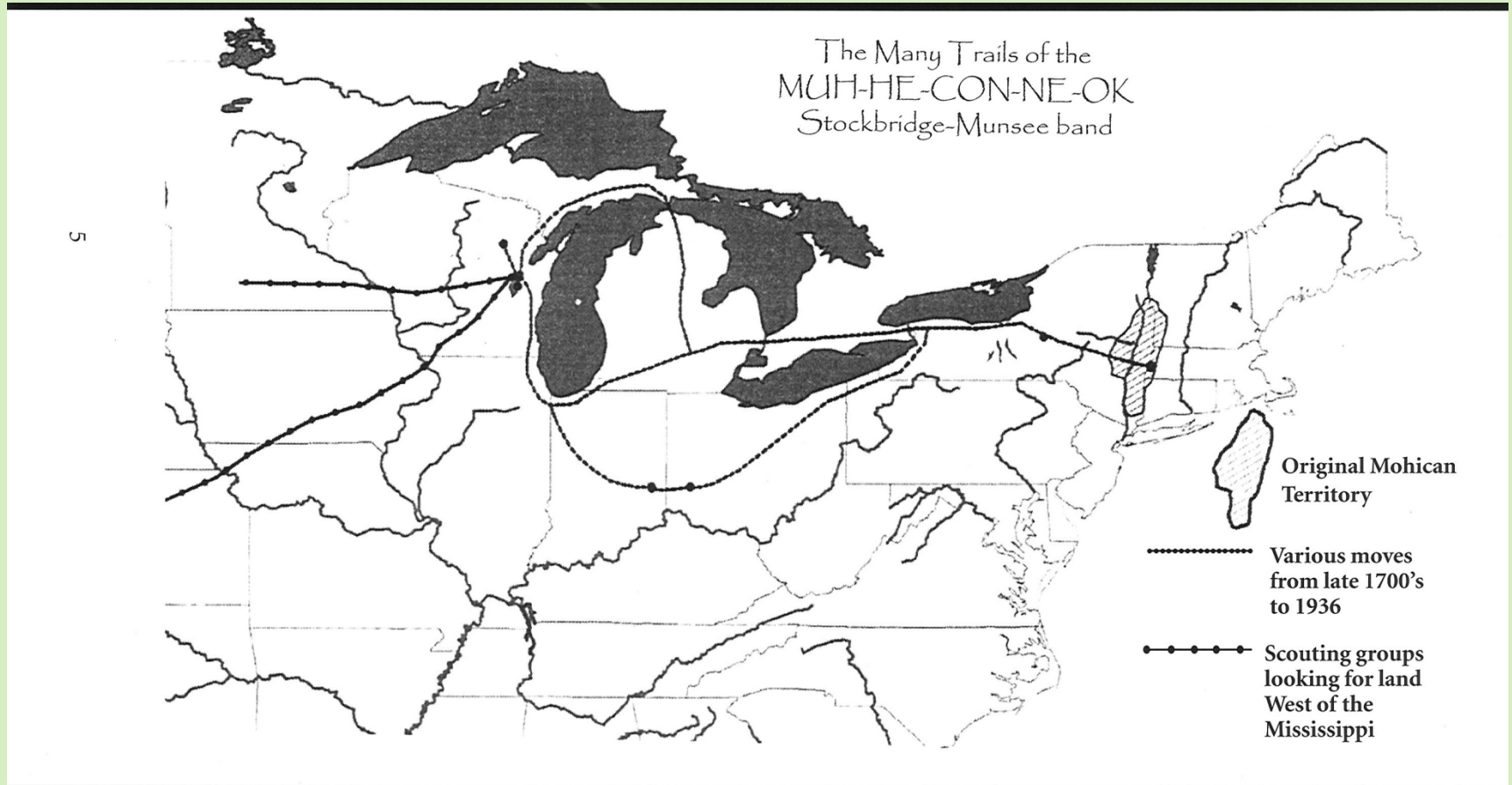


Painting follows archeological reports & accurately depicts pre European village.

Tribal History

- The tribe lived along the Muh-he-con-ne-ok River, “where the waters are never still”.
- The Stockbridge name came from the town of Stockbridge, in the Housatonic Valley of Massachusetts.
- The Munsee Delaware, another Algonquin-speaking band, joined the westward movement of the Stockbridge Mohicans.

Many Trails to present day location



Continuing Traditions



Water & Forestry Resources



Wildlife Resources – Bear study



Cultural Symbols



Various views of alternative energy

- Some view on-grid electric as “modern” and only reliable energy.
- Hardships of not having electric and ready supply of fuel still within memory of elders.
- Difficulty in accepting end of fossil-fuel age when many remember horse & buggy, firewood heating & finally getting electricity.

Alternative energy beginnings



Solar heating



Solar DHW on tribal apartments.



Project Objectives:

Study feasibility of installation of the following to provide 30% or more of the needs of the health center.

- Photovoltaic power for electrical needs.
- Heat pump for heating & cooling.
- Solar thermal for space heating or hot water.
- Wood fiber biomass for heating.

Stockbridge-Munsee Health & Wellness Center



Main entrance of clinic



Air view of clinic



Progress

- A request for proposals (RFP) was drafted using the grant objectives as the work statement.
- The RFP was sent to a list of consultants & engineering firms.
- The RFP was also published in a newspapers.
- Consultants had 3½ weeks to reply with a proposal.

What is an RFP?

1. Introduction - who we are, work setting.
2. Schedule. - Receive date, bid opening.
3. Scope of Services - specific tasks.
4. Proposal Requirements - a list of qualifications, modeling programs, key personnel, fees & references.
5. Additional Information - owners rights, contract requirements, etc.

RFP Acceptance

- I checked the references on the bids I liked and received great reviews of the consultants.
- The proposals received were reviewed & a first and second choice made. A tribal election caused a bid delay, but the new council did accept the recommended bid.
- The contract signing and initial site visit are being done early November.

Activities to Come

1. Sign contract with the consulting firm .
2. Renewable resource assessment via site specific analysis.
3. Determine current & future energy needs for a 25 year time period.
4. Analyze the type & efficiency of energy transmission from generation site to facility.
5. Determine if integration of systems is possible without total change-out.

6. Economic analysis, can the alternative energy generation be integrated into the clinic in cost effective manner for a 25 year payback.
7. Determine which phase of NEPA will be required if the plan were implemented.
8. Project the return on investment (ROI) for each alternative energy system.
9. Based on the ROI, select one system then design location, size and tie-ins to the clinic.
10. Take needed training and professional development throughout grant period.

- 11 While doing the feasibility study for each energy, determine what the long term operation & maintenance of the system will be and incorporate this into the ROI.
- 12 Develop a business plan for a reservation-wide implementation of a sustainable energy strategy through the current process of the Integrated Resource Management Plan, (IRMP).
- 13 Reporting for the grant.

Lessons Learned

Anticipate scheduling of other entities which have an input to the process, do not assume that their schedule will be as usual.



**EXPECT
DELAYS**

And we hope this will be the beginning
of a beautiful partnership

