

Brandy Toft, Air Quality Specialist
LEECH LAKE BAND OF OJIBWE



SEVENTH GENERATION INITIATIVE, SUSTAINABLE COMMUNITIES GRANT: LEECH LAKE'S SOLAR FURNACES

Environmental Justice
Green Jobs: Creation and Training

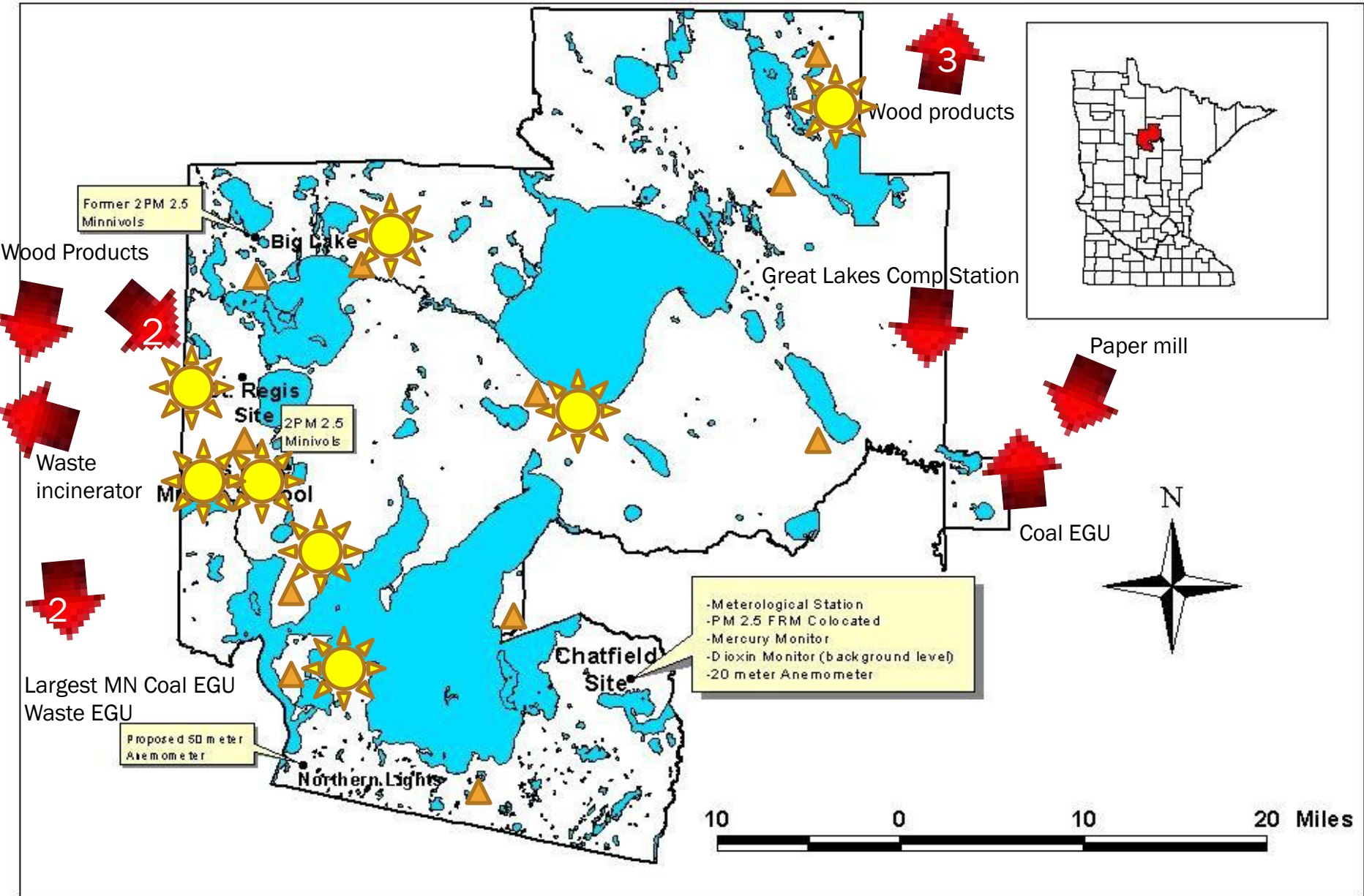
LEECH LAKE BAND OF OJIBWE



- ✘ Rural Reservation in North Central Minnesota
- ✘ 864,158 acres, over 70% is water/wetlands
- ✘ 713 miles of rivers/streams
- ✘ 270 fishable lakes, 40 wildrice lakes
- ✘ Serving 12,000 in 11 communities



Leech Lake Reservation



PROJECT PARTICIPANTS



- ✘ Meet the 5 criteria
 - + Minnesota's Heating Assistance Program
 - + Must be weatherized
 - + Sufficient space on a southern facing wall
 - + Minimal shading of the collectors
 - + Embrace the idea of using solar to offset heating load.
- ✘ ↑ the economic security of 8 low-income families, ↓ carbon footprint
- ✘ Become more sustainable while showing reductions in air pollution

TRAINED STAFF

12 Leech Lake Staff

* Job opportunities

* Resume * Knowledge

* Opened minds



8 SOLAR PANEL FURNACES

4 Tribal member owned

4 Housing Authority owned

**Goal to open thinking and
promote green energy**



IT WORKED!!!!

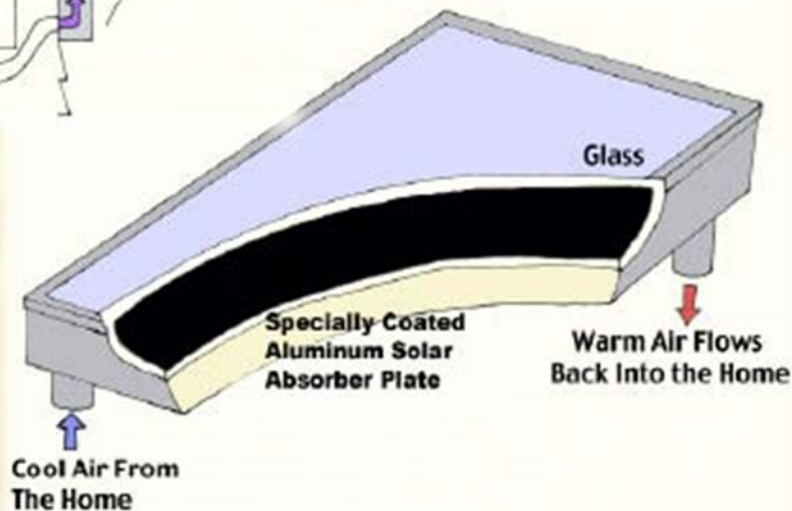
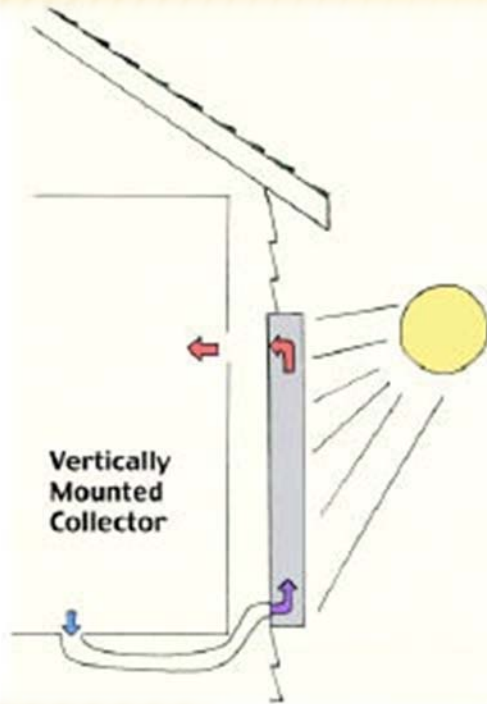
30 new Housing
homes designed
with solar furnaces

Tribal members
inquiring



SOLAR FURNACE MANUFACTURING

- Potential to create 20-30 manufacturing, installation, maintenance *green* jobs for Leech Lake
- Re-use existing building



Last 25-50 years
Produce 7-8 mBTUs annually

WHAT ARE WE GETTING OUT OF THIS?

To date, our installations can generate:

BTUs: 60.25 mBTUs
KWHs: 17,800 kwhs

of clean, renewable
solar energy in one year!



WHAT ARE “WE” GETTING OUT OF THIS?

- ✘ Developed as a model for other Tribes
- ✘ Green thoughts at all levels of government
- ✘ New opportunities and jobs for Tribal members
- ✘ Economic security and sustainability – decrease reliance on petroleum
- ✘ Economic green venture





BRANDY TOFT
AIR QUALITY SPECIALIST
LEECH LAKE BAND OF OJIBWE

218-335-7429

air@lldrm.org

www.lldrm.org

