

CHALLENGES, OPPORTUNITIES, AND BEST PRACTICES FOR BIOSOLIDS LAND APPLICATION

CASSIE STRAUSS, UNITED LIQUID WASTE RECYCLING



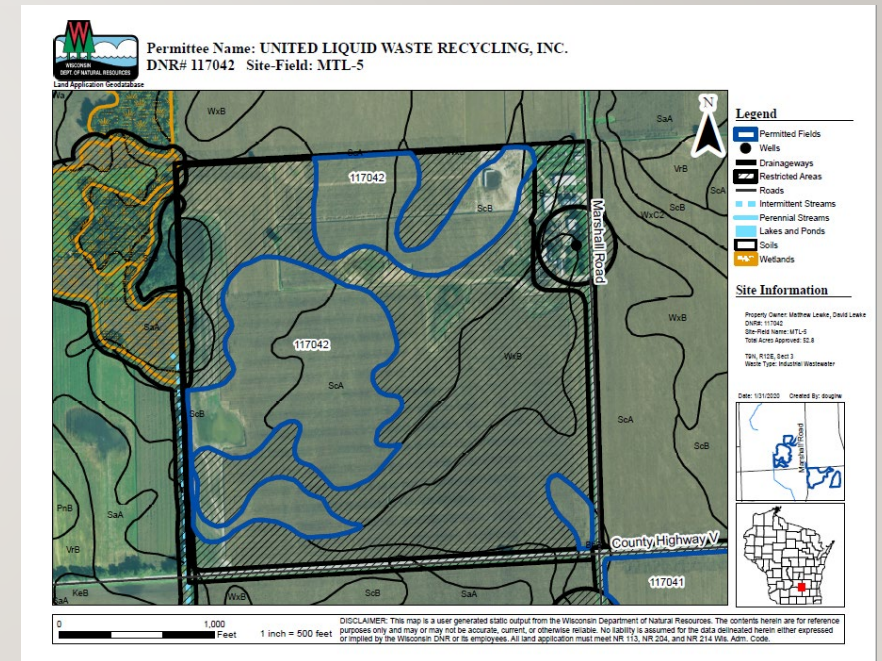
UNITED
LIQUID WASTE RECYCLING, INC.

- Family owned and operated.
- Municipal and industrial waste recycling.
- Contract hauling and land application for WWTP's.



CHALLENGES....

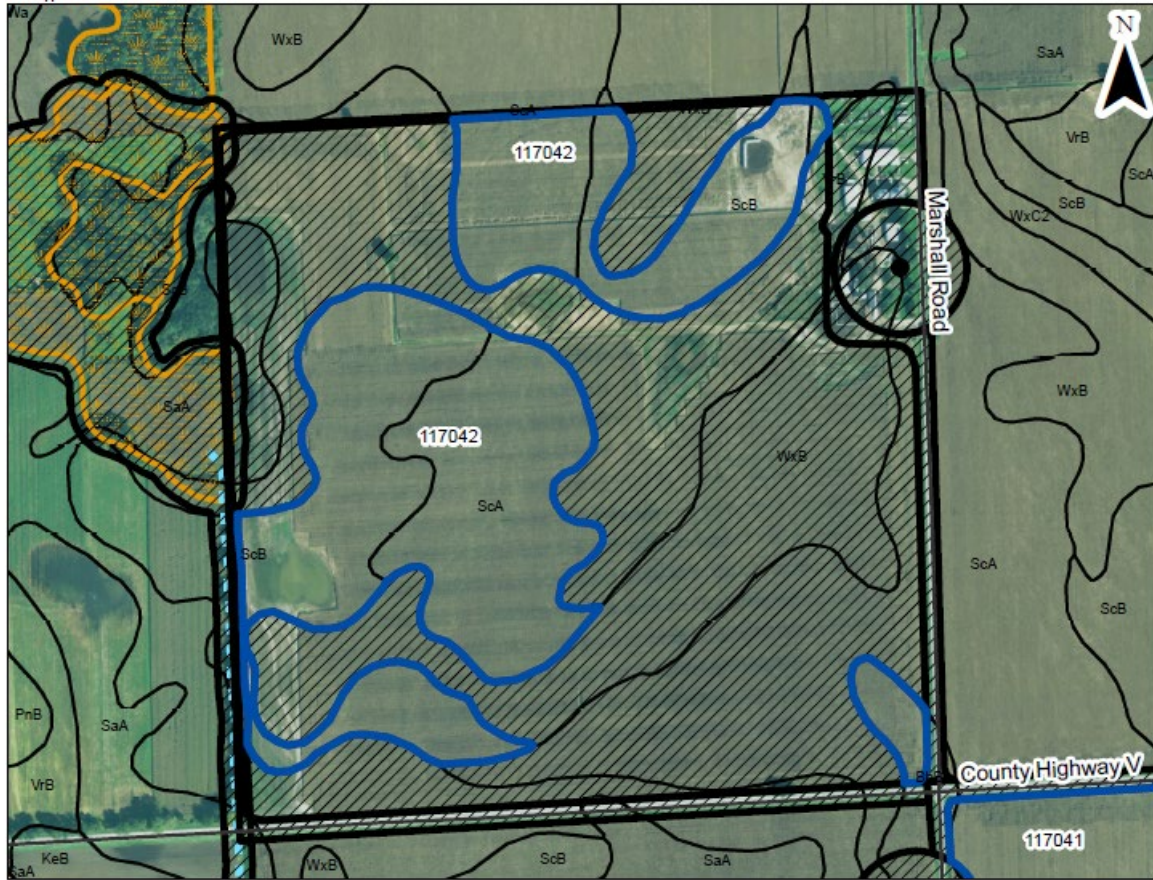
- Finding “suitable” land that meets all qualifications.
 - More and more land restriction.
 - Slope, depth to groundwater, water holding capacity, water setbacks, etc...
- Producers provide land that is not all approvable acres.
 - Hard to see the benefit when only 1/4 of the field is being covered.





Land Application Geodatabase

Permittee Name: UNITED LIQUID WASTE RECYCLING, INC.
DNR# 117042 Site-Field: MTL-5



Legend

- Permitted Fields
- Wells
- Drainageways
- Restricted Areas
- Roads
- Intermittent Streams
- Perennial Streams
- Lakes and Ponds
- Soils
- Wetlands

Site Information

Property Owner: Matthew Leake, David Leake
DNR#: 117042
Site-Field Name: MTL-5
Total Acres Approved: 52.8
T9N, R12E, Sect 3
Waste Type: Industrial Wastewater

Date: 1/31/2020 Created By: dougfw



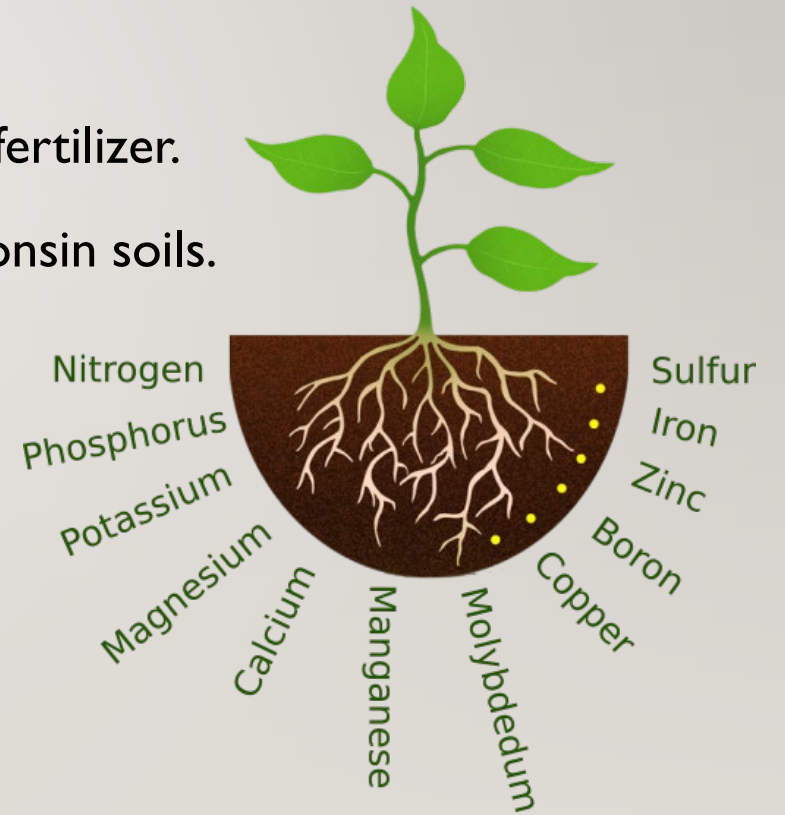
DISCLAIMER: This map is a user generated static output from the Wisconsin Department of Natural Resources. The contents herein are for reference purposes only and may or may not be accurate, current, or otherwise reliable. No liability is assumed for the data delineated herein either expressed or implied by the Wisconsin DNR or its employees. All land application must meet NR 113, NR 204, and NR 214 Wis. Adm. Code.

MORE CHALLENGES...

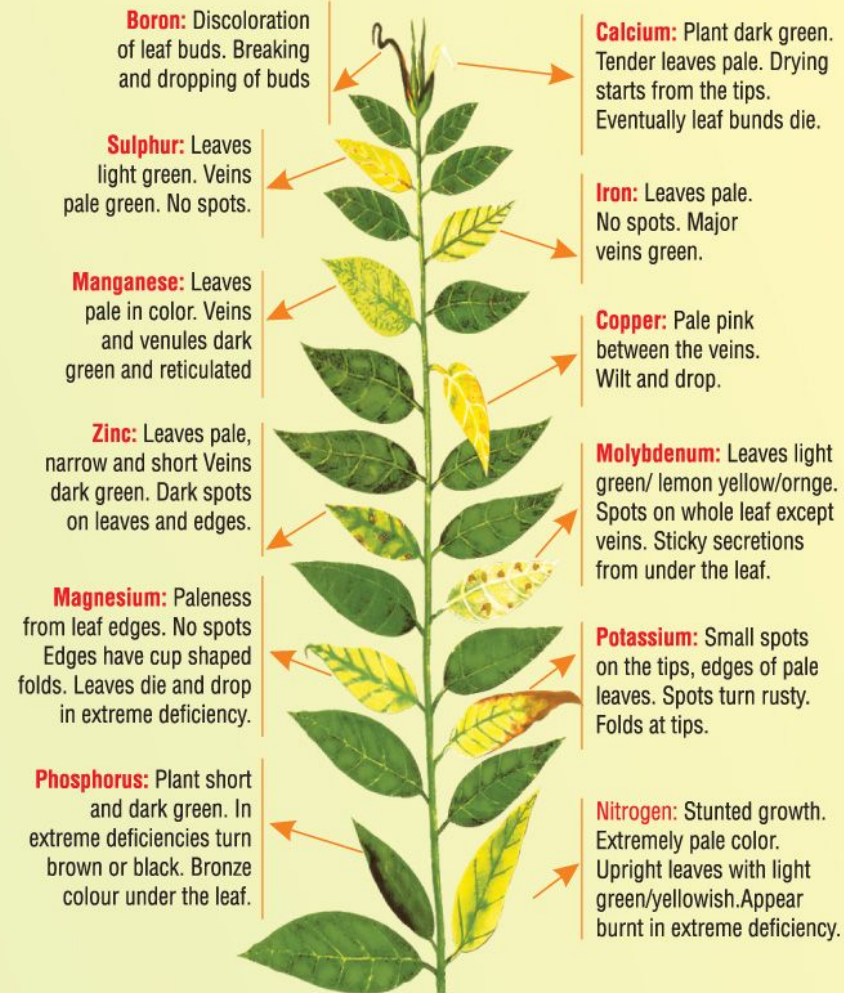
- Concern of COVID-19 transmission.
- More counties/towns/jurisdictions are creating rules against land application of biosolids.
- Selling of farmland.
- Undereducation of the public regarding land application.
 - Almost all complaints are due to neighbors not knowing what is going on.

OPPORTUNITIES...

- Non-chemical fertilizer.
- Cost savings of approximately \$100 per acre compared to fertilizer.
- Addition of micronutrients that are often deficient in Wisconsin soils.



Deficiency Chart of Micronutrients



THE COLOUR REPRESENTED ARE INDICATIVE.
THEY MAY VARY FROM PLANT TO PLANT

OVERALL BIOSOLIDS APPLICATION

- We're seeing a downward trend in field approvals.
- An upward trend in restrictions of biosolids application within areas.
- Farmer benefit and cost savings.
- Community instruction to cut down on complaints of undereducation.

QUESTIONS???

