

Benefits of Biosolids To Farmers, Soil and the Environment

Paul Wilken

Western Lake Superior Sanitary District

Clean Water & Reuse Manager, Conveyance &
Biosolids



27 11:17 AM

Benefit to Farmers

1. Direct Savings Compared to Using Commercial Fertilizer
2. Indirect Savings Compare to Using Commercial Fertilizer
3. Reality of Fertilizing for Grass Farmers



A Match Made in Heaven

Benefit to Soil Health

















Evidence of Soil Building



More Evidence

WLSDD Biosolids Land Application Reporting System

Western Lake Superior District - Biosolids Land Application Reporting System

Select State: 01 - Minnesota

Land Application Site Information | Other Sites | Delivery Logs | Operator Logs | General Information | Reports | Schedule

Site Summary | Enrollment Status | Application Year | Soils Analysis | Site Contacts | Comments | Browse Sites | Yield Data

Site: EVTF

Soil Analysis

Sample Date	5/16/2001
Texture	Coarse
Organic Matter	0.1 % Low
Soluble Salts	0.1 mmhos/cm
pH	8.7
Buffer Index	
Olsen Phosphorus	ppmP
Bray Phosphorus	2 ppmP
Potassium	300 ppmK
Sulfate Or Soluble Sulfur	S04-S
Boron	0.1 ppmB

Advisor Gold Ignore

Record: 1 of 13

WLSDD Biosolids Land Application Reporting System

Western Lake Superior District - Biosolids Land Application Reporting System

Select State: 01 - Minnesota

Land Application Site Information | Other Sites | Delivery Logs | Operator Logs | General Information | Reports | Schedule

Site Summary | Enrollment Status | Application Year | Soils Analysis | Site Contacts | Comments | Browse Sites | Yield Data

Site: EVTF

Soil Analysis

Sample Date	9/24/2015
Texture	Medium
Organic Matter	1.2 % Low
Soluble Salts	0.12 mmhos/cm
pH	8.4
Buffer Index	7.6
Olsen Phosphorus	13 ppmP
Bray Phosphorus	2 ppmP
Potassium	431 ppmK
Sulfate Or Soluble Sulfur	S04-S
Boron	0.29 ppmB

Advisor Gold Ignore

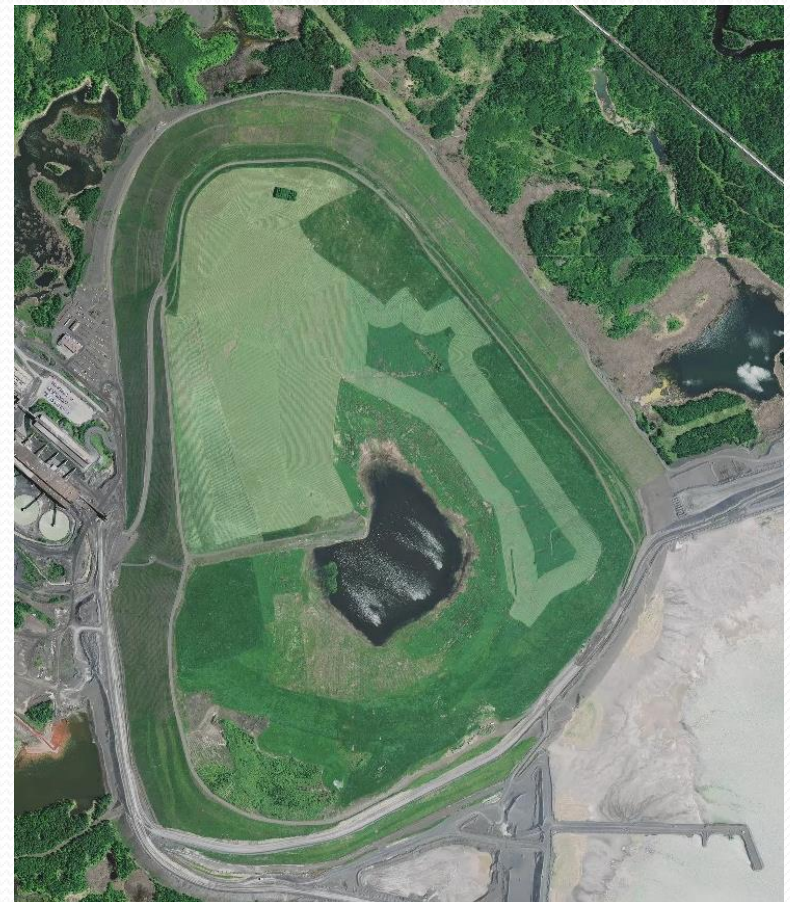
Record: 1 of 13



Circa 2003



Circa 2015, Google Earth



Questions?

