

Lake States Fire Science Consortium

A JFSP KNOWLEDGE EXCHANGE CONSORTIUM



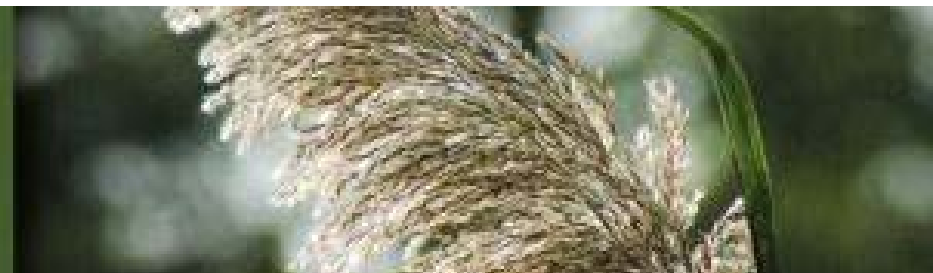
@LSFireScience



www.lakestatesfiresci.net

2014-2015 Webinar Series
January 15, 2015

Part One Webinar **Phragmites and Prescribed Fire**



@GLPhrag



www.greatlakesphragmites.net



Phragmites and Prescribed Fire: Seasonal Prescriptions and Risk

Lee Osterland, Fire Management Specialist



Why Manage Phragmites? What's the big deal? Juuust Buuurn It Already!!

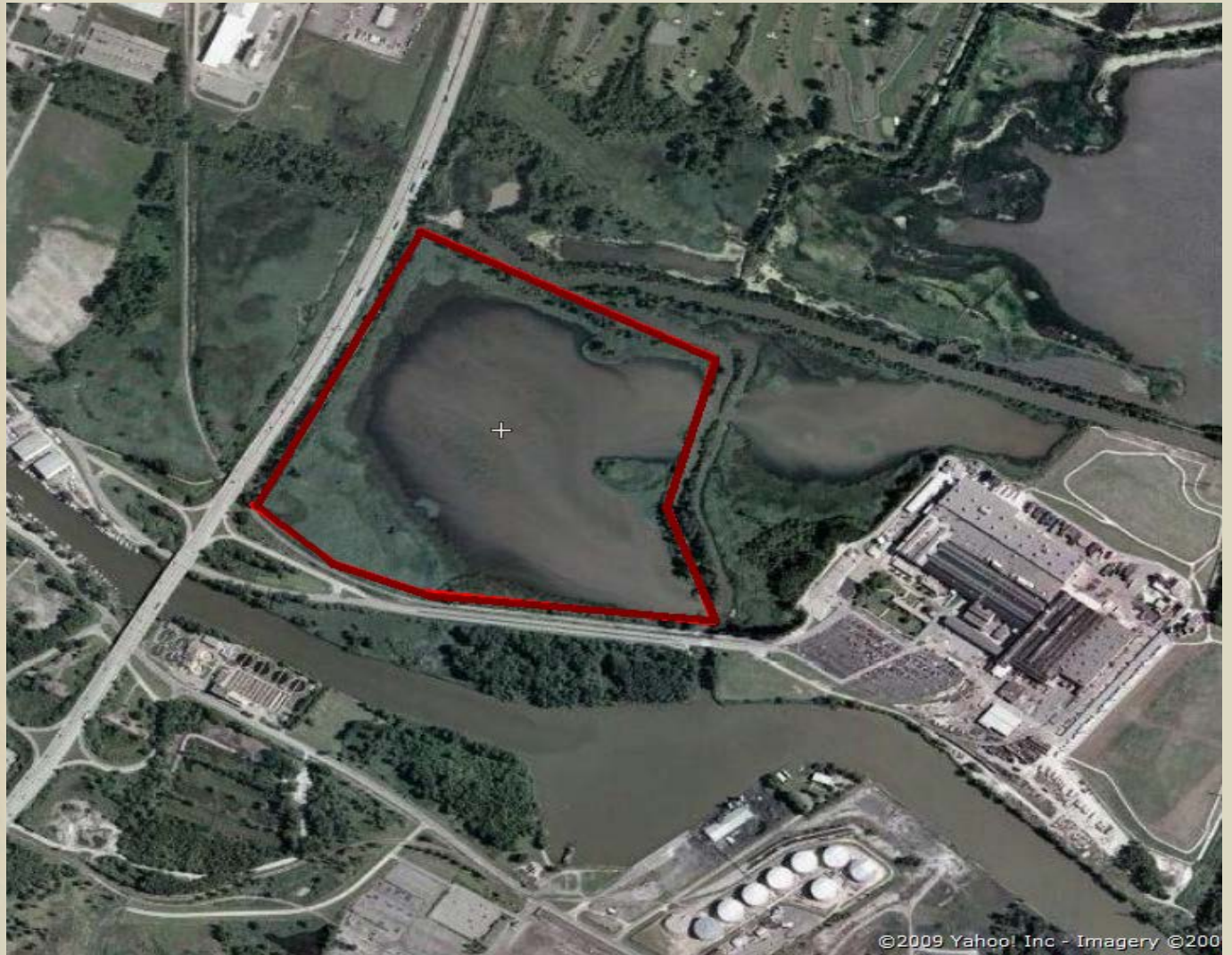








Can phragmites, people and fire co-exist? Yes,
BUT you better do your homework!



©2009 Yahoo! Inc - Imagery ©200



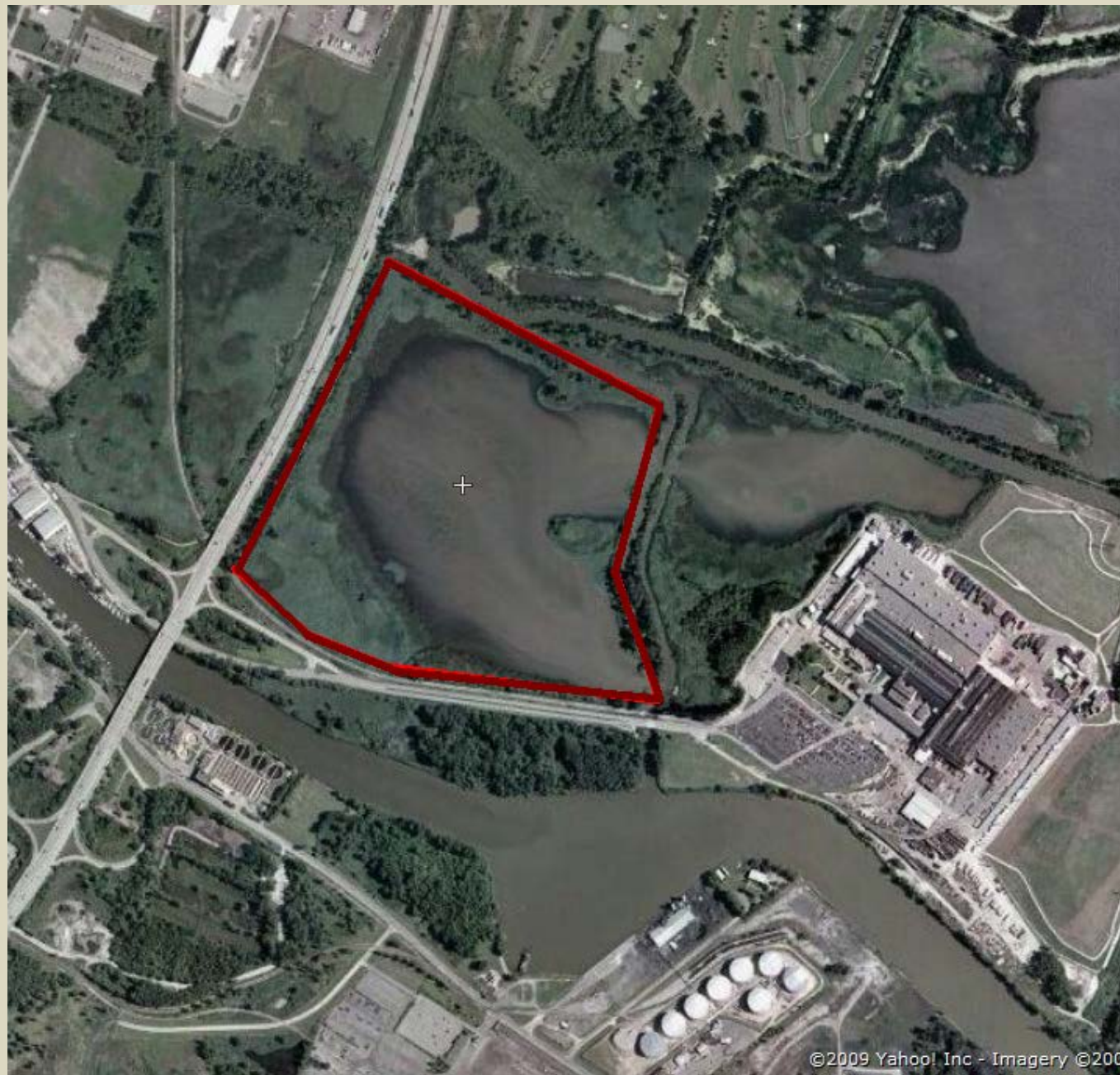












©2009 Yahoo! Inc - Imagery ©200

- 
- Time of Year to Burn
 - Wet or Dry Site
 - Controlled vs. Non-controlled Water Level
 - Altering Fuel Arrangement



Spring, Summer, Fall or Winter?



12-15-11

Fuel Moisture: 22%

Temp. 18, R.H. 42%, Wind: SW@12mph
75% - 100% Cloud Cover w/Snow Flurries





8-31-12

Fuel Moisture: 2% - 17%

Temp. 104, R.H. 38%, Wind: W @ 10mph

Clear Sky









Great Lakes Fire / Fuels

MESO WEST



[LINKS](#)

[MesoWest](#)

[ROMAN](#)

[Help](#)

[Great Lakes Forest Fire Compact](#)

[U of Utah Dept. of Atmospheric Sciences](#)

[NWS Fire Weather](#)

[Login to Great Lakes](#)

Login:

Password:

[Login](#)

[Create a User](#)

[AGENCY LINKS](#)

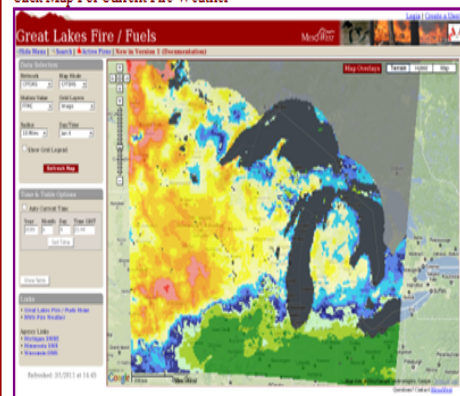
[Michigan DNR](#)
[Contact MI DNR](#)

[Minnesota DNR](#)
[Contact MN DNR](#)

[Wisconsin DNR](#)
[Contact WI DNR](#)

Great Lakes Surface Weather and Fire Indices

[Click Map For Current Fire Weather](#)



If logged in, your default profile will be used

[Technical Guide 11-1: Working With the Great Lakes Fire and Fuels](#)

[Information System Tools in Lake States Fire Management](#) 

[Click here to read what's new in Version 1](#) 

Tabular Fire Weather Products

[CFFDRS Database Table](#)

[CFFDRS Station Status](#)

[NFDRS Observed Database Table](#)

[NFDRS Forecast Database Table](#)

[CFFDRS Initial Values and Data Updates](#) (Restricted Access)

[Download CFFDRS by State](#)





Petersburg (MIPTR)

Temp

Wind

Precip

FFMC/FWI/ISI

BUI

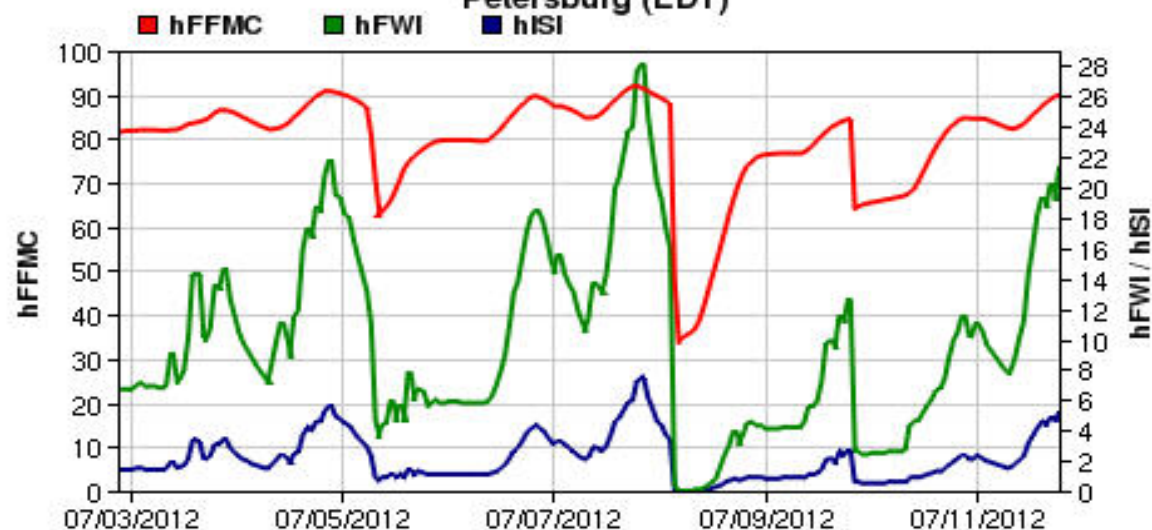
DMC

DC

CDSR

[help](#)

Petersburg (EDT)



All times are 14:00 EDT values

	Jul 09	Jul 10	Jul 11			Jul 09	Jul 10	Jul 11
FFMC:	87.7	89.7	93		Temp (F):	81	82	84
DMC:	75	80	85		RH (%):	48	32	26
DC:	397	406	415		Wind (MPH):	5	4	6
ISI:	4.5	5.6	10.4		Precip (In):	0	0.04	0
BUI:	102	107	112		FDR-Conifer:	High	High	Extreme
FWI:	18	22	34		FDR-Grass:	None	None	None
DSR:	5	6	14		FDR-H Wood:	None	None	None

[Recent Obs for MIPTR](#)

[Year to Date CFFDRS](#)

[Download Data](#)





National Weather Service Weather Forecast Office

Gaylord, MI



Home Site Map News Organization Search for: ☐ NWS ☐ All NOAA

Local forecast by
"City, St" or Zip Code

XML

 RSS Feeds

Current Hazards
Watches/Warnings
Outlooks
Submit Report
Facebook Page

Current Conditions
Observations
Radar
Satellite
Snow Cover
Snowfall Analysis
Precip Analysis

Forecasts
Forecast Discussion
Local Area
Activity Planner
Aviation Weather
Fire Weather
Marine Weather
Severe Weather
Winter Weather
Hurricane Center

Hydrology
Rivers & Lakes

Climate
Local
National
Drought
More...

Weather Safety
Preparedness
Weather Radio
StormReady
SkyWarn

Michigan Fire Weather

Watches & Warnings

Observations

Planning Forecasts

Digital Forecasts

Outlooks

Fire Assessment

Submit a Spot Forecast Request

FOR OFFICIAL USE ONLY

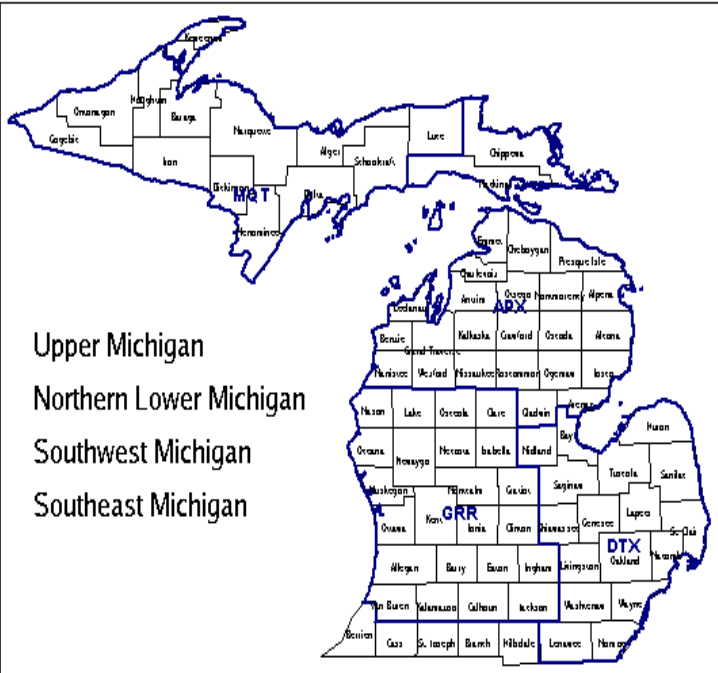
Select your geographic area or click your county on the map below:

Upper Michigan

Northern Lower Michigan

Southwest Michigan

Southeast Michigan



Weather Map

Radar

VIS Satellite

IR Satellite

Day 1 Outlook



WEDNESDAY

SKY/WEATHER.....PARTLY CLOUDY (35-45 PERCENT) UNTIL 4 PM...THEN SUNNY (5-15 PERCENT).

MAX TEMPERATURE.....79-84. 24 HR TREND.....1 DEGREE COOLER.

MIN HUMIDITY.....41-51 PERCENT. 24 HR TREND.....4 PERCENT DRIER. 20-FOOT WINDS.....NORTH 10 TO 15 MPH.

HAINES INDEX.....4 OR LOW POTENTIAL FOR LARGE PLUME DOMINATED FIRE GROWTH.

MIXING HEIGHT.....5640-6140 FT AGL.

TRANSPORT WINDS.....NORTH 10 TO 15 MPH.

VENTILATION INDEX...`EXCELLENT` (720).

PCPN AMOUNT.....NONE.



Dry Site vs. Wet Site





March 18th

Temp 60

RH 25-30%

Wind:

West 8-12mph

Transport Wind:

W-14mph

Vent. Index:

Excellent 900





Non-Controlled Water Level





©2009 Yahoo! Inc - Imagery ©200





2-4-2010

Ignition 1300

Fuel Moisture 15%

*Temp 31, RH 48%, Wind
2-4 mph*

(<3 mph average)

50-75% Cloud Cover





2-1-2010

Ignition: 1335

*Fuel Moisture Content 19%-
20%*

*Temp 26, RH 52% Wind 4-6
mph/Gust to 10*

*75-100% High Thin Cloud
Cover*



Manipulating Fuel Arrangement











7-11-12

Time: 0900

Fuel Moisture: 2% - 22%

Temp. 85, R.H. 50%, Wind W@ 5mph

Clear Sky

Precipitation: 2/100 previous night









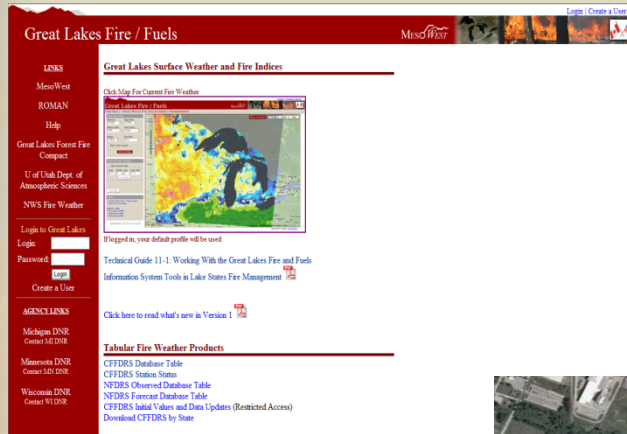
What Is The Result of All of This?



Meet Prescribed Burn Objectives



Summary



Thank you! Questions?

osterlandl@michigan.gov



Lake States Fire Science Consortium

A JFSP KNOWLEDGE EXCHANGE CONSORTIUM



@LSFireScience



www.lakestatesfiresci.net

Part Two Phragmites and Prescribed Fire

March 12, 2015 at 2:00 PM EST (1:00 PM CST)



Great Lakes
PHRAGMITES



@GLPhrag)



www.greatlakesphragmites.net

Lake States Fire Science Consortium

A JFSP KNOWLEDGE EXCHANGE CONSORTIUM



February Webinar:

February 19, 2015 at 2:00 PM Eastern (1:00 PM Central)

**Long-term effects of repeated prescribed burning on
tree growth and drought vulnerability in *Pinus resinosa*
forests in northern Minnesota**

Alessandra Bottero
University of Minnesota



@LSFireScience



www.lakestatesfiresci.net