

# Mapping Phragmites in St. Clair Flats using Aerial Photos, Google Street View, and Bing Oblique Imagery



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# What Methods are Being Used to Locate and Map Phragmites?

**Aerial Photo Interpretation using:**

- **SEMCOG 2005 1 foot imagery**
- **NAIP 2005 1 meter imagery**
- **Bing Oblique Imagery**
- **Google Street View**



**SEMCOG 2005 1 Foot**



NAIP 2005 1 Meter

bing



Make Bing your decision engine



# Bing Maps Pictometry Bird's Eye 6 Inch Oblique

25 feet

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Google maps

43525 Elizabeth, Mount Clemens, MI 48043

Search Maps

Show search options

Find businesses, addresses and places of interest.

Print Send Link



Google Maps Street View







Search Maps

Show search options

Print Send Link





# Legend



Phragmites

# What Methods are Being Used to Locate and Map Phragmites?

**Field Verification:**

**Roadside survey of mapped areas**





# What Methods are Being Used to Locate and Map Phragmites?

## Field Verification:

Not a lot of commission errors, but some omission errors mostly related to:

- Time difference (2005 to 2010)
- Sparse areas in fields and ditches
- Ditch clearing

# Results:

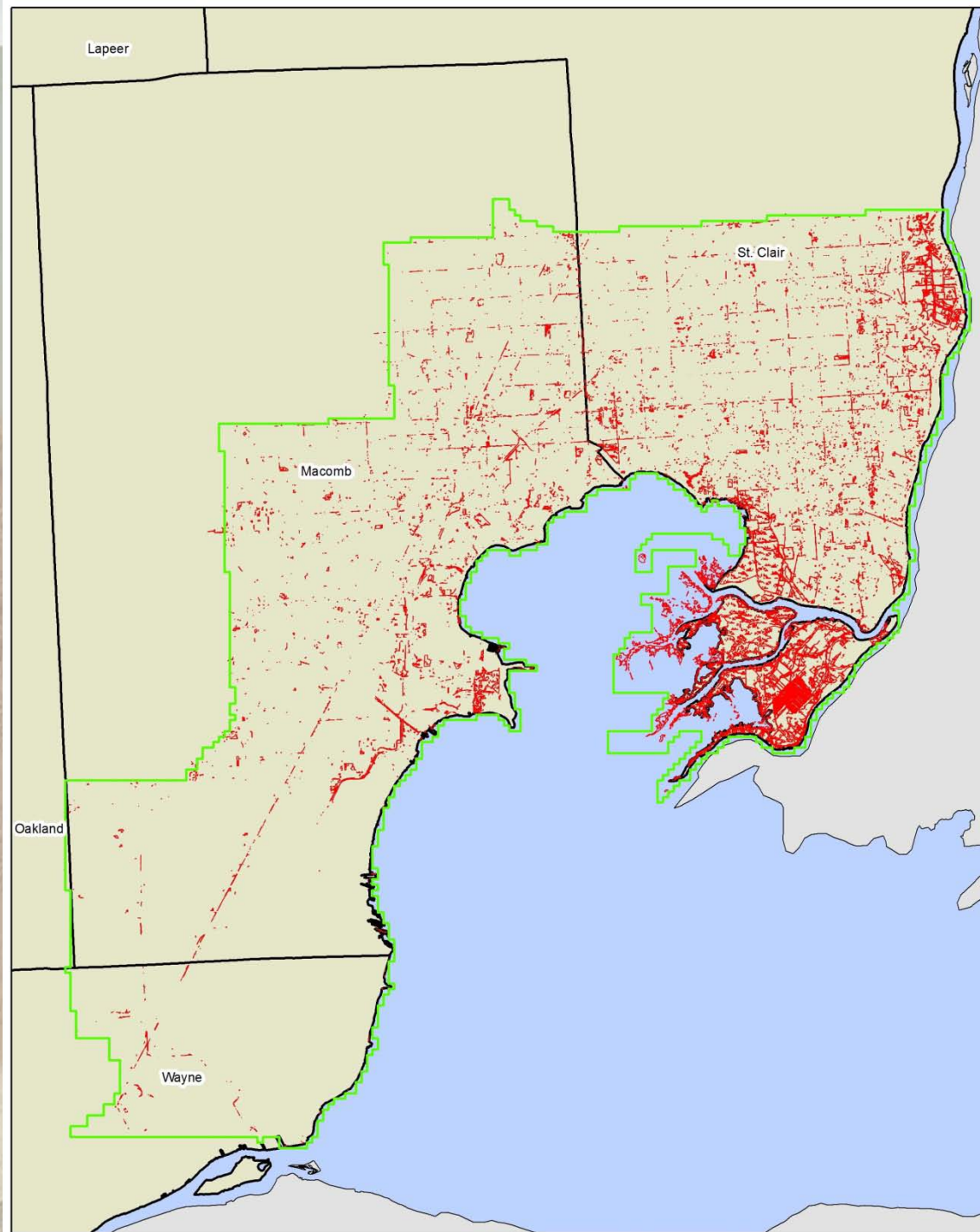


**Phragmites**



**Project Area**

**12,300 acres of  
Phragmites has been  
mapped.**

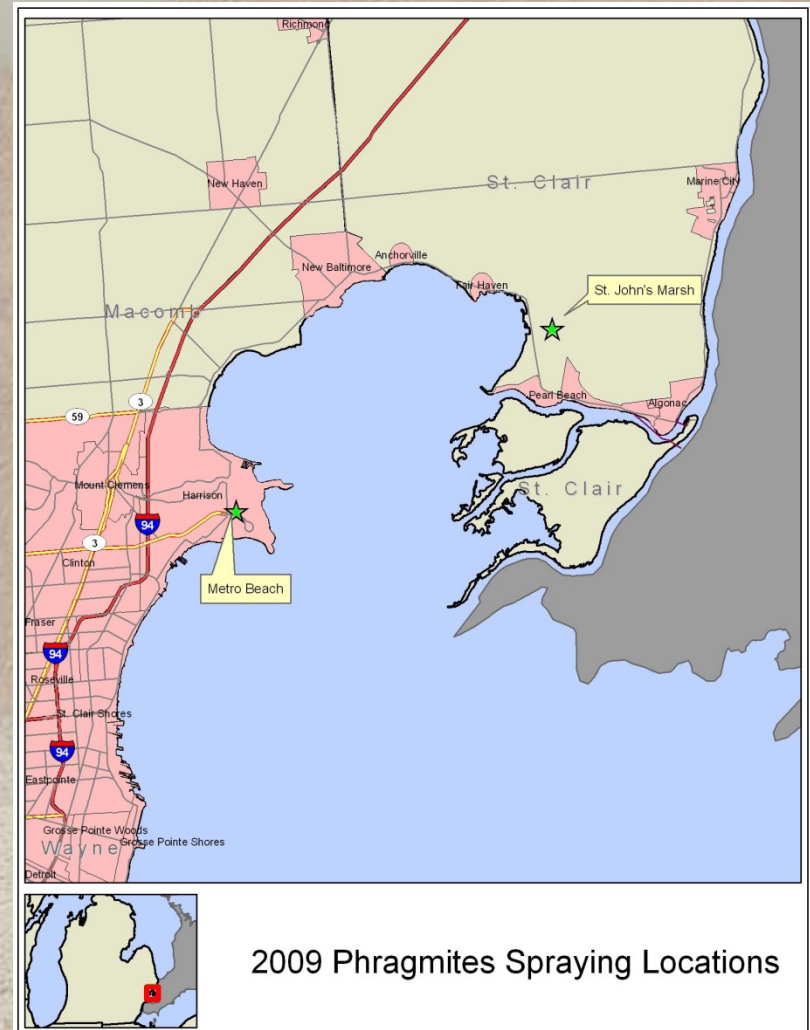


# How Could the Use of These Methods be Expanded?

- **Methods easily repeatable for other areas with potential for identifying very small patches**
- **Time consuming (expensive) for large areas**
- **Dependent on Google and Bing imagery (availability and acquisition date) and other existing imagery**

# How are Treatment Sites being Recorded and Mapped?

Two sites are being treated as part of this project. Mapping procedures currently do not track treatment sites.



# What Approaches Have You Used for Data Access and Maintenance?

- Download at web site with map viewer:

[http://glaromaps.ducks.org/StClair\\_Phragmites/](http://glaromaps.ducks.org/StClair_Phragmites/)

- Data will be maintained at web site
- No planned update to mapping

St. Clair Watershed Phragmites Mapping Data Updated 7-27-2010 | Download Personal Geodatabase | Download Shapefile | Ducks Unlimited | Email

- Results**
- Map Contents**
- StClair\_Phragmites\_Mapping
    - Phragmites
    - Mapping Area
    - Watersheds
    - County
    - Road
    - City
    - Canada Province
    - Aerial Imagery
    - States

