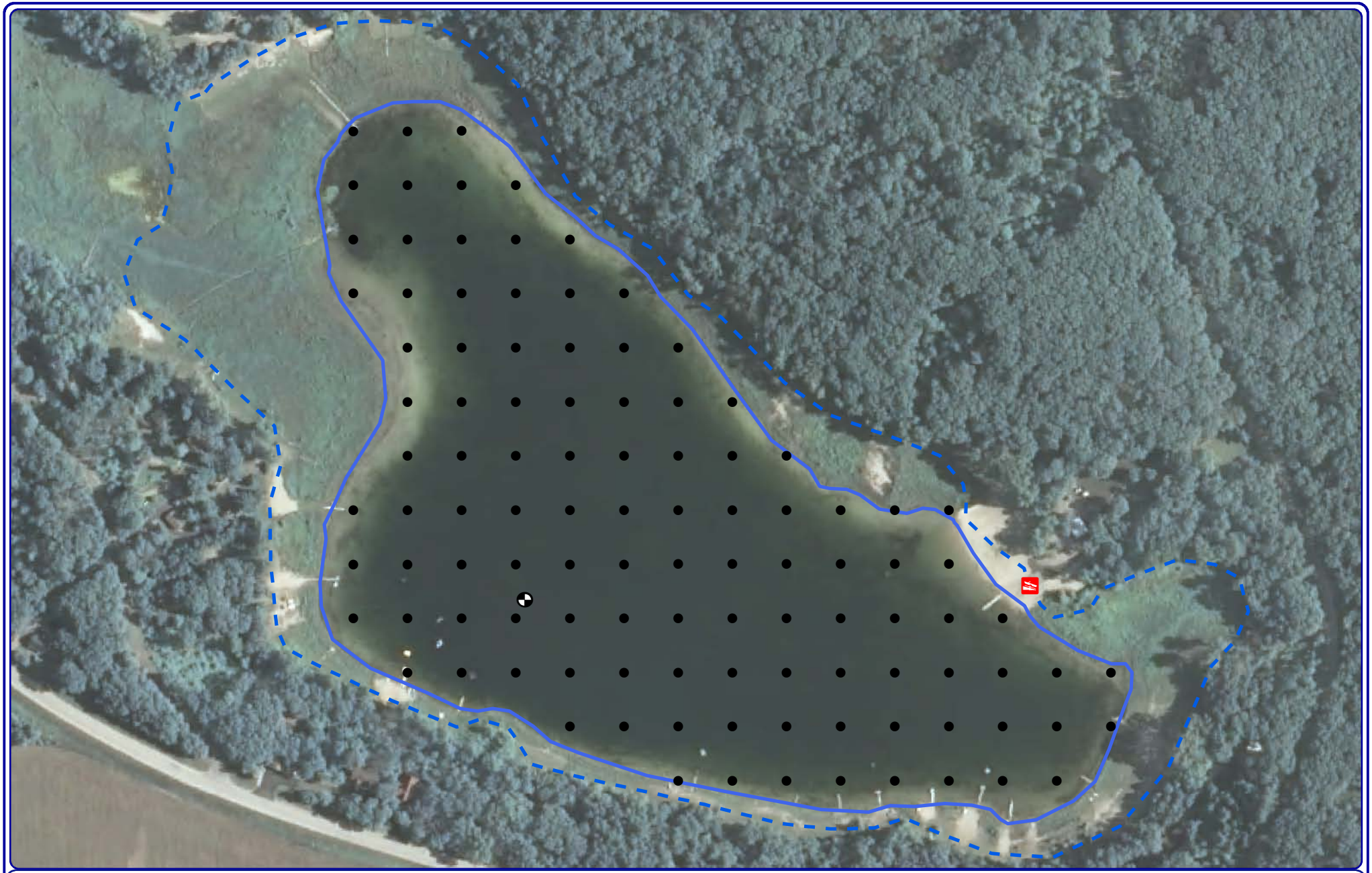


N
W E
S

250
Feet

Onterra LLC
Lake Management Planning
815 Prosper Rd
De Pere, WI 54115
920.338.8860
www.onterra-eco.com

Sources:
Hydro: WDNR
Orthophotography: NAIP, 2010
Map Date: February 7, 2012
Filename: *Map2_Marl_Location.mxd*



Project Location in Wisconsin

Legend

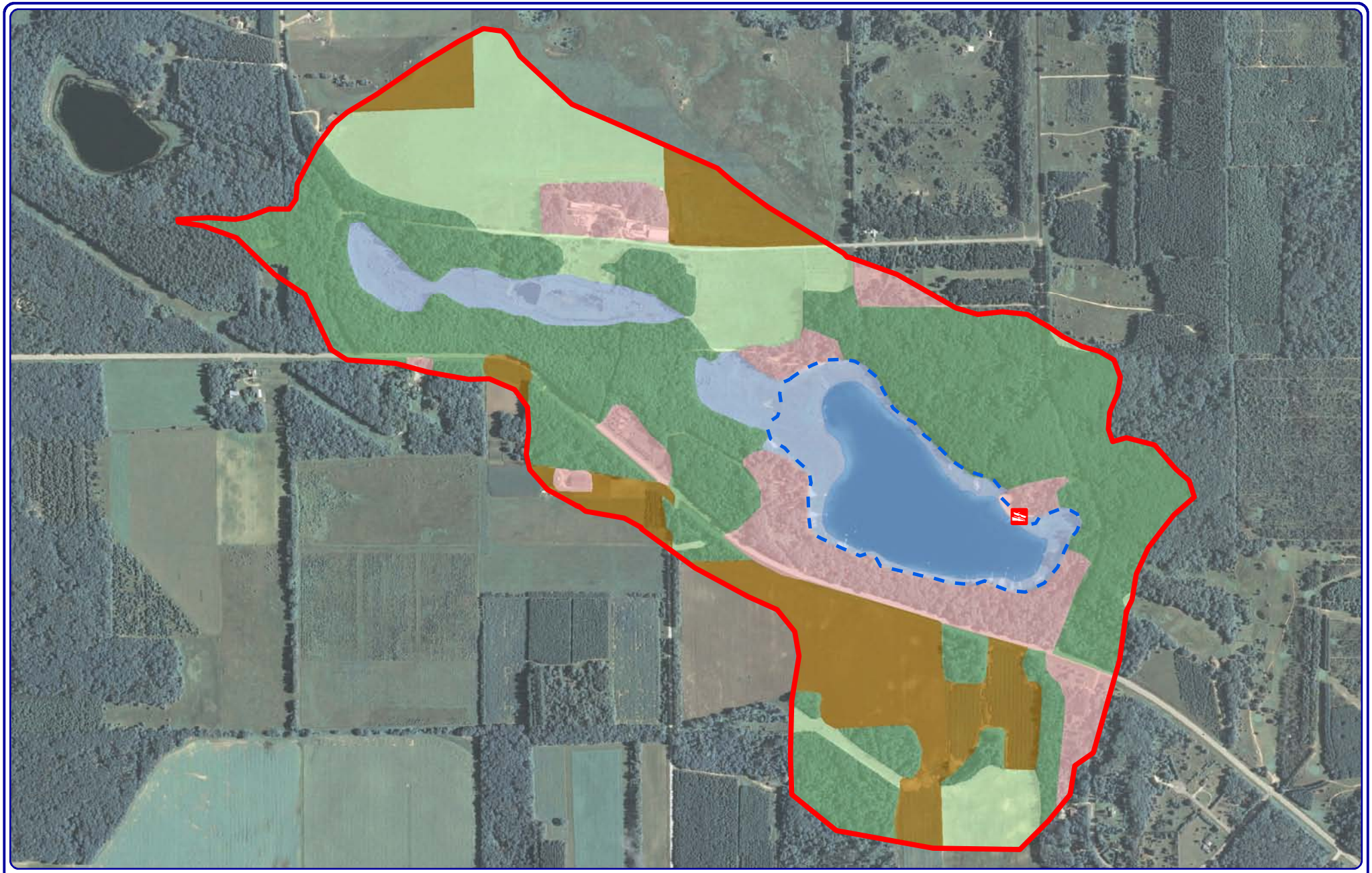
- Marl Lake 2010 ~27 acres
- Marl Lake Ordinary High Water Mark ~41 acres
- Point-intercept Survey Location
  32-meter spacing - 109 total points
- Water Quality Sampling Location
- Public Access

Map 1

Marl Lake

Waushara County, Wisconsin

Project Location & Lake Boundaries



N
W E
S

900
Feet

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Sources:
Land Cover: NLCD 2006
Hydro: WDNR
Orthophotography: NAIP, 2010
Map Date: February 3, 2012
Filename: *Map2_Marl_Watershed.mxd*



Project Location in Wisconsin

Legend

- Watershed Boundary
- Marl Lake - Ordinary High Water Mark
- Public Access

Land Cover Types

- Forest
- Pasture/Grass
- Wetlands
- Open Water
- Row Crops
- Rural Residential

Map 2

Marl Lake

Waushara County, Wisconsin

Watershed Boundary & Land Cover Types



N
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250
Feet

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Sources:
Hydro: WDNR
Orthophotography: NAIP, 2010
Map Date: February 7, 2012
Filename: *Map3_SA_2010.mxd*



Project Location in Wisconsin

Legend

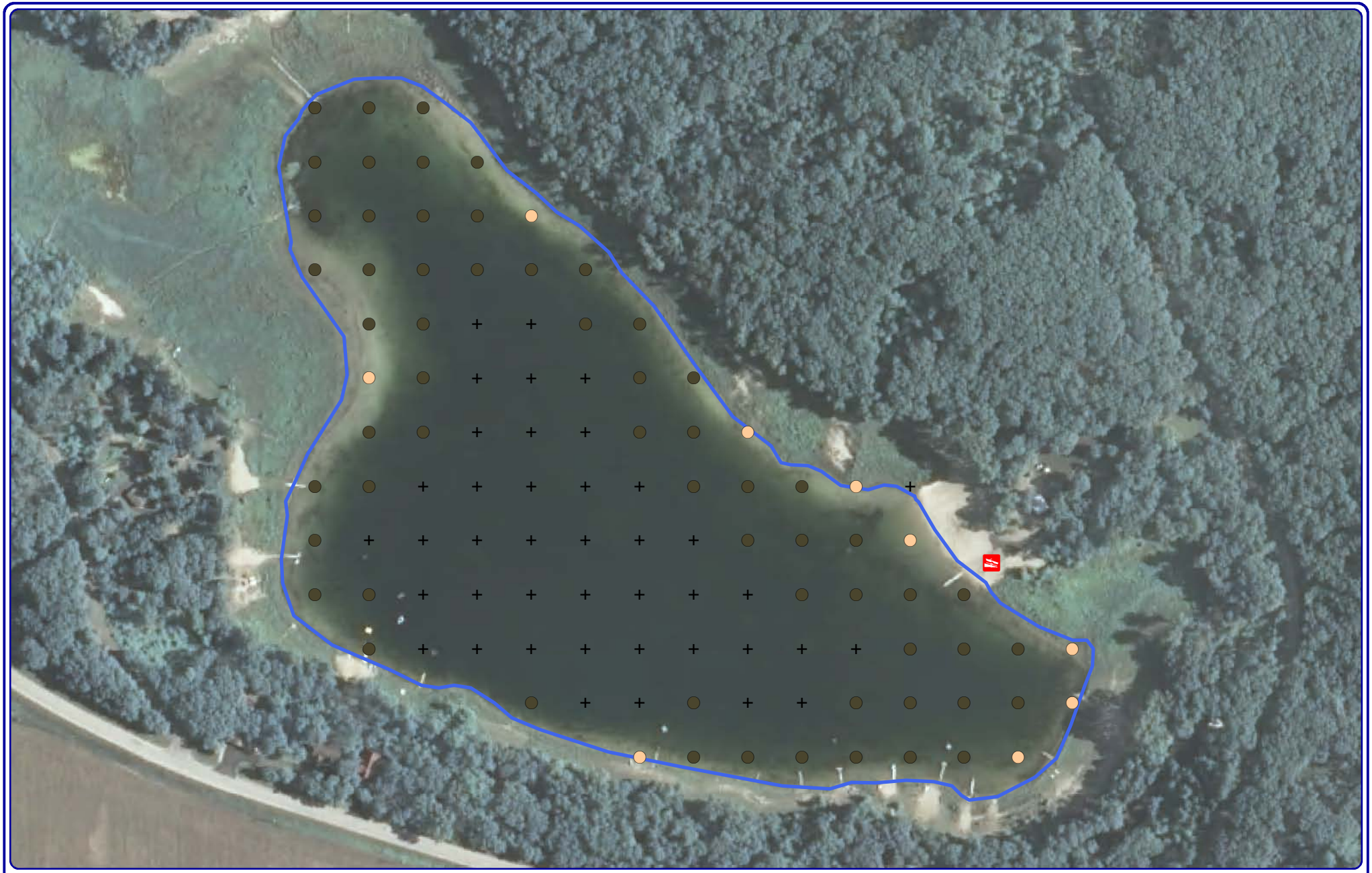
- Natural/Undeveloped (0.5 miles)
- Developed-Natural (None)
- Developed-Semi-Natural (0.4 miles)
- Developed-Unnatural (0.1 miles)
- Urbanized (0.2 miles)

Map 3

Marl Lake

Waushara County, Wisconsin

2010 Shoreline Condition



N
W E
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250
Feet

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Sources:
Hydro: WDNR
Orthophotography: NAIP, 2010
Map Date: February 7, 2012
Filename: *Map4_Marl_SubstratePI.mxd*



Project Location in Wisconsin

Legend

Point-intercept Sampling Locations

- \+ No Data (*Non-navigable or Too Deep*)
- Muck
- Sand
- Rock (*None*)

Map 4

Marl Lake

Waushara County, Wisconsin

PI Survey: Substrate Types



N
W E
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250
Feet

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Sources:
Hydro: WDNR
Orthophotography: NAIP, 2010
Map Date: February 7, 2012
Filename: *Map5_Marl_TRFPI.mxd*



Project Location in Wisconsin

Legend

Point-intercept Sampling Locations

- \+ No Vegetation or Non-navigable
- Rake-fullness = 1
- Rake-fullness = 2
- Rake-fullness = 3

Map 5

Marl Lake

Waushara County, Wisconsin

PI Survey:
Aquatic Plant Distribution



N
W E
S

250
Feet

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815 Prosper Rd
De Pere, WI 54115
920.338.8860
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Sources:
Hydro: WDNR
Orthophotography: NAIP, 2008
Aquatic Plants: Onterra, 2010
Map Date: February 7, 2012
Filename: *Map6_Marl_Comm_July10.mxd*



Project Location in Wisconsin

Legend

Large Plant Communities
- Emergent
- Floating-leaf *(None found)*
- Mixed floating-leaf & emergent
- 2002 Emergent and/or Floating-leaf Community

Small Plant Communities
- Emergent
- Floating-leaf
- Mixed floating-leaf & emergent

Emergent Exotic Plant Species in red

Map 6

Marl Lake

Waushara County, Wisconsin

Emergent & Floating-leaf Aquatic Plant Communities



N
W E
S

250
Feet

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Sources:
Hydro: WDNR
Orthophotography: NAIP, 2010
Map Date: February 7, 2012
Filename: *Map7_Marl_CLPPB_2010.mxd*



Project Location in Wisconsin

Legend

Curly-leaf Pondweed (July 2010)

- Highly Scattered (*None*)
- Scattered
- Dominant
- Highly Dominant (*None*)
- Surface Matting (*None*)
- Single or Few Plants
- Clumps of Plants
- Small Plant Colony (*None*)

Map 7

Marl Lake

Waushara County, Wisconsin

2010 CLP Locations



N
W E
S

250
Feet

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Sources:
Hydro: WDNR
Orthophotography: NAIP, 2010
Map Date: February 7, 2012
Filename: *Map8_Marl_CLPPB_2011.mxd*



Project Location in Wisconsin

Legend

Curly-leaf Pondweed (June 2011)

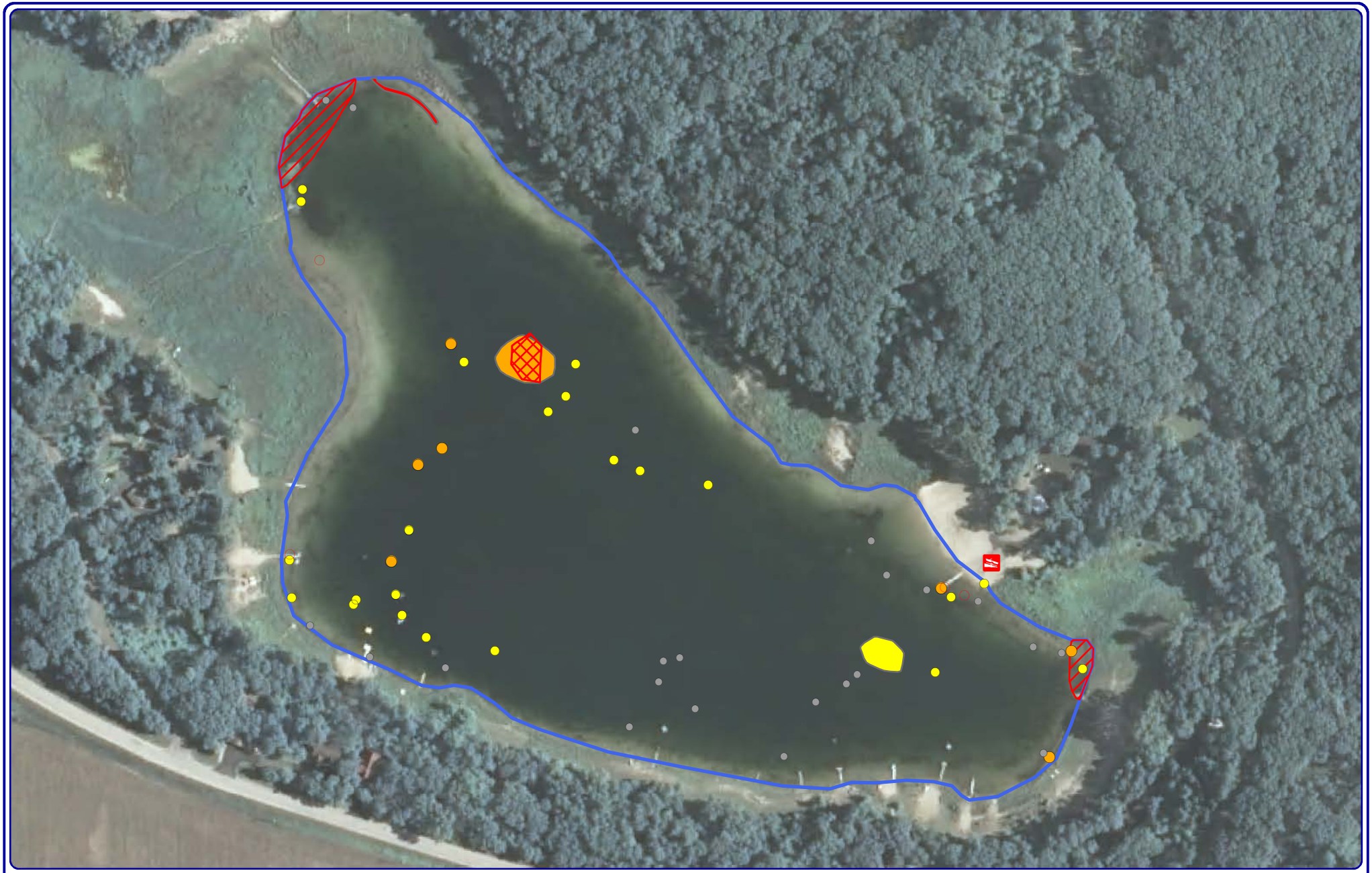
- Highly Scattered (*None*)
- Scattered
- Dominant
- Highly Dominant (*None*)
- Surface Matting (*None*)
- Single or Few Plants
- Clumps of Plants
- Small Plant Colony (*None*)
- 2011 Hand-Removal Locations

Map 8

Marl Lake

Waushara County, Wisconsin

2011 CLP Locations



N
W E
S

250
Feet

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De Pere, WI 54115
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Sources:
Hydro: WDNR
Orthophotography: NAIP, 2010
Map Date: February 7, 2012
Filename: *Map9_Marl_CLPPB_2012.mxd*



Project Location in Wisconsin

CLP June 2012

- Highly Scattered (None)
- Scattered (None)
- Dominant
- Highly Dominant
- Surface Matting
- Single or Few Plants
- Clumps of Plants
- Small Plant Colony

CLP June 2011

- Single or Few/Clumps of Plants
- Scattered
- Highly Dominant

Map 9

Marl Lake

Waushara County, Wisconsin

2012 CLP Locations



N
W E
S

250
Feet

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De Pere, WI 54115
920.338.8860
www.onterra-eco.com

Sources:
Hydro: WDNR
Orthophotography: NAIP, 2010
Map Date: February 7, 2012
Filename: *Map9_Marl_EWM_T2012_Cond1.mxd*



Project Location in Wisconsin

Legend

Eurasian water-milfoil (September 2011)

- Single or Few Plants
- Clumps of Plants
- Small Plant Colony (*None*)

Map 10

Marl Lake

Waushara County, Wisconsin

2011 EWM Locations



N
W E
S

250
Feet

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815 Prosper Rd
De Pere, WI 54115
920.338.8860
www.onterra-eco.com

Sources:
Hydro: WDNR
Orthophotography: NAIP, 2010
Map Date: September 14, 2012
Filename: *Map11_Marl_EWM_PB_Aug2012.mxd*



Project Location in Wisconsin

Legend

Eurasian water-milfoil (August 2012)

- Single or Few Plants
- Clumps of Plants
- Small Plant Colony (*None*)

Map 11

Marl Lake

Waushara County, Wisconsin

2012 EWM Locations