

EURASIAN WATER MILFOIL ("EWM") MANAGEMENT
PHASE II ACTION GOAL

The fall of 2009 EWM survey, performed by Onterra, LLC, is shown on the enclosed Map #3 and was recommended to be the proposed treatment area in the spring of 2010. Beds B10 and D10 were to be treated with 150 lbs/acre of granular 2,4-D. Bed B10 was very dense; and therefore, were to be treated at 200 lbs/acre.

Bed C10 was treated at 200 lbs/acre in 2008 and 2009; however, there was minimal plant kill even at this maximum dosage rate. After considerable consultation with Tim Hoyman and Eddie Heath of Onterra, LLC, Kevin Gauthier of the DNR and Mark Kordus of Bonestroo, it was decided that a dual application of a weighted liquid 2,4-D (DMA4@1.5 ppm) would be applied and spaced 24 hours apart. Polyon anti-draft/sinking agent, ¼ gal/acre would be used.

Because of the extreme density of this bed, it is possible that the granular 2,4-D used in 2008 and 2009 did not reach the Lake bottom to attack the root structure of the plant, but was suspended in the dense foliage of the bed. This is possibly the reason for the ineffective plant kill. This assumption prompted use of the weighted liquid 2, 4-D. nce Onterra does the post-treatment survey (late August 2010) we will be able to evaluate the effectiveness of this treatment method.

Also, when Onterra performed the pre-treatment survey in May 2010, additional EWM beds were located on the north end of the Lake and are identified as E-10, F-10, G-10 and H-10. (See anclosed 2010 Final EWM Treatment Area Map.) These beds are located in front of the boat launch and City of Crandon swimming beach area. Onterra recommended that these beds also be treated at 150 lbs/acre if Lake Metonga Association had sufficient funds. The Association agreed to the recommendation and authorized that these beds be included which increased the total treatment area from 36.5 to 39.5 acres.

Lake Metonga Association's goal for 2011 and succeeding years is to be as proactive as available funds allow based upon the Association's available funds and grants. Not only have the surveys shown a reduction in EWM (50 acres in 2008, 81 acres in 2009, 39.5 acres in 2010), but an increase in native plants which substantiates the need to be proactive.

CHEMICAL RESIDUAL MONITORING

The Army Corps of Engineers has been working on an AIS study in conjunction with a Florida Research Professor. The Corps through the WI.DNR has generated detailed AIS Control information surrounding spot treatment, total eradication, liquid, and pellet (granular) application of chemicals. Lake Metonga Association was invited to participate by collecting water samples following chemical treatment of EWM in an effort to determine the dissipation and ultimately the effectiveness of the treatment.

The Corps existing information indicates that 2,4-D dilutes so quickly that the effective concentration might be lost by the time it dissolves. Since specific beds were being treated with granular 2,4-D and one bed was treated with liquid 2,4-D (bed C10), an analysis of the collected samples should reveal the

ation level with respect to time. Following is the time samples were gathered at the sites
following the chemical application.

June 2nd, 3 hours and 6 hours after treatment.

June 3rd, 4th, 5th, 7th, 9th, and 16th day after treatment.

The enclosed Map #3 highlights the sample points with green dots. Location ME4 was also sampled (this is not an EWM bed) to determine if the chemical disperses to other locations and if so, what were the concentration levels on days sampled. All collected samples were treated with muratic acid and shipped to Florida. The Corps will analyze and provide a report which should assist in setting goals for future treatment of EWM.

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CHEMICAL RESIDUAL MONITORING

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 acres

Treatment Areas: Navigate - 150 lbs/acre

Site	Acres	Ave Depth
B-10	6.4	9 feet
D-10	2.1	5 feet
Sub Total	8.5	

Treatment Areas: Navigate - 200 lbs/acre

Site	Acres	Ave Depth
A-10	5.3	12 feet
Sub Total	5.3	

Treatment Areas: Dual DMA IV applications spaced 24 hrs apart @ 1.5ppm each

Site	Acres	Volume (acre-feet)	Ave Depth (feet)	Min. Depth (feet)	Max. Depth (feet)
C-10	22.7	254.24	11.2	7	19
Sub Total	22.7				

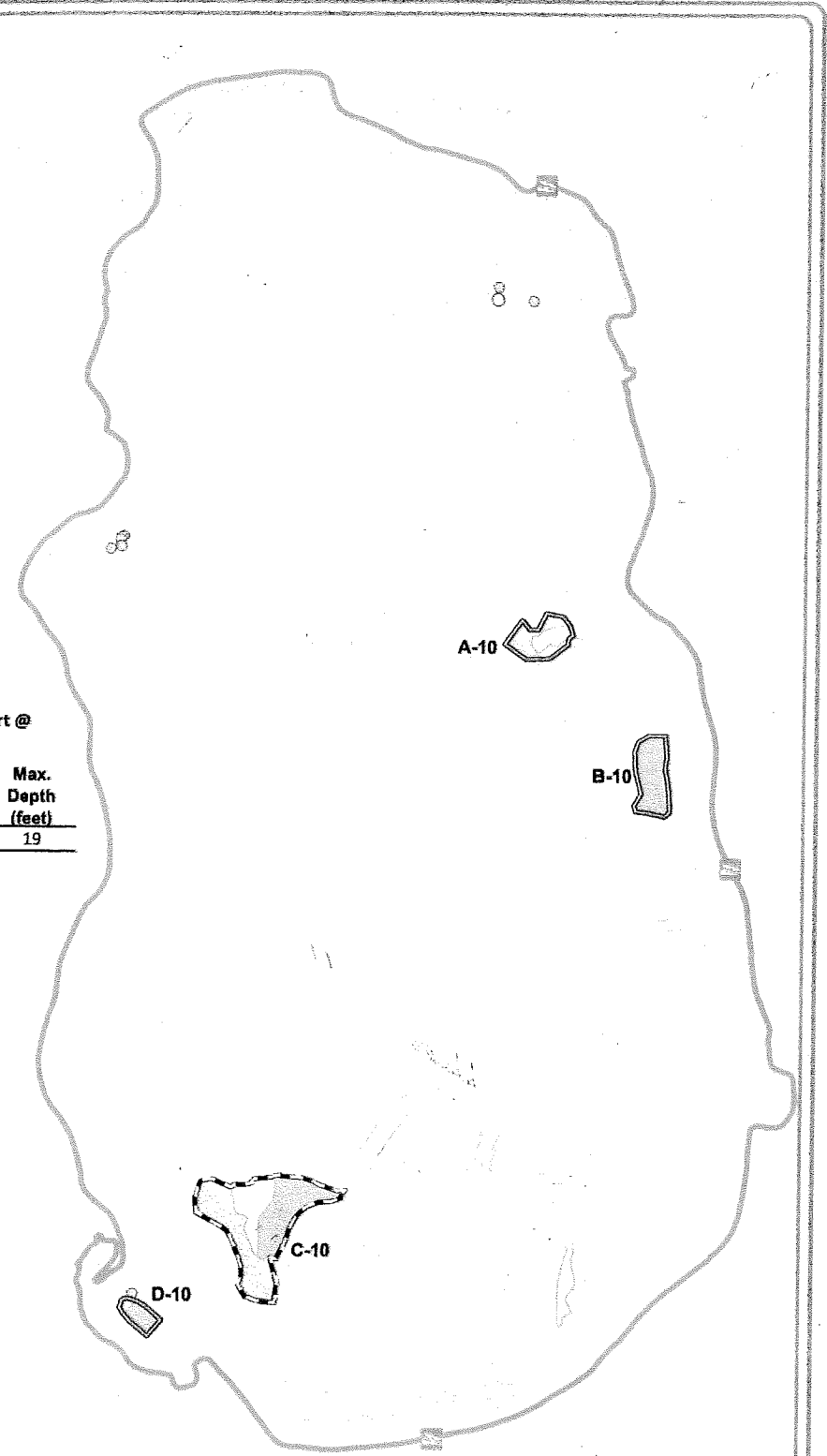
Grand Total 36.5

Lake Metonga - Whole-lake Calculations

Lake Areas (GIS Calculated)	2,038.5 acres
Maximum Depth	79 feet
Volume (1971 Lake Survey Map)	54,547 acre-feet



- Please Note:**
- Entire area of lake used for fishing.
 - Proposed Treatment areas are used for all boating activities.



Onterra LLC
 Lake Management Planning
 35 South Broadway Suite C
 De Pere, WI 54115
 920.331.8660
 www.onterra-llc.com

Sources:
 Roads & Hydro: WDNR
 Aquatic Plants: Onterra 2009
 Bathymetry: WDNR - Digitized by Onterra
 Map date: November 17, 2009
 File Name: Map3_Met_T2010_EWM_Cond1andPB.mxd

- 2010 Proposed Treatment Areas**
- Navigate - 200 lbs/acre
 - Navigate - 150 lbs/acre
 - DMA IV - Split 1.5 ppm
- EWM Survey Results (August 2009)**
- Single or Few Plants
 - Many Plants or Clumps of Plants

- EWM Survey Results (August 2009)**
- Highly Scattered
 - Scattered
 - Dominant
 - Highly Dominant
 - Surface Matting (none found)

Map 3
Lake Metonga
 Forest County, Wisconsin
2010 Proposed EWM Treatment Areas

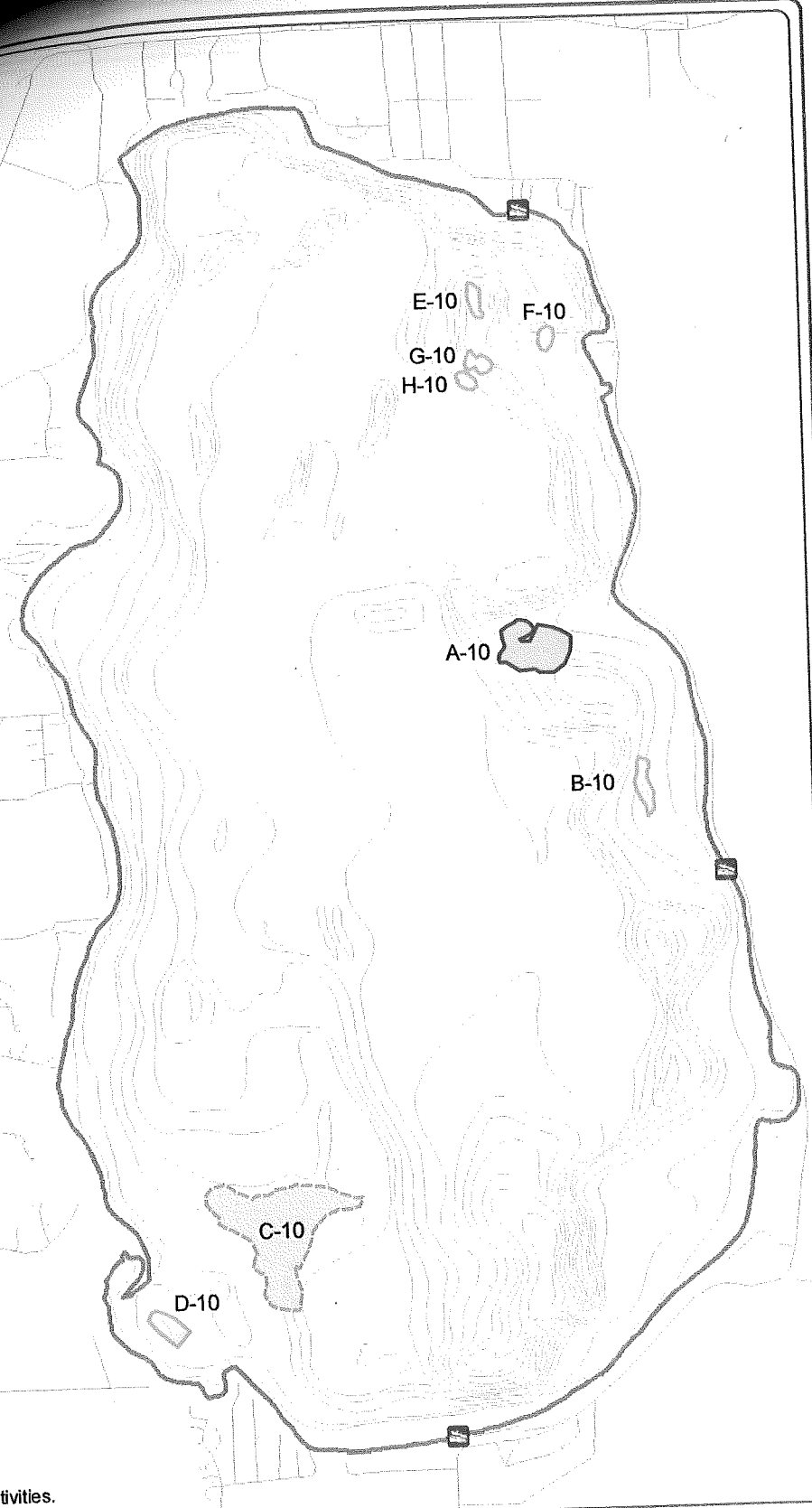
Area	Ave Depth
8.5	7.6
2.3	9 feet
2.0	5 feet
1.0	4 feet
0.9	4 feet
1.1	8 feet
0.7	12 feet

Treatment Areas: Granular 2,4-D at 200 lbs/acre

Site	Conditional Acres	Permit Acres	Ave Depth
A-10	5.3	7.9	12 feet
Sub Total	5.3	7.9	

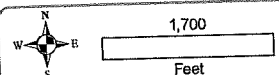
Treatment Areas: Dual liquid 2,4-D applications spaced 24 hrs apart @ 1.5ppm each

Site	Conditional Acres	Permit Acres	Volume (acre-feet)
C-10	22.7	24	268.8
Sub Total	22.7	24.0	
Grand Total	36.5	39.5	



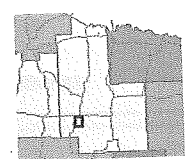
Please Note:

1. Entire area of lake used for fishing.
2. Proposed Treatment areas are used for all boating activities.



Onterra LLC
 Lake Management Planning
 135 South Broadway Suite C
 De Pere, WI 54113
 920.338.8860
 www.onterra-llc.com

Sources:
 Roads & Hydro: WDNR
 Aquatic Plants: Onterra 2010
 Bathymetry: WDNR - Digitized by Onterra
 Map date: May 20, 2010
 File Name: MeL_T2010_EWM_Perm1.mxd



Extent of large map shown in red.

- 2010 Final Treatment Areas**
- 200 lbs/acre granular 2,4-D
 - 150 lbs/acre granular 2,4-D
 - Liquid 2,4-D - Split 1.5 ppm

Lake Metonga
 Forest County, Wisconsin
2010 Final EWM
Treatment Areas