





**LEGEND**

-  EMERGENT AND FLOATING LEAVED (LILYPADS, PICKERELWEED, SWAMP LOOSESTRIFE)
-  LOW GROWING (CHARA, NAIAD, ELODEA, WILD CELERY)
-  MID TO FULL DEPTH (NATIVE PONDWEEDS, WATER STARGRASS, NORTHERN MILFOIL)
-  NO AQUATIC PLANTS

**LAKE CHEMUNG  
MANAGEMENT GOAL MAP**

LIVINGSTON COUNTY, MICHIGAN

1" = 1000'  
0 1000'

**Progressive**

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## LAKE CHEMUNG PLANT CONTROL

2003

Date	Comments	Work Type	Quantity	Unit of Measure	Cost	Remaining Balance
02/03/2003	Public hearing on program at Genoa Twp	Meeting			\$0.00	
03/18/2003	Hearing of apportionment @ Genoa TWP Board meeting	Meeting			\$0.00	
04/21/2003	Thermocline Determination	Survey			\$0.00	
05/06/2003	Initial AVAST Treatment	Avast	10.60		\$25,446.00	
05/06/2003	House Count = 300 homes/thermocline determination	Survey			\$0.00	
05/06/2003	Initial Plant Survey; EWM and Large-Leaved Pondweed prevalent	Plant Survey			\$0.00	
05/08/2003	AVASTest Sampling	AvasTEST	4.00		\$300.00	
05/20/2003	AVASTest Sampling	AvasTEST	4.00		\$300.00	
06/02/2003	AVAST Treatment	Avast	7.60		\$18,240.00	
06/05/2003	AVASTest Sampling	AvasTEST	4.00		\$300.00	
06/18/2003	EWM dead and dying - stems still prevalent	Plant Survey			\$0.00	
06/19/2003	Algae treatment	Algae Control	39.00		\$2,184.00	
07/08/2003	AvasTest sampling	AvasTEST	4.00		\$300.00	
08/14/2003	AVAS Survey-no milfoil noted	Plant Survey			\$0.00	
<b>Totals:</b>					<b>\$47,070.00</b>	

## LAKE CHEMUNG PLANT CONTROL

2004

Date	Comments	Work Type	Quantity	Unit of Measure	Cost	Remaining Balance
05/24/2004	Initial Plant Survey- Treatment for Chara and Curly-leaf recommended	Plant Survey			\$0.00	
06/01/2004	1-acre of Chara control added on to original survey map	Plant Survey			\$0.00	
06/02/2004	Initial treatment	Aquathol	9.00		\$1,761.30	
06/02/2004	Initial treatment	Algae Control	7.50		\$438.85	
06/22/2004	Curly-leaf pondweed treatment	Aquathol	20.00		\$3,914.00	
06/22/2004	Chara treatment	Algae Control	10.00		\$576.80	
06/30/2004	Third treatment-Chara control (no charge)	Copper Sulfate	10.00		\$0.00	
07/02/2004	Fourth Treatment-Chara control	Copper Sulfate	22.00		\$1,257.30	
07/06/2004	Plant survey-abundant stargrass, and chara	Plant Survey			\$0.00	
07/12/2004	Plant survey- Chara treatment areas noted	Plant Survey			\$0.00	
07/19/2004	Chara treatment	Algae Control	12.00		\$692.16	
07/29/2004	Plant survey- abundant stargrass and chara	Plant Survey			\$0.00	
08/04/2004	Association meeting	Meeting			\$0.00	
08/05/2004	Chara treatment	Algae Control	11.50		\$663.32	
08/18/2004	Detailed AVAS survey - one small area of EWM	Plant Survey			\$0.00	
11/03/2004	Association meeting	Meeting			\$0.00	
12/08/2004	Storm drain field evaluation	Survey			\$0.00	
<b>Totals:</b>					<b>\$9,303.73</b>	

## LAKE CHEMUNG PLANT CONTROL

2005

Date	Comments	Work Type	Quantity	Unit of Measure	Cost	Remaining Balance
04/21/2005	DEQ protocol water quality sampling & STS outfall sampling	Sampling			\$0.00	
05/04/2005	Meeting at International Society to discuss drain report	Meeting			\$0.00	
05/17/2005	Initial plant survey w/Pike - noted proposed treatment areas for exotics and Chara	Plant Survey			\$0.00	
05/23/2005	DEQ permit fee	Permit Fee			\$650.00	
05/23/2005	Initial treatment	Algae Control	15.00		\$890.40	
05/23/2005	Initial treatment	Aquathol	13.00		\$2,618.20	
05/23/2005	Initial treatment	2,4-D	3.50		\$349.80	
05/23/2005	Initial treatment	Reward	1.00		\$201.40	
06/17/2005	Post-treatment inspection w/Pike - noted additional areas to be treated	Plant Survey			\$0.00	
06/22/2005	Follow-up treatment	Reward	20.00		\$4,020.08	
06/22/2005	Follow-up treatment	Algae Control	35.00		\$2,077.60	
07/12/2005	Post-treatment and pre-harvest survey w/Pike	Plant Survey			\$0.00	
07/20/2005	Begin harvesting	Harvesting	40.00		\$10,000.00	
07/25/2005	Harvest inspection - added about 4 acres to total	Plant Survey			\$0.00	
08/09/2005	DEQ protocol water quality sampling	Sampling			\$0.00	
08/15/2005	DEQ protocol plant survey - some Chara treatment areas noted	Plant Survey			\$0.00	
08/19/2005	Follow-up treatment	Algae Control	8.00		\$474.88	
<b>Totals:</b>					<b>\$21,282.36</b>	

## LAKE CHEMUNG PLANT CONTROL

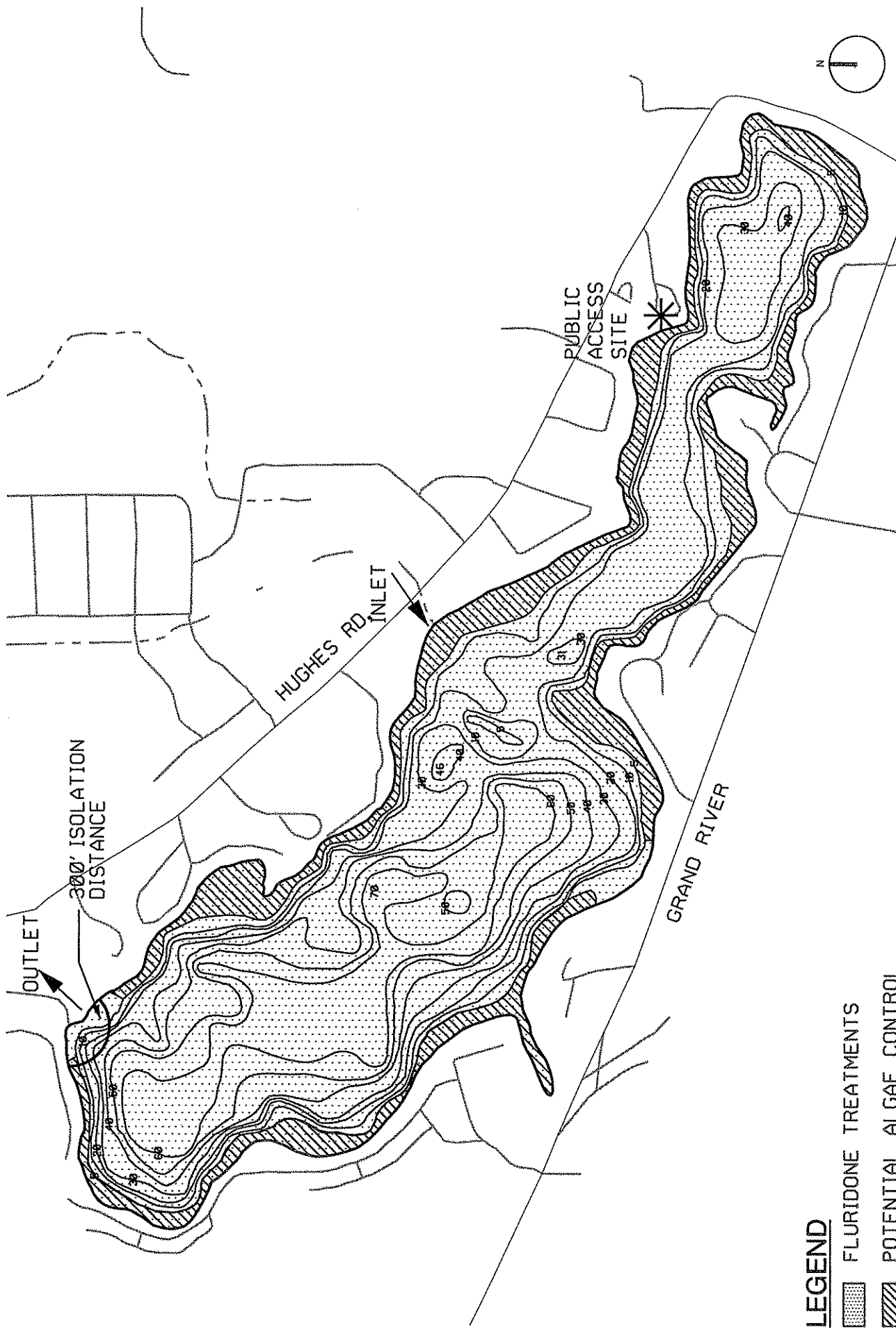
2006

Date	Comments	Work Type	Quantity	Unit of Measure	Cost	Remaining Balance
05/01/2006	Plant Survey w/Jack pike - abbreviated survey checking complaint areas	Plant Survey			\$0.00	
05/03/2006	Algae treatment	Algae Control	6.00		\$366.00	
05/09/2006	Plant Survey w/Jack Pike & Gerry Matevia - Curly-leaf prevalent, some EWM	Plant Survey			\$0.00	
05/17/2006	Initial treatment	Algae Control	3.00		\$183.00	
05/17/2006	Initial treatment	Reward	14.00		\$2,898.00	
05/17/2006	Initial treatment	Add. Triclopyr	11.50		\$1,610.00	
05/17/2006	Initial treatment	Triclopyr	11.50		\$4,387.25	
06/07/2006	Plant Survey w/Gerry Matevia - noted areas needing follow-up treatment	Plant Survey			\$0.00	
06/13/2006	Follow-up treatment	Algae Control	3.75		\$228.90	
06/13/2006	Follow-up treatment	Reward	12.00		\$2,485.20	
06/21/2006	Plant Survey w/Jack Pike - noted areas still needing harvest work	Plant Survey			\$0.00	
06/23/2006	Mechanical harvesting June 14 - 23	Harvesting	38.00		\$9,785.00	
06/28/2006	Algae treatment	Algae Control	10.00		\$610.40	
07/18/2006	Plant Survey	Plant Survey			\$0.00	
07/26/2006	Algae Treatment	Algae Control	5.50		\$335.72	
07/26/2006	Potomogetons Treatment	Aquathol	1.00		\$207.10	
07/26/2006	EWM Treatment	Reward	1.75		\$358.75	
07/26/2006	Wild celery treatment	Nautique	8.50		\$3,011.13	
09/19/2006	DEQ protocol AVAS survey - good diversity of pondweeds, water stargrass and celery	Plant Survey			\$0.00	
<b>Totals:</b>					<b>\$26,466.45</b>	

## LAKE CHEMUNG PLANT CONTROL

2007

Date	Comments	Work Type	Quantity	Unit of Measure	Cost	Remaining Balance
01/01/2007	DEQ permit fee reimbursement	Permit Fee			\$650.00	
03/05/2007	Public Hearing @ Genoa TWP Hall	Meeting			\$0.00	
05/07/2007	Public Hearing on the SAD roll @ Genoa TWP Hall	Meeting				
05/14/2007	Initial survey - noted areas of EWM and curly-leaf for treatment	Plant Survey				
05/22/2007	Curly Leaf Pondweed TMT	Aquathol	7.50	acres	\$1,596.00	
05/22/2007	Milfoil and Curly Leaf TMT	Reward	17.00	acres	\$3,617.60	
05/22/2007	Algae Control TMT (confirm price)	Copper Sulfate	14.00	acre	\$878.08	
06/01/2007	Plant survey w/Al Hough and Gerry Matevia - noted areas needing treatment	Plant Survey				
06/12/2007	Chara Algae Control TMT	Copper Sulfate	12.00	acre	\$752.64	
06/12/2007	Milfoil and Curlyleaf TMT	Reward	16.00	acre	\$3,404.80	
06/12/2007	Curlyleaf TMT	Aquathol	3.75	acres	\$798.00	
06/27/2007	Plant survey - noted areas needing treatment and/or harvesting	Plant Survey				
07/02/2007	Milfoil TMT	Reward	1.50	acres	\$319.20	
07/02/2007	Algae Control TMT	Copper Sulfate	8.25	acre	\$517.44	
07/13/2007	Mechanical Harvesting between July 13 and July 19	Harvesting	38.00	acres	\$10,070.00	
07/19/2007	Harvest inspection w/Gerry Matevia - noted areas needing work	Plant Survey				
07/24/2007	Chara Algae TMT	Copper Sulfate	9.50	acre	\$595.84	
07/24/2007	Milfoil TMT	Reward	7.50	acres	\$1,596.00	
07/24/2007	Eel Grass and/or Naiads TMT	Nautique	5.50	acres	\$2,002.00	
08/17/2007	Survey with Michael, Al; most areas looked good; some patchy milfoil, wild celery, sparse Illinois	Plant Survey				
09/14/2007	DEQ protocol AVAS survey	Plant Survey				
<b>Totals:</b>					<b>\$26,797.60</b>	



**LEGEND**

 FLURIDONE TREATMENTS

 POTENTIAL ALGAE CONTROL

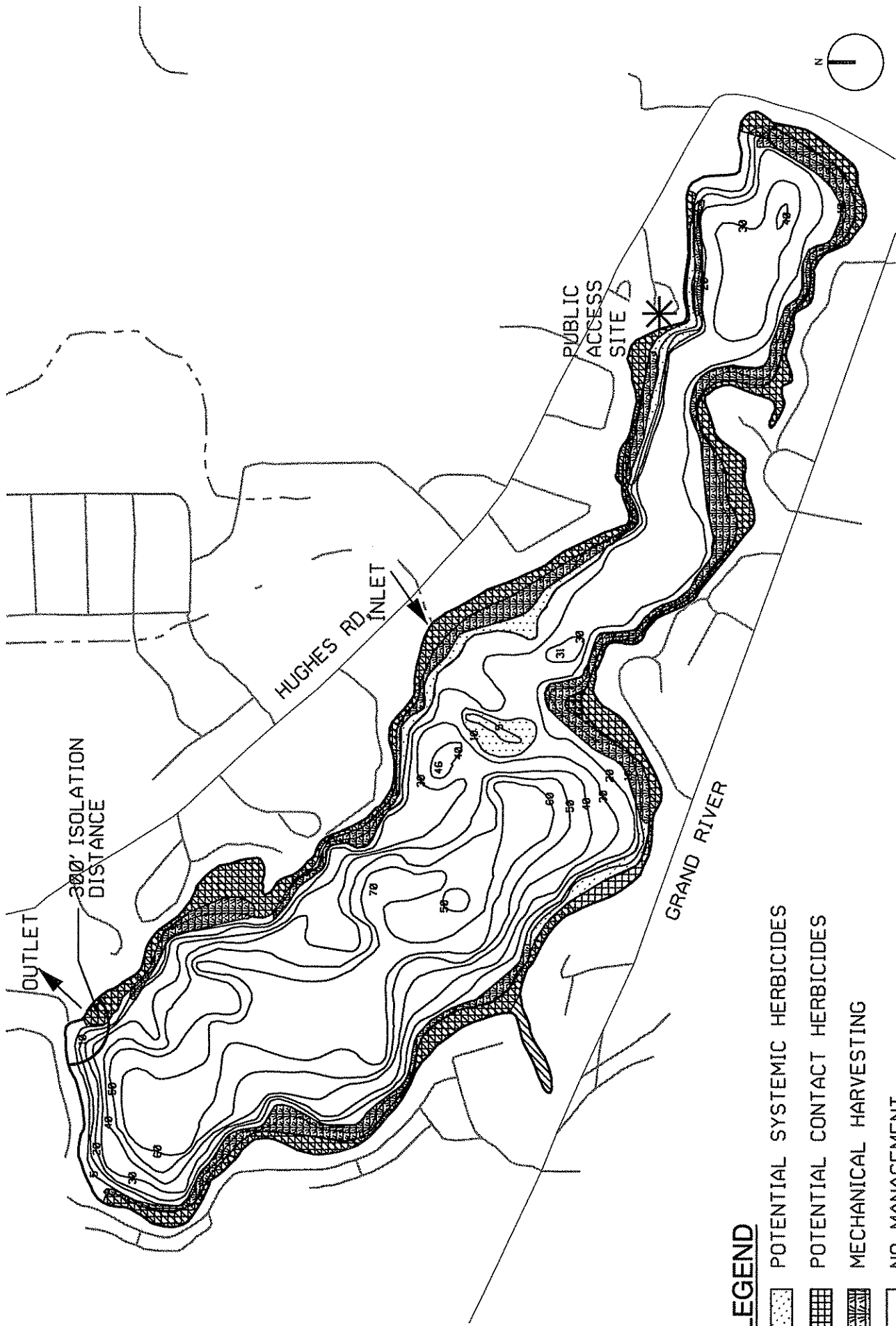
**LAKE CHEMUNG  
ANNUAL VEGETATION MANAGEMENT 2008 MAP**

LIVINGSTON COUNTY, MICHIGAN





1" = 1000'  
0 1000'

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**LEGEND**

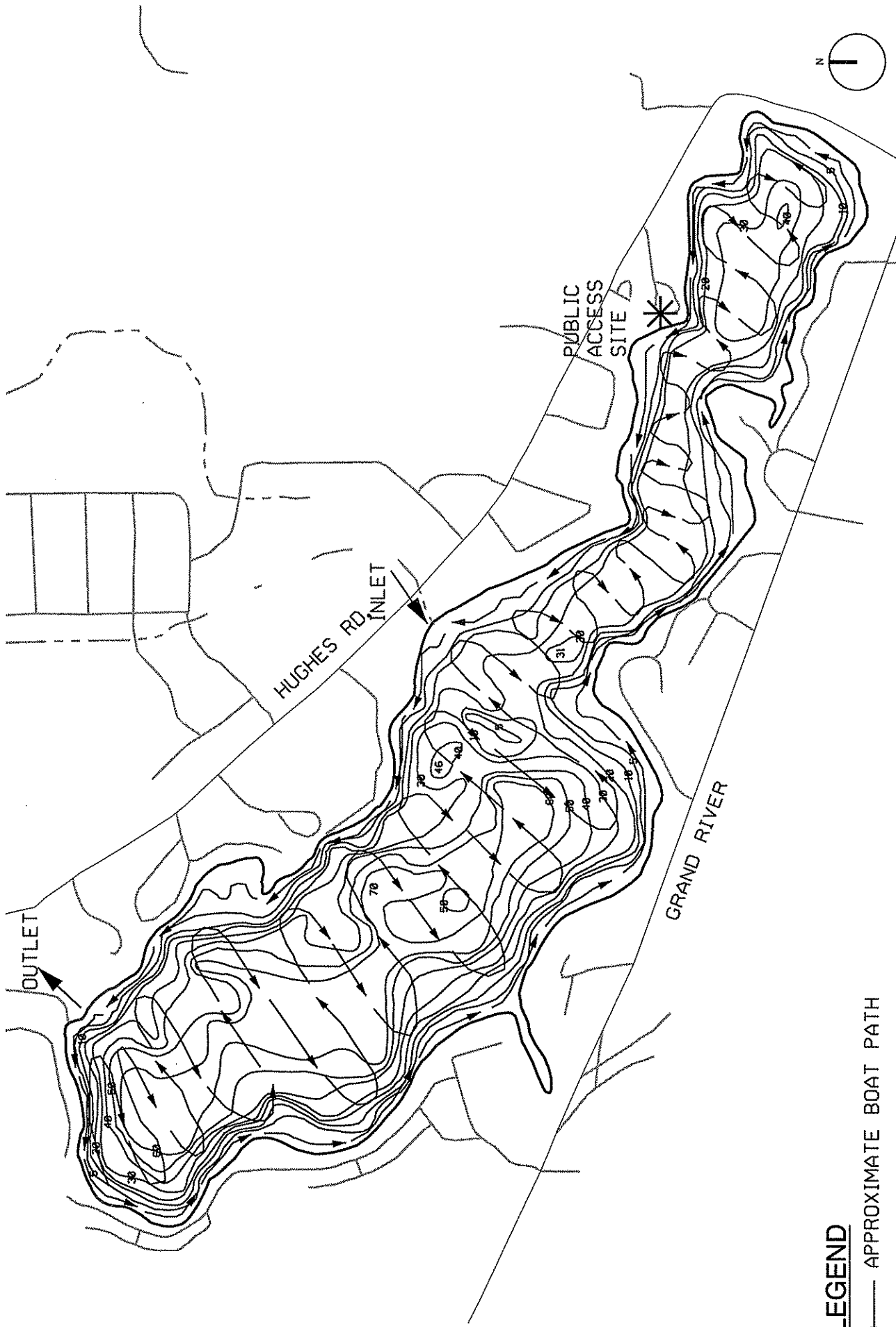
-  POTENTIAL SYSTEMIC HERBICIDES
-  POTENTIAL CONTACT HERBICIDES
-  MECHANICAL HARVESTING
-  NO MANAGEMENT

**LAKE CHEMUNG  
ANNUAL VEGETATION MANAGEMENT  
PLAN 2009 AND 2010 MAP**

LIVINGSTON COUNTY, MICHIGAN



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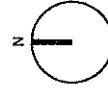


**LEGEND**

— APPROXIMATE BOAT PATH

**LAKE CHEMUNG  
FLURIDONE DISTRIBUTION MAP**

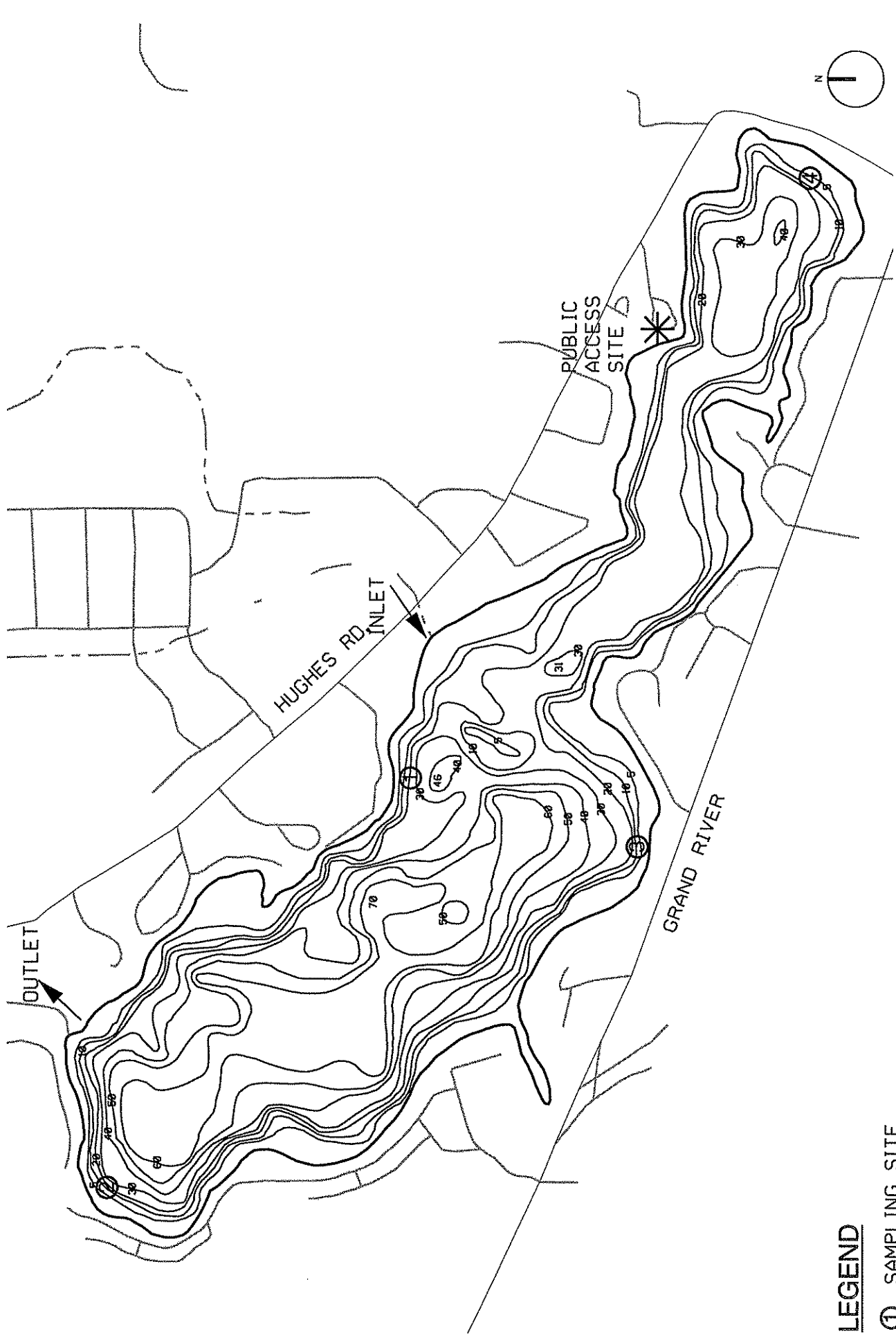
LIVINGSTON COUNTY, MICHIGAN



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Lake Chemung Volume Calculations for Determining Fluridone Dosage

	Contour	Area	
	0	313 Acres	
	5	251 Acres	
	10	226 Acres	
			<b>6 ppb treatment</b>
		Acre-Feet	Fluridone Needed @ 6 ppb
Volume for Upper 5 foot Strata		1,407.15	
Donut Hole Volume (Area of 5 foot multiplied by 5 feet)		1,255.00	
Donut Volume (Total - Donut Hole)		152.15	2.48 Quarts
Volume for 5 to 10 foot Strata		1,191.95	
Total Donut Hole Volume (0-10 foot Strata)		2,446.95	39.93 Quarts
Total			<u>42.42 Quarts</u>
	<b>TOTAL</b>		<b>10.60 Gallons</b>



**LEGEND**

- ① SAMPLING SITE

**LAKE CHEMUNG  
FLURIDONE RESIDUE SAMPLING LOCATION MAP**

LIVINGSTON COUNTY, MICHIGAN

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