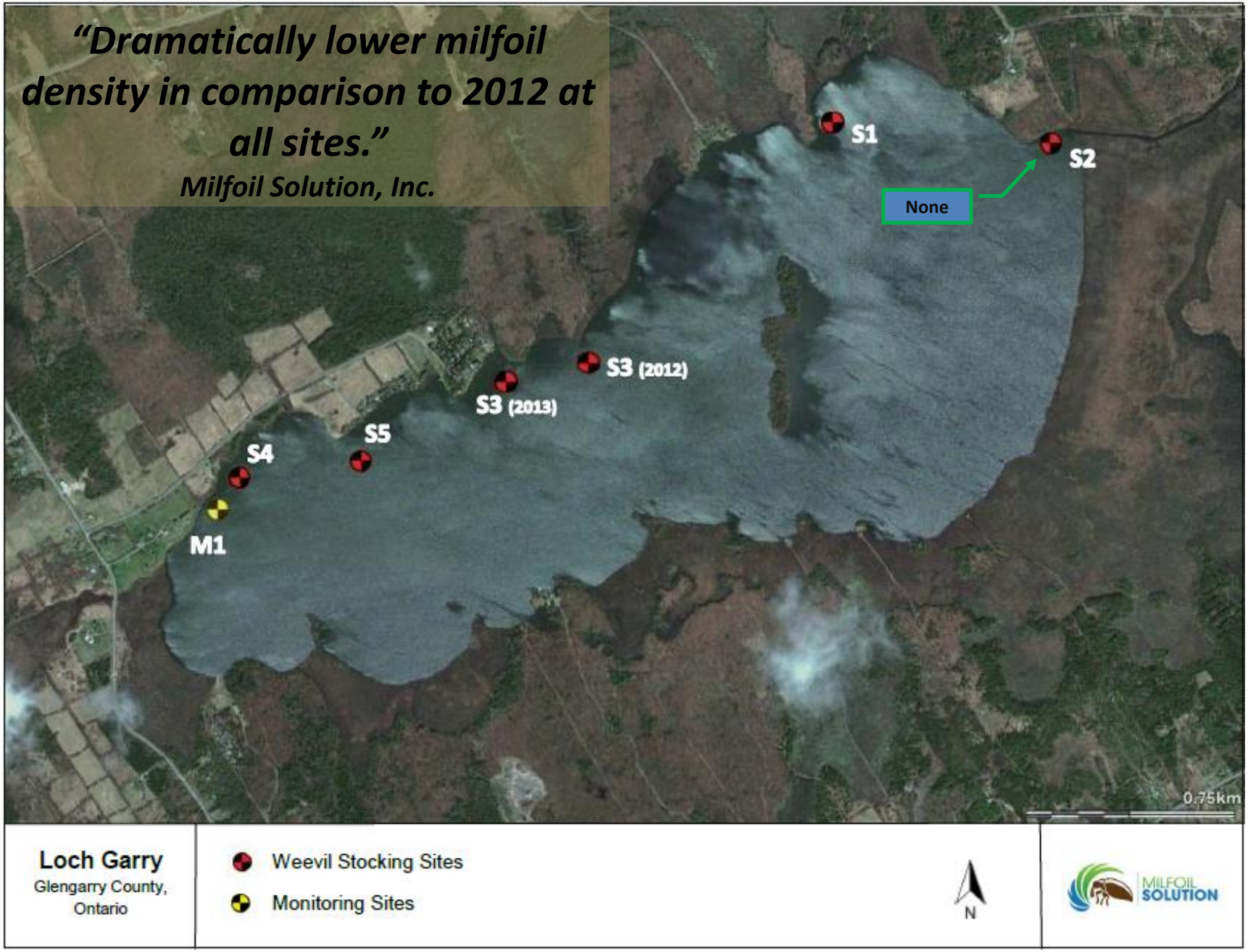
Garry Waters 2013 Progress Report

A grassroots initiative between
the Township of North Glengarry and
The Loch Garry Lake Association
to repair Loch Garry.

50,000 weevils were stocked at four sites in Loch Garry in 2013

Site	Initial Survey/ Stocking Date	Final Survey Date	Number of Weevils
S1	July 19	September 5	12,500
S3	July 24	September 5	12,500
S4	July 14 / July 19	September 5	12,500
S5	July 24	September 5	12,500
M1	July 23	September 5	0
		Total	50,000


"Dramatically lower milfoil density in comparison to 2012 at all sites."
Milfoil Solution, Inc.
S1
S2
None
S3 (2012)
S3 (2013)
S5
S4
M1
0.75km
Loch Garry
Glengarry County, Ontario
Weevil Stocking Sites
Monitoring Sites
N
MILFOIL SOLUTION

"damage caused by weevil larvae was identified in the follow-up survey at all sites that were stocked"

Milfoil Solution, Inc.

Site	July density (stems/m2)	September density (stems/m2)	2012 density (stems/m2)
S1	204	63	483
S2	--	--	409
S3	181	133	480
S4	66	11	318
S5	219	156	--
M1	96	63	494

- Average decrease of 44% at all sites
- Average decrease of 16% more than monitoring site
- Eurasian milfoil decreased in ALL sites
- Monitoring site decreased approximately 30%

"Sites established at Loch Garry showed the greatest decrease in milfoil"

Milfoil Solution, Inc.

Lake	Average Initial Density (stems/m2)	Average Final Density (stems/m2)	% increase decrease
Loch Garry, S3	181	133	27%
Loch Garry, S5	219	156	29%
Big Cedar, S3	137	122	11%
Big Cedar, S6	122	167	36%
Long Lake, S5	119	133	12%
Rondeau Bay, S3	66	140	111%

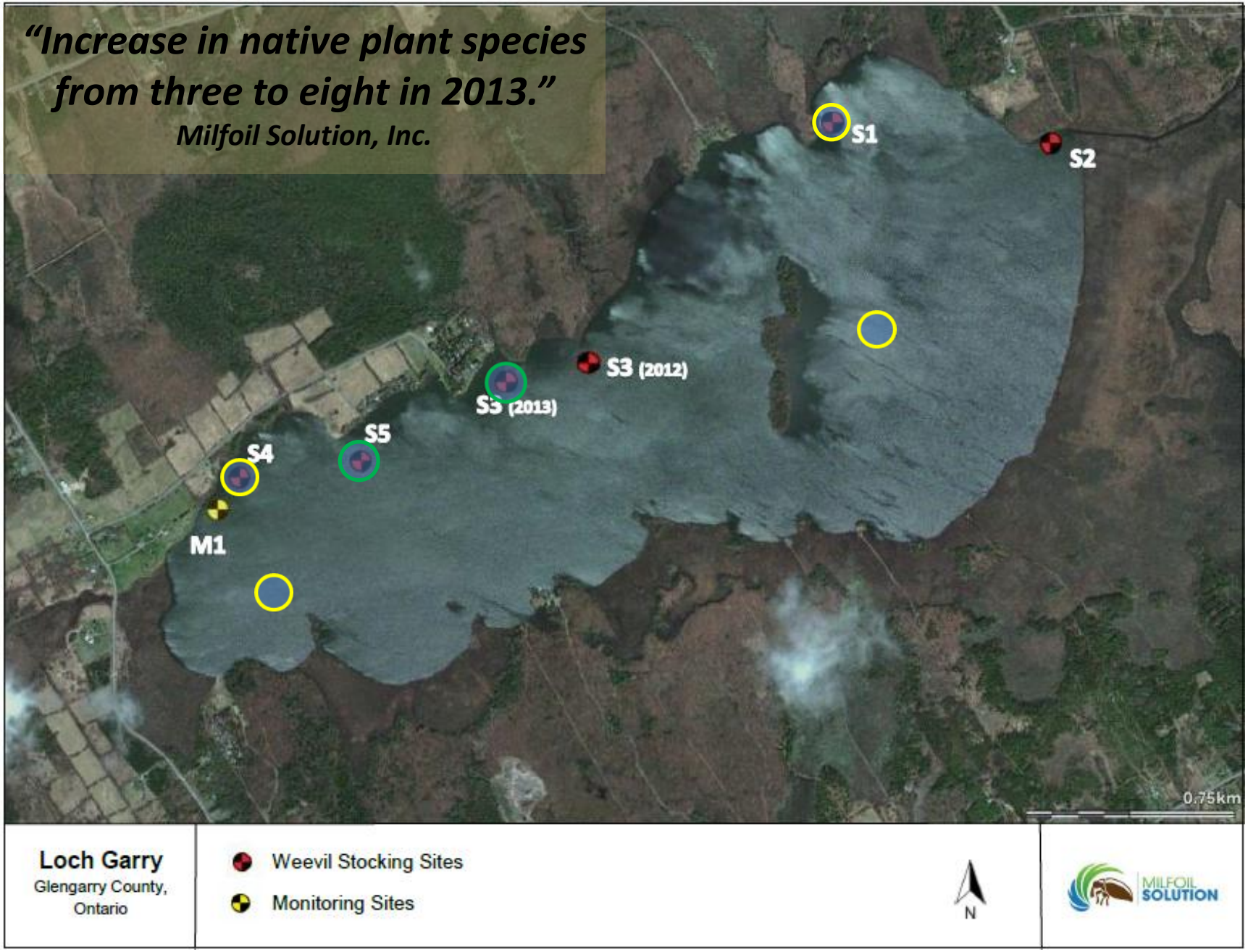
Key takeaways for 2013

- Damage observed within milfoil beds in initial survey indicates that a weevil population overwintered and is becoming established. Weevils seen at the monitoring site further indicates overwintering and migration to denser sites.
- All sites significantly decreased in EWM; the stocked sites showed a decrease greater than the monitoring site.
- Milfoil at two stocking sites completely collapsed at start of 2013
- We have every reason to think that we will benefit next year from successful overwintering and a natural early start to the year which will complement the past two years success.
- Cyclic growth in the future can be contained by the continuing presence of weevils.

2014 Objectives and Costs

- ***Restock established sites:*** Maintain weevil stocking at current sites only where warranted
- ***Plan for new sites:*** Identify new sites to foster continued dispersion of weevils
- ***Maintain early start:*** Signing a contract in January will advance us in the queue.

Initial & follow-up survey and final report	50,000 weevils	LGLA participation	Cost to North Glengarry
$7,000	$45,000	$10,000	$42,000 plus HST


"Increase in native plant species from three to eight in 2013."
Milfoil Solution, Inc.
S1
S2
S3 (2012)
S3 (2013)
S4
S5
M1
0.75km
Loch Garry
Glengarry County, Ontario
Weevil Stocking Sites
Monitoring Sites
N
MILFOIL SOLUTION

2014 and beyond

- Success following three seasons of stocking and two seasons of overwintering will allow us to better gauge the number of weevils and time required to control the milfoil.
- Plan for phased reduction in annual stocking as success continues and grows.

Mill Pond

- Milfoil remained minimal in 2013.
- Early spring rake would allow for removal of pondweed roots and entire plant.
- Mid-summer skimming to remove algae bloom trapped in weeds would improve cosmetics of Mill Pond.
- Survey by Milfoil Solution, Inc. to monitor the spread of existing milfoil recommended for 2014.

Thank you to our corporate sponsors: Caisse Populaire de la Vallée, Alexandria Moulding, MacEwen Petroleum, Scotiabank and Glengarry Mutual Insurance

Thank you to the Council and Management of The Township of North Glengarry