SCATTERING RICE LAKE SUMMARY AND CONCLUSIONS

The point-intercept survey results for this lake revealed a significant reduction in EWM lakewide and at three individual treatment sites (Figure 13). Overall there was a 53.6% reduction in EWM on Scattering Rice Lake after the treatment. Figure 14 displays the number of pointintercept locations exhibiting each of the EWM rake fullness ratings within the areas treated on Scattering Rice Lake. The figure shows that out of the 125 locations that contained EWM before the treatment, 59 had a rake fullness of greater than one (Figure 14). After the treatment, only 18 of these locations contained EWM rake fullness rating of greater than one (Figure 14).

The peak biomass survey showed that in general, EWM was reduced but a few areas still contained treatable amounts of EWM (Maps 4 & 14). The lakeward edges of Scat-A were reduced to scattered after the treatment, but the core of the colony still contained highly dominant EWM (Map 14). The upstream portion of this site also increased in EWM density, but was not treated in 2008 due to navigation hazards. The area is proposed for treatment in 2009. EWM density was reduced at all other treatment sites and reduced in extent at two of those sites (Table 5). Because Scat-D-09 is located in relatively deeper water and contains dense EWM, it is recommended to be treated at a slightly higher herbicide dose (175 lbs/acre). An additional treatment site is proposed for 2009 (Scat-C-09, Map 14).

As mentioned in the Treatment Monitoring section, native plant frequencies were monitored in Scatting Rice Lake during the post treatment survey (Figure 15). Two plants were found to have a statistically significant reduction in frequency within the 2008 treatment areas: northern water milfoil (9.0) and Illinois pondweed (11.7). Illinois pondweed is a monocot, and therefore should not be susceptible to the dicot-specific herbicide. Seven native plants were found to have significantly increased their frequency within the 2008 treatment areas, including two dicot species: coontail and common bladderwort (Figure 15).

			EWM Occurrence				EWM Density	/	1
Site	Acres	Dose	N	% Change	Criteria Met	Before	After	Criteria Met	Notes
ScRice - A	9.3	100	36	78.9	Yes	D=2 & D=1	D=2, D=1, &	Yes	Remaining colonies are much smaller than
							None		original.
ScRice - B	1.8	150	4	0.0	ISS	D=3	D=2	Yes	All sub-sample locations contained EWM
									during the August '07 & '08 surveys.
ScRice - C	3.5	100	4	33.3	ISS	D=2	D=2 & Scat	No (?)	Shallower part of colony was reduced.
ScRice - D1	16.7	100	76	60.0	Yes	D=3 & D=2	D=2 & Scat	Yes	Much EWM remains in location including
									D=3 area extending north up-river.
ScRice - D2	18.0	150	60	42.9	No	D=3 & D=3	D=2 & Scat	Yes	Much EWM remains in location, especially
									in western part

Table 5.	Evaluation	of 2008	EWM	treatment	on Sc	attering	Rice L	.ake f	following	success
criteria st	andards. N	l= Numbe	er of po	oint-intercep	ot sub-s	sample lo	cations	S.	_	

ISS = Insuficient Sample Size



Figure 13. EWM percent occurrence in point-intercept locations displayed by treatment site on Scattering Rice Lake. Please note only those treatment sites with eight or more point-intercept locations are displayed on the graph. Statistical significance is determined by Chi-square distribution analysis (alpha = 0.05).



Scattering Rice Lake.



Figure 15. Native plant change in percent frequency from 2007 to 2008 within treatment areas on Scattering Rice Lake.





Appendix A Scattering Rice Lake Vilas County, Wisconsin

2008 Eurasian Water Milfoil Treatment Point-Intercept Monitoring Locations



Extent of large map shown in red.

