WATERSMEET LAKE SUMMARY AND CONCLUSIONS

Although tens of acres of highly dominant and surface matting EWM were mapped within Watersmeet Lake and the associated section of the Eagle River in 2007, only 26.3 acres were treated in 2009. Because of the great abundance of this exotic species, an experimental approach was taken to determine efficacy in these highly dominant areas that are exposed to flow. Three colonies of surface matting EWM were chosen within the Eagle River (River-A, River-B, and River-C) and three colonies were chosen in Watersmeet Lake, proper (Wat-C, Wat-G, and Wat-I; Map 10).

Overall, a significant reduction in EWM by 42.4% was observed within Watersmeet Lake and the associated portion of the Eagle River (Figure 29). A significant reduction was also observed at three of the six sites treated (Maps 10 and 20, Figure 29). Of the 89 sub-sample locations that contained EWM before the treatment, 58 had a rake fullness rating of greater than one (Figure 30). While 50 locations still contained EWM after the treatment, only seven had a rake fullness rating of greater than one (Figure 30), showing a reduction in EWM density. Based on the peak biomass survey, the EWM in all the areas treated was reduced by at least two levels of density (Maps 10, 20; Table 11).

Based on the 2008 peak biomass EWM survey, there are over 105 acres of EWM that warrant treatment in 2009, mostly consisting of scattered or greater areas of EWM (Map 20). Two areas near Wat-F and Wat-E have dense colonies of EWM and warrant treatment, but cannot be fully accessed due to navigational hazards like partially submersed stumps and rocks (Map 10).

Five native species were found to have significantly increased within the 2008 treatment areas including two dicots; coontail and common bladderwort (Figure 31). A statistically significant reduction in native species frequency was not observed within the treatment areas (Figure 31).

Table 11. Evaluation of 2008 EWM treatment on Watersmeet Lake following success criteria standards. N= Number of point-intercept sub-sample locations.

			EWM % Occurrence			EWM Density			
Site	Acres	Dose	N	% Change	Criteria Met	Before	After	Criteria Met	Notes
River - A	6.0	150	24	45.5	No	D=3	Scat	Yes	
River - B	4.5	150	16	14.3	No - NSS	D=3	Highly Scat & D=1	Yes	
River - C	7.3	150	28	78.3	Yes	D=3 & D=2	Scat & D=1	Yes	
Wat - C	4.4	150	16	0.0	No - NSS	D=3	D=1	Yes	All sub-sample locations contained EWM during the August '07 & '08 surveys.
Wat - G	0.7	150	4	75.0	ISS	D=3	D=1	Yes	
Wat - I	3.5	150	12	60.0	Yes	D=3	Scat	Yes	

ISS = Insuficient Sample Size
NSS = Not Statistically Significant

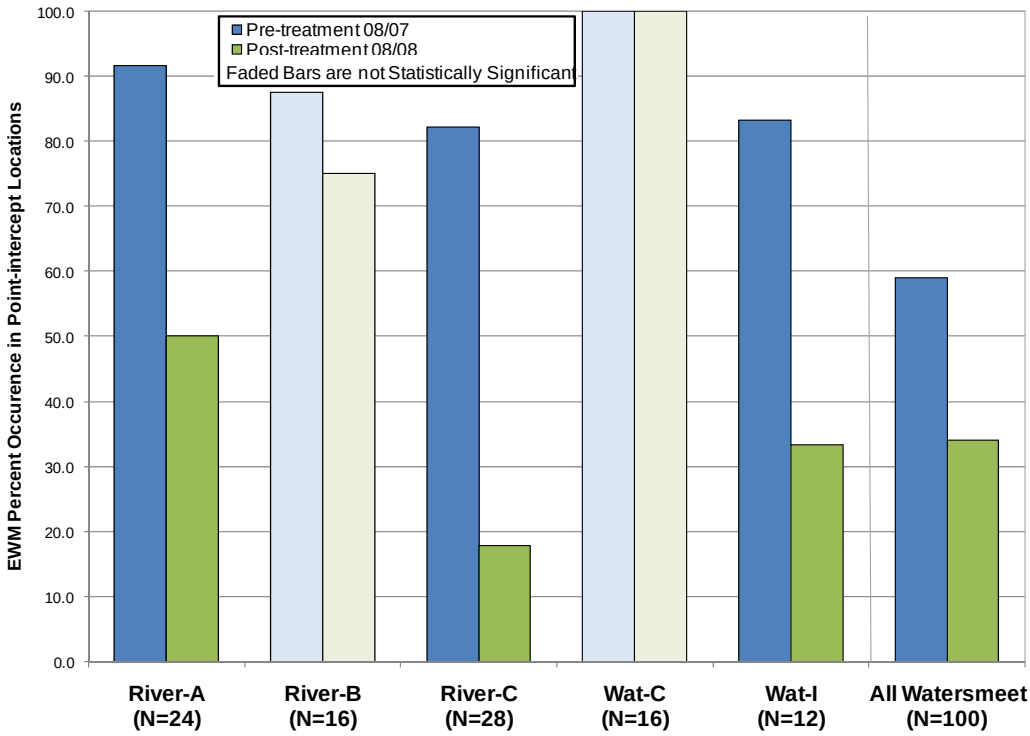


Figure 29. EWM percent occurrence in point-intercept locations displayed by treatment site on Watersmeet Lake. Please note only those treatment sites with eight or more point-intercept locations are displayed on the graph. Statistical significance is determined by Chi-square distribution analysis (alpha = 0.05).

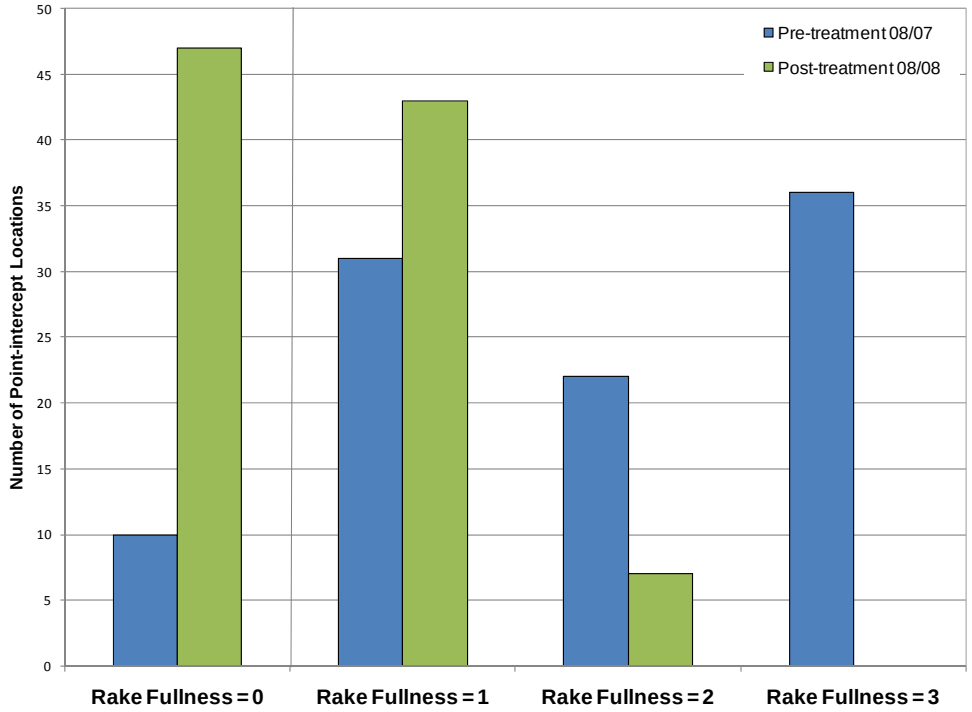


Figure 30. EWM rake fullness distribution within treated areas on Watersmeet Lake.

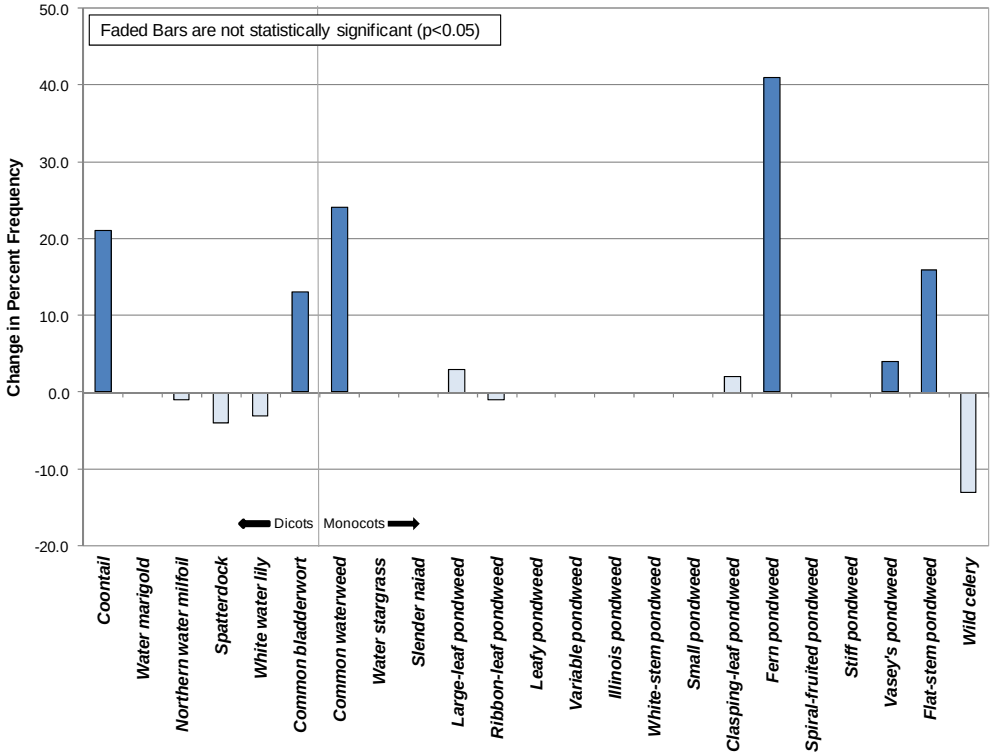
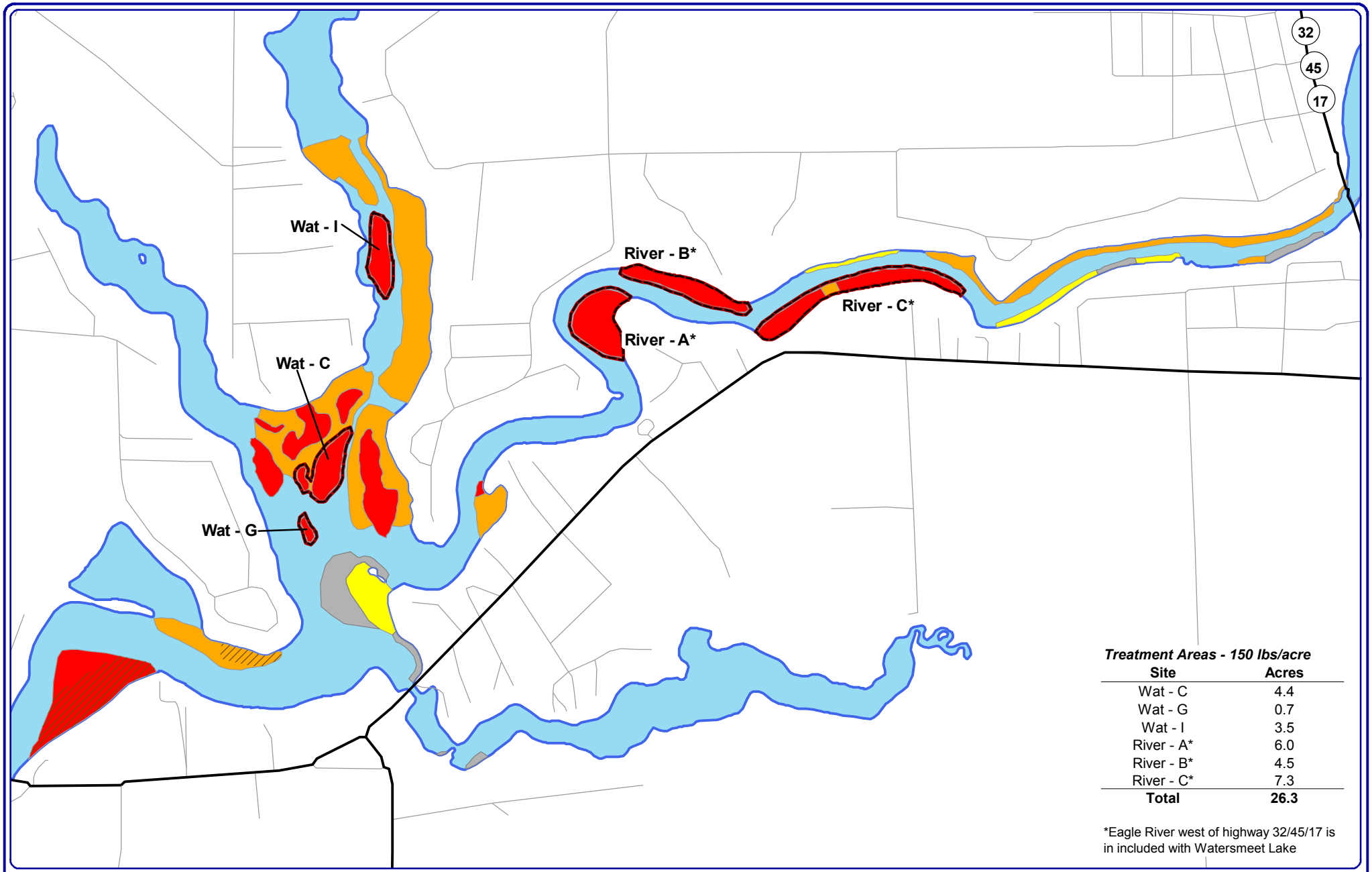


Figure 31. Native plant change in percent frequency from 2007 to 2008 within treatment areas on Watersmeet Lake.



Treatment Areas - 150 lbs/acre

Site	Acres
Wat - C	4.4
Wat - G	0.7
Wat - I	3.5
River - A*	6.0
River - B*	4.5
River - C*	7.3
Total	**26.3**

*Eagle River west of highway 32/45/17 is in included with Watersmeet Lake

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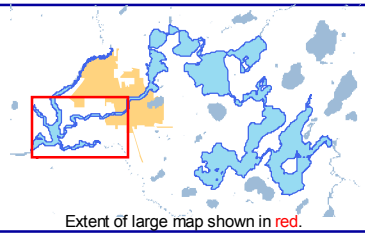
www.onterra-eco.com

Source:
Roads & Hydro: WDNR
Aquatic Plants: Onterra, 2008
Map Date: December 31, 2008
File Name: ERC_2008Treat_Watersmeet.mxd



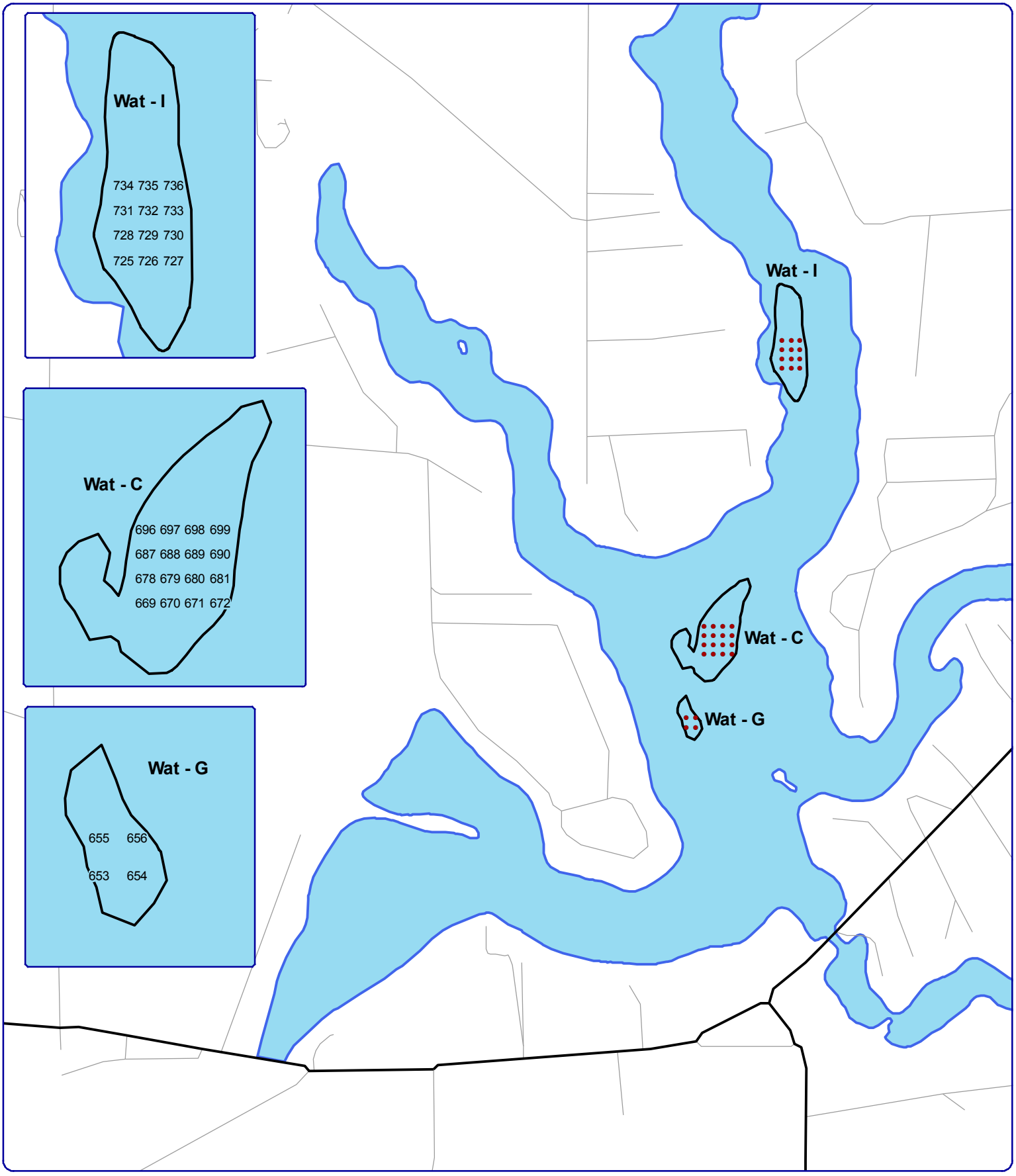
Extent of large map shown in red.

Legend

2007 EWM Colonies
- Highly Scattered *(none found)*
- Scattered
- Dominant
- Highly Dominant
- Surface Matting

2008 Treatment Areas
- Proposed Treatment Area (150 lbs/acre)
- Proposed Treatment Area (100 lbs/acre)
- Navigational Hazard Area

Map 10
Watersmeet Lake
Vilas County, Wisconsin
2008 EWM Final Treatment Areas



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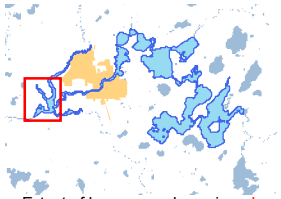
Sources:
Roads & Hydro: WDNR
Aquatic Plants: Onterra, 2008
Map date: December 30, 2008

File Name: ERC_WatMeet_EWM_Treat_T08_PI.mxd



Extent of large map shown in red.

Legend

\# Point-intercept sub-sample location

2008 EWM Treatment Area

Appendix A

Watersmeet Lake

Vilas County, Wisconsin

2008 EWM Treatment Point-Intercept Monitoring Locations