

Table of Contents

Introduction and Physical Settings	1
Watershed Modeling	3
Runoff Sampling	5
In-lake Water Quality	7
Water Column Profiles	10
Chlorophyll a & Algae	14
Zooplankton	17
Aquatic Vegetation	20
Discussion	24
Recommendations	28
References	29
Appendix A – Education	31
Appendix B – Watershed modeling data	33
Appendix C – Zooplankton Report	42
Appendix D – Algae Reports	69

Figures & Tables

Ward Lake level	2
Ward Lake land-use	3
Sampling Sites	5
Runoff Nutrients	6
TN : TP	8
2008 Secchi depth	9
Average historical secchi depth	9
Temperature profile	10
Dissolved oxygen profile	11
Specific conductance profile	12
pH profile	13
Chlorophyll a	14
Concentration of algae	15
Algal Divisions	16
Zooplankton percentage	17
Zooplankton #/m ³	18
Zooplankton diversity	19
Point intercept map	20
Rake Fullness	21
Aquatic macrophyte species frequency	23
Wisconsin eco-regions	24