Library Reference 2.7.10

Progress towards water quality improvement: Metaphyton. AMP 2009 Annual Report. (Assessment Measure)

AMENDED CONSENT JUDGMENT GOAL

Reduction of the areal coverage of metaphyton (filamentous algae) to improve aesthetic quality of the lake for recreational use, and improve conditions for growth of aquatic plants.

Hypotheses to be tested:	**Status:**
Metro improvements and watershed phosphorus load reductions result in reduced areal coverage of metaphyton in nearshore areas of Onondaga Lake	• Metaphyton coverage was low compared to past years.
Current Conditions with Historical Comparison	
Estimated Areal Coverage *(Annual average (standard deviation))*	2004: 5 (8) square meters (eight stations) 2005: 13 (17) square meters (eight stations) 2006: 2 (5) square meters (nine stations) 2007: 6 (9) square meters (nine stations) 2008: 15 (23) square meters (nine stations) 2009: 2.5 (5) square meters (nine stations)
Factors affecting abundance of macroalgae	Phosphorus, water clarity, zebra mussels, lake water level, water temperature, wind, emerged macrophyte growth.
Monitoring and Assessment Program	
Lake Monitoring *(Annual County monitoring program)*	• Weekly surveys during recreational period (June –Sept) at nine nearshore stations (Wastebeds station added in 2006) (see the Quality Assurance Project Plan for station coordinates) • Semi-quantitative method employed using visual observation and measurements