



7.0 BIBLIOGRAPHY

Anoka County Community Health and Environmental Services Department. Anoka County Groundwater Protection Assessment (Draft), March 1995

Burch, Mark. City of White Bear Lake, 2006

Engstrom, Daniel R. Sediment Stratigraphy in Storage Basins of the Lambert Creek/Vadnais Lake Watershed, November 1991

Forshay, Steve. City of North Oaks Water Management Plan, 1988

James, W.F., J.W. Barko and H.L. Eaken. 2001. Direct and indirect impacts of submerged aquatic vegetation on the nutrient budget of an urban oxbow lake. APCRT Technical Notes Collection (ERDC TN-APCRP-EA-02) U.S. Army Engineer Research and Development Center. Vicksburg, MS.

Lino Lakes, City of. Local Water Management Plan, October 24, 1994.

Metropolitan Council. 2030 Regional Development Framework, January 2004

Metropolitan Council. Twin Cities Metropolitan Area Water Supply: A Plan for Action, February 1993

Metropolitan Council. 2030 Water Resources Management Policy Plan, May 2005

Minnesota Pollution Control Agency. Protecting Water Quality in Urban Areas, 1990

Ramsey Soil and Water Conservation District, City of North Oaks Wetland Inventory, April 1980

Ramsey Soil and Water Conservation District, Hydraulic Structure Inventory: Vadnais Lake Watershed, October 3, 1986

Ramsey Soil and Water Conservation District. Ramsey County Erosion and Sediment Control Handbook, 1989

Ruhl, James F. "Quality of Groundwater Around Vadnais Lake and in Lambert Creek Watershed, and interaction of Ground Water with Vadnais Lake," USGS Report 94-4062

St. Paul Water Utility. Experimental Application of Spent Lime to Sucker Lake Sediments, No date.

Schilling Environmental, Watershed Management Plan, Vadnais Lake Area Water Management Organization, 1987



**APPENDIX A
ANNUAL REPORT CARD**

Goals Evaluation and Report Card – 2007

The Vadnais Lake Area Water Management Organization (VLAWMO) produced a preliminary report card in 2004 which looked at set goals and how well they were met. This exercise was redone in 2007. Those having input into the process included the VLAWMO Technical Commission, Board of Directors, staff, personnel from other agencies, and the member municipalities, city councils and town board, the St. Paul Regional Water Service, as well as residents from the watershed area.

Many goal elements have improved to date. These include:

- Monitoring and modeling within the watershed.
- Source Water Protection
- Local partners & stewardship:
 - Sustainable Lake Management Plans (SLMP)
 - Cost-share program
- Groundwater protection
- Flood protection
- Wetland protection
 - WCA administration
 - Wetland management plan elements incorporated
- Lower Lambert restoration
- Regional ditch management
- Website updates
- Newspaper public information
- Public education
- Restructuring the governance and funding process for the watershed

All of the above areas will to have time and energy put into their development. However, most of the restructuring work is complete and the efforts are being redirected to the following items:

- Working with municipalities on local water plans that will address all statutory requirements. New focus elements:
 - Stormwater standards update
 - Erosion control
 - TMDL requirements
 - SLMP goals
 - Education partnership opportunities
- Citizen's Advisory Committee will meet to determine its objectives and implementation plan.
- Pilot school program is planned through partnership and outside assistance.

It is anticipated that elements of the report card will be incorporated in future Annual Reports. See the attached report card for additional information.

2007 Report Card- October 2007; Yellow – improvement; Blue – needs improvement

	2	3		5	6	7	
Water Quality / Quantity		Grade	V – VLAWMO staff / vol. X - Delegation P - Partners/ Notes C- Consulting assistance	Water Plan page reference	Cost est. OR % of budget	2007 Budget (\$234,000)- \$ based on % from 6	Hurdles and Opportunities
	Erosion control	C	V X mixed -Comments to cities; permit if needed	4.2;	2	\$	New standards will be enforced in LWP. VLAWMO will: work w/cities on LWP updates & will develop a permit program if this standards are not met
	Stormwater reviews	C	V X mixed -Comments to cities; permit if needed	4.2, 4.3, 4.4	5	\$	New standards will be enforced in LWP. VLAWMO will: work w/cities on LWP updates & will develop a permit program if this standards are not met
	Data depository Citizen's Lake Monitoring; Watershed model	B-	Gathering SPRWS data, CLMP data; lake level data, SLMP data; Needs: V, staff, volunteers	4.2 Quality; 4.6 public participation; 4.9 inform dec	7	\$8500 1500 % \$30k	VLAWMO will share the just completed watershed model with its communities & use it to guide future monitoring, SLMPs, and TMDL studies. Also: enter data in STORET; metrics are being fine tuned, web available
	Source Water Protection	C+	V & X Have done public education program; input into SPRWS planning & implementation; will review in LWP;X to SPRWS / cities	3.2.2 & 3.2.3	1	\$	VLAWMO will comment on wellhead protection plans & enforce stricter standards
	Sustainable Lake Management Plans & cost share program	B-	V, P C Birch Lake SLMP – 1 st with Birch Lake Improvement District; policies for new cost share program	4.2, 4.4, 4.5, 4.6		\$7,500 – SLMP \$5K cost- share \$15,000 SLMP implementati on;	VLAWMO has committed to producing SLMPs for all major water basins in the watershed. SLMP implementation funding has been incorporated. SLMPs will be

						\$50K pre-TMDL on Goose Lake	coordinated with possible TMDL studies.
	Groundwater	C	V Infiltration standards included	4.3	0.5	\$	WPA assistance for inter-municipal issues
	Flood prevention	B-	V, X & C Watershed model X FEMA @ members	4-1	1	% of \$30k	New standards will be enforced. Work with LWP to encourage ditch inspection/maintenance; will work with locals on major repairs. Lower Lambert Creek flood reduction study; Hwy 61 study
Wetlands							
	Administer WCA	B+	V, P 25% staff time	4.4	40	\$	Watershed is increasingly developed; high priority areas have been identified and have stricter standards. New state standards will be enforced
	Priority elements of the Wetland Management Plan adopted in Water Plan	B-	V – buffer & hydro period standards incorporated – Plan to be adopted in 2007	4.4	2	\$1716	Bounce and buffer standards have been incorporated. SPRWS protected waters increases the standard level
Projects							
	Lambert Lake restoration	A-	Almost complete V, P & C	4.1; 4.2, 4.4, 4.5, 4.6, 4.7; 4.9, 4.10	15	\$12,869	Essentially complete. Possible future action: spring planting/weed control along new ditch and wingdam sheet pile on SW corner of pond to reduce short circuiting to overflow channel
	Lower Lambert	B+	V, P & C – implement in 2007	Ditto			The streambank stabilization of high priority areas of Lower Lambert may spark neighbor interest. The Board may want to

							increase cost-share funding in the future
	Ditch management (Co 14 & 13 & branches)	B	V, P 3 stabilization projects; 3 flume replacements; Whitaker design	Ditto	0	0	Maintenance budget established; Whittaker pond maintenance scheduled in 2008
Citizen's Advisory Committee	This area needs work		The storm sewer utility and cost share program may not be an activated citizenry				Hurdle: need time & funding to set up & coordinate program; The new VLAWMO Storm water utility billing has introduced the watershed to its residents. Recruitment is on-going
	Mission	D	Individuals have helped	4.6	1		Early meetings will focus mission / action
	Meetings	D	VLAWMO has met with citizen groups; they have come to Board / Comm. mtgs.	4.6	0	0	Meeting planned for January 2008
Public Education							
	Website – info & update	B-	H has been updated but still needs structural overhaul	4.6	0.5	\$3000	New website format planned for 2008
	Annual newsletter or article	C	Several articles in local papers on restructuring & specific programs brochure update	4.6	0.5		Annual article for municipal newsletters; Town Life article; topic specific press releases
	Public education forum	B+	V, P, & C Started Water Matters – cable program; 2 – 3 per year	4.6	3		Produced first annual “Partnership” education conference
	Coordination with schools / groups	D+	V with C assistance	4.6	0	0	Hurdle: need time & funding to set up & coordinate program; Increased budget in 2008; Preliminary contact w/Ag Charter school on project

Planning & agency coordination				Page ref	%		
	Update Water Plan & JPA	B / A	V, C, P WMP / JPA complete (V, X on JPA)	6.0	15	\$75000	Hope to complete Water Plan approval in 2007
	Local plan review	B-	V & C Comment time allocated in 2008	6.2	0.5		Hurdle: need time & funding to set up & coordinate program; Time allocated and consulting assistance in 2008
	Watershed boundary clarification	C	V, P, C; Orphan and contested areas along boundary	2.0; 4.7.2; 5.4; & JPA Appendix			Hurdle: the areas were not specified by parcel or hydrology V has identified all areas through the utility model. Next step: consensus with neighbor watersheds & BWSR change process
Reporting							
	Goals review & annual report	B+	V Report card and annual report	4.9, 6.1;	1		Will be reviewed by Tech Commission in Jan and at first Board meeting. Report to: communities, website, BWSR & State Auditor
	Year end financial report / audit	A	V & C done	4.6	3	\$3900	Done annually