

Table 3-14c Watershed Data, Hydrologic Modeling, and Water Quality Modeling Summary

City of Minnetonka, Water Resources Management Plan

Nine Mile Creek Watershed

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Subwatershed No.	Foot Notes ^A	Hydrologic Modeling																	Water Quality Modeling						Subwatershed No.		
		Watershed Characteristics				Existing Conditions			Proposed Conditions							Historical Elevations ^C		PondNET Information									
		Total Area (Ac)	Water Area (Ac)	Impervious Area (Ac)	Turf Area (Ac)	Existing Outlet Elevation	Existing Outlet Size (in)	Land-Locked?	Proposed Normal Elevation	Proposed Outlet Size (in) Approx	Hydrologic Evaluation Method	1% Annual Exceedance Probability Storm (100-yr Flood Elevation)	Storage (Ac-ft)	Average Discharge (cfs)	Peak Discharge (cfs)	Critical Storm Duration (hrs)	Comments	Normal Elevation	Flood Elevation	Total Direct Watershed Area (Ac)	Pond Area (Ac)	Mean Depth (ft)	Runoff Coefficient	Total Phosphorus Removal (%) Pond		Total Phosphorus Removal (%) Total Watershed	
<i>Oak Drive Lane</i>																											
501	1	42.4	10.2	6.4	25.8	995	OC	Y	979.3	12	Volume Rtg	980.3	10.0	1.0		24		977.8	980	42.4	10.2	3.5	0.15	56.49	59.03	501	
501-1	1	9	0.56	1.7	6.8	984.8	OC	Y	980.2	NA	Volume Rtg	980.8	0.4	12.0		0.5		NA	NA	9.0	0.6	1.0	0.15	35.24	35.24	501-1	
502	1	9.8	1.15	2.2	6.5	1011.7	OC	Y	1005.6	24	Volume Rtg	1006.0	0.5	22.0		0.5		1003.1	1006	9.8	1.2	4.0	0.18	58.82	58.82	502	
503	1	19.9	1.3	4.7	14.0	972.1	OC	Y	964	12	Volume Rtg	968.0	6.0	2.0		240		956.7	962.5	19.9	1.3	3.8	0.18	75.94	86.33	503	
504	1	48.4	6.5	12.6	29.3	950	OC	Y	938.5	12	Volume Rtg	941.0	17.0	2.0		240		937	943	48.4	6.5	5.0	0.22	49.5	75	504	
505	1	4	0.6	0.9	2.6	955	OC	Y	948.8	12	Volume Rtg	950.0	0.7	1.0		24		946.1	949	4.0	0.6	2.5	0.18	51.7	51.7	505	
506	1	8.9	2.1	1.4	5.4	944	OC	Y	938.5	12	Volume Rtg	941.0	5.4	2.0		3		926.4	929.5	8.9	2.1	12.0	0.15	74	74	506	
507	1	9.6	0.8	2.2	6.6	950.1	OC	Y	934.5	12	Volume Rtg	936.4	1.5	1.0		12		932	936	9.6	0.8	3.8	0.18	57.34	57.34	507	
507-2	1	2.4	0.44	0.4	1.6	940.8	OC	Y	940	12	Volume Rtg	940.8	0.4	1.0		6		NA	NA	2.4	0.4	3.5	0.15	57.34	57.34	507-2	
508	1	4.5	0.45	0.8	3.2	926	OC	Y	919.3	12	Volume Rtg	920.8	0.7	1.0		12		921	923	4.5	0.5	1.1	0.15	38.24	38.24	508	
509	1	36.8	6.2	10.7	19.9	NA	NA	Y	922	21	Hydrograph	923.5	9.8		11.0	96	Wetland managed in the city of Hopkins. Assume 100 year flows go to pond 514. Low flows go to Hopkins.	917	919	36.8	See Comm	See Comm	0.25	See Comm.	See Comm.	509	
<i>Subtotal</i>		195.7	30.3	43.8	121.6															195.7						<i>Subtotal</i>	

Abbreviations: INA - Information Not Available; OC - Outlet is an Open Channel; NA - Not Available; Y - Yes; N - No; HFP - High Flood Potential; DNR - Minnesota Department of Natural Resources; PWC - DNR Public Watercourse; PD - DNR Public Ditch; US - Upstream; WQ - Water Quality; Const. - Construction

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		Watershed Characteristics				Existing Conditions			Proposed Conditions							Historical Elevations ^C		PondNET Information									
		Total Area (Ac)	Water Area (Ac)	Impervious Area (Ac)	Turf Area (Ac)	Existing Outlet Elevation	Existing Outlet Size (in)	Land-Locked?	Proposed Normal Elevation	Proposed Outlet Size (in) Approx	Hydrologic Evaluation Method	1% Annual Exceedance Probability Storm (100-yr) Flood Elevation	Storage (Ac-ft)	Average Discharge (cfs)	Peak Discharge (cfs)	Critical Storm Duration (hrs)	Comments	Normal Elevation	Flood Elevation	Total Direct Watershed Area (Ac)	Pond Area (Ac)	Mean Depth (ft)	Runoff Coefficient	Total Phosphorus Removal (%) Pond	Total Phosphorus Removal (%) Total Watershed		
<i>Shady Oak Lake</i>																											
510	1	14.8	0.3	3.6	10.9	916	OC	N	914.5	42	Hydrograph	914.8	0.1		70.0	0.5		912.5	914.5	14.8	0.3	1.0	0.18	30.7	30.7	510	
511	1	14.7	2.4	2.5	9.8	916	OC	Y	912	18	Hydrograph	913.4	4.2		6.0	2		912	913	14.7	2.4	1.0	0.15	32.4	43.7	511	
512-1	1	17.4	1.37	4.0	12.0	911.1	8	N	911.1	21	Hydrograph	914.0	5.2		17.0	96		911.5	913.5	17.4	1.4	0.5	0.18	14.1	42.1	512-1	
512-2	1	7.9	1.2	2.7	4.0	913.8	OC	Y	912.3	21	Hydrograph	914.0	2.3		12.0	96		NA	NA	7.9	1.2	1.1	0.28	33.9	39.2	512-2	
512-3	1	10.5	1.03	2.4	7.1	917.5	OC	Y	916.7	12	Hydrograph	918.5	2.3		2.0	12		NA	NA	10.5	1.0	0.5	0.18	20	36.5	512-3	
513	1	11.2	0.43	2.7	8.1	949.8	OC	Y	946.8	12	Hydrograph	949.3	1.8		1.0	2		943.8	949	11.2	0.4	1.4	0.18	38.8	38.8	513	
514	1	7.2	1.13	1.2	4.9	925	OC	Y	920.6	18	Hydrograph	922.9	3.2		11.0	96		920.5	922	7.2	1.1	1.0	0.15	36.2	36.2	514	
515	1	3	0	2.7	0.3	924	24	N	NA	18	Volume Rtg	NA	0.0	12.0		0.5		NA	NA	3.0	0.0	0.0	0.58	0	0	515	
516	1	12.1	1.06	5.5	5.5	909.6	12	N	910.1	27	Hydrograph	913.5	5.1		16.0	96		910	912	12.1	1.1	0.2	0.34	5.5	35.1	516	
516-1	1	8.1	0	2.4	5.7	926	18	N	NA	36	Hydrograph	NA	0.0		35.0	0.5		NA	NA	8.1	0.0	0.0	0.22	0	0	516-1	
517	2	5.3	0.4	1.2	3.7	940	33	N	910	33	Hydrograph	912.4	2.1		22.0	6	Existing conditions assumed to be proposed; Review of As-builts needed	909.3	912	5.3	0.4	0.5	0.18	6.6	39.7	517	
518	1	5	0	1.3	3.8	NA	NA	N	NA	33	Hydrograph	NA	0.0		32.0	0.5		NA	NA	5.0	0.0	0.0	0.18	0	0	518	
519	1	4	0	2.8	1.2	NA	NA	N	NA	18	Hydrograph	NA	0.0		17.0	0.5		NA	NA	4.0	0.0	0.0	0.46	0	0	519	
520	1	21.9	0	13.1	8.8	INA	CB	N	NA	54	Hydrograph	NA	0.0		105.0	0.5	FLOW = 10year from 520 + 100year from 517. Overflow down Shady Oak Road.	NA	NA	21.9	0.0	0.0	0.40	0	0	520	
521	1	12	0	3.6	8.4	NA	NA	N	NA	42	Hydrograph	NA	0.0		70.0	0.5		907	910.5	12.0	0.0	0.0	0.22	0	0	521	
521W	1	18	0.3	4.4	13.3	909	18	N	907	72	Hydrograph	909.0	0.6		144.0	1		NA	NA	18.0	0.3	2.5	0.18	17.2	31.2	521W	
521E	1	3.7	0.11	1.4	2.2	908	18	N	908	12	Hydrograph	910.0	0.8		2.0	1		NA	NA	3.7	0.1	0.2	0.28	10.3	10.3	521E	
522	1	3.2	0.05	0.8	2.4	948.7	OC	N	941	12	Hydrograph	946.0	0.6		1.0	240		945.8	947	3.2	0.1	0.3	0.18	13.2	13.2	522	
523	1	7.8	0	2.0	5.9	NA	NA	N	NA	24	Volume Rtg	NA	0.0	17.0		0.5		NA	NA	7.8	0.0	0.0	0.18	0	0	523	
524	1	20.1	0	5.0	15.1	NA	NA	N	NA	42	Volume Rtg	NA	0.0	76.0		0.5		NA	NA	20.1	0.0	0.0	0.18	0	0	524	
525	1	3.9	0	1.0	2.9	NA	NA	N	NA	18	Volume Rtg	NA	0.0	10.0		0.5		NA	NA	3.9	0.0	0.0	0.18	0	0	525	
526	1	3.1	0	0.8	2.3	NA	NA	N	NA	15	Volume Rtg	NA	0.0	8.0		0.5		NA	NA	3.1	0.0	0.0	0.18	0	0	526	
527	1	5.3	0	1.1	4.2	NA	NA	N	NA	15	Volume Rtg	NA	0.0	9.0		0.5		NA	NA	5.3	0.0	0.0	0.15	0	0	527	
528	1	11.9	0	3.0	8.9	907.2	42	N	NA	66	Volume Rtg	NA	0.0	121.0		0.5	Low flows by-pass Shady Oak Lake. See comment for watershed 537.	907.4	907.9	11.9	0.0	0.0	0.18	0	0	528	
529	1	11.6	0	2.9	8.7	NA	NA	N	NA	48	Hydrograph	NA	0.0		110.0	0.5		NA	NA	11.6	0.0	0.0	0.18	0	2.8	529	
530	2	11.6	3.4	1.6	6.6	907.2	60	N	907.2	60	Hydrograph	908.0	3.1		105.0	1		906.1	907.5	11.6	3.4	1.5	0.15	42.6	41.5	530	
531	2	25.3	2.1	5.8	17.4	903.8	60	N	903.8	60	Volume Rtg	907.5	12.2	168.0		1	Existing conditions assumed to be proposed; Review of As-builts needed	903.6	909	25.3	2.1	1.3	0.18	20.9	50.7	531	

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		Total Area (Ac)	Water Area (Ac)	Impervious Area (Ac)	Turf Area (Ac)	Existing Outlet Elevation	Existing Outlet Size (in)	Land-Locked?	Proposed Normal Elevation	Proposed Outlet Size (in) Approx	Hydrologic Evaluation Method	1% Annual Exceedance Probability Storm (100-yr) Flood Elevation	Storage (Ac-ft)	Average Discharge (cfs)	Peak Discharge (cfs)	Critical Storm Duration (hrs)	Comments	Normal Elevation	Flood Elevation	Total Direct Watershed Area (Ac)	Pond Area (Ac)	Mean Depth (ft)		Runoff Coefficient	Total Phosphorus Removal (%) Pond	Total Phosphorus Removal (%) Total Watershed
531-1	1	3.5	0.4	0.8	2.3	906	OC	N	906	54	Volume Rtg	907.5	0.7	130.0		1	Existing conditions assumed to be proposed; Review of As-builts needed	NA	NA	3.5	0.4	1.9	0.18	14.9	41	531-1
532	1	2.5	0	0.6	1.9	NA	NA	N	NA	15	Volume Rtg	NA	0.0	7.0		0.5		NA	NA	2.5	0.0	0.0	0.18	0	0	532
533	1	1.2	0	0.3	0.9	906.86	12	N	907	12	Volume Rtg	910.3	0.5	2.0		1		907	907.5	1.2	0.0	0.0	0.18	0	0	533
534	1	17.9	3.6	2.9	11.4	910.6	15	N	910.6	12	Volume Rtg	912.0	5.5	1.0		48		910	911.5	17.9	3.6	5.0	0.15	58.8	66.9	534
534A	10	16.7	0.54	4.0	12.1	940.5	12	N	940.5	12	Volume Rtg	944.0	2.6	1.0		24	Existing conditions assumed to be proposed; Review of As-builts needed	932	937	16.7	0.5	2.5	0.18	52.2	52.2	534A
535	1	3	0	0.8	2.3	NA	NA	N	NA	15	Volume Rtg	NA	0.0	9.0		0.5		NA	NA	3.0	0.0	0.0	0.18	0	0	535
536	1	2.9	0	0.7	2.2	NA	NA	N	NA	15	Volume Rtg	NA	0.0	10.0		0.5		NA	NA	2.9	0.0	0.0	0.18	0	0	536
537	1	163.3	97.7	6.6	59.0	907.4	OC	Y	903.4	18	Volume Rtg	905.2	179.0	7.0		240	Shady Oak Lake. Cost estimate includes low flow pipe from watershed 528.	902.1	903.3	163.3	97.7	15.0	0.09	70.5	82.4	537
Subtotal		491.6	117.5	98.1	276.0															491.6						Subtotal

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<i>Minnetoga Lake</i>																										
538	1	11.8	0.7	2.8	8.3	974.3	15	N	974.3	15	Volume Rtg	976.8	2.8	7.0		1		974.2	977.5	11.8	0.7	3.6	0.18	54.4	55.6	538
538-1	1	3.1	0.1	0.8	2.3	981.7	OC	N	981.8	12	Volume Rtg	983.0	0.2	5.0		0.5		NA	NA	3.1	0.1	0.4	0.18	19.4	19.4	538-1
539	1	19.8	0.4	4.9	14.6	972.8	18	N	972.8	12	Volume Rtg	975.9	3.5	1.0		6		972.8	975.9	19.8	0.4	2.4	0.18	45.5	45.5	539
540	2	31.8	1.4	7.6	22.8	969.5	24	N	969.5	24	Volume Rtg	971.5	3.3	29.0		0.5	Need to construct a berm; Existing conditions assumed to be proposed; Review of As-builts needed	NA	NA	31.8	1.4	2.3	0.18	38.5	56.2	540
540-1	1	10.4	0	2.6	7.8	NA	24	N	NA	30	Volume Rtg	NA	0.0	29.0		0.5		NA	NA	10.4	NA	NA	0.18	0	54.4	540-1
541	1	11	0.9	4.0	6.1	998.7	OC	Y	996	12	Volume Rtg	998.2	2.2	1.0		1		996	999.5	11.0	0.9	2.0	0.28	46.2	46.2	541
541A	1	17.4	0	7.8	9.6	NA	OC	N	NA	OC	Volume Rtg	NA	0.0	39.0		0.5		NA	NA	17.4	NA	NA	0.31	0	0	541A
542	1	26.6	1	6.4	19.2	978.2	OC	Y	964	12	Volume Rtg	968.0	5.0	1.0		48		962	967	26.6	1.0	5.5	0.18	56.5	64.4	542
543	1	26.4	1.3	6.3	18.8	961.6	OC	HFP	948.6	12	Volume Rtg	951.6	3.8	3.0		12	James Road will flood 1.6'.	950	952.5	26.4	1.3	5.0	0.18	60.7	60.7	543
544	1	28	3.3	6.2	18.5	928	15	N	928	12	Volume Rtg	934.5	27.0	3.0		24		928	932.5	28.0	3.3	5.0	0.18	46.5	71.7	544
545	1	7.1	0.3	1.7	5.1	1018.7	OC	Y	1008	12	Volume Rtg	1012.0	1.3	1.0		1		1003.3	1009	7.1	0.3	4.5	0.18	59.6	59.5	545
546	1	15.4	0.6	3.7	11.1	975	OC	Y	969.1	12	Volume Rtg	974.2	3.2	2.0		12		968	974	15.4	0.6	2.0	0.18	47.3	56.8	546
547	1	22.7	0	5.7	17.0	951	OC	N	NA	30	Volume Rtg	NA	0.0	65.0		0.5		NA	NA	22.7	NA	NA	0.18	0	0	547
547-1	1	6.2	0	1.6	4.7	970	OC	N	NA	21	Volume Rtg	NA	0.0	22.0		0.5	Discharge includes flow from 546; Existing conditions assumed to be proposed; Review of As-builts needed	NA	NA	6.2	NA	NA	0.18	0	44.5	547-1
548	2	15	1.4	3.4	10.2	921.7	45	N	921.7	15	Volume Rtg	927.0	12.0	5.0		240		918.6	926	15.0	1.4	3.0	0.18	24.3	72.6	548
548A	1	5.1	0	1.3	3.8	948.2	OC	N	945	12	Volume Rtg	948.2	1.1	1.0		6		944.8	948.5	5.1	NA	NA	0.18	0	0	548A
548B	1	2.3	0	0.6	1.7	966.4	OC	N	962.8	12	Volume Rtg	966.4	0.4	1.0		3		962.6	967	2.3	NA	NA	0.18	0	0	548B
548C	2	4.1	0.4	0.9	2.8	930.2	30	N	930.2	30	Volume Rtg	933.8	2.1	66.0		1	Discharge includes flow from 547; Existing conditions assumed to be proposed; Review of As-builts needed	928.2	932	4.1	0.4	1.6	0.18	43.6	43.6	548C
549A	1	1.5	0.2	0.3	1.0	938.8	OC	N	936	42	Volume Rtg	938.0	0.4	72.0		1	Discharge includes flow from 549B and 548C.	931.7	935.5	1.5	0.2	2.4	0.18	51.2	51.2	549A
549B	1	2.7	0.3	0.6	1.8	938.8	OC	Y	921.8	15	Volume Rtg	925.5	1.8	5.0		24		920	925	2.7	0.3	1.9	0.18	6.4	69.1	549B
549C	1	2.3	0	0.6	1.7	940.1	OC	N	936.8	12	Volume Rtg	939.1	0.5	1.0		1		936	938.5	2.3	NA	NA	0.18	0	0	549C
550	1	6.2	0.5	1.4	4.3	954.8	OC	N	946	12	Volume Rtg	948.8	1.3	1.0		1		936	939.5	6.2	0.5	5.5	0.18	63.1	63.1	550

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City of Minnetonka, Water Resources Management Plan

Nine Mile Creek Watershed

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City of Minnetonka, Water Resources Management Plan

Nine Mile Creek Watershed

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		Watershed Characteristics				Existing Conditions			Proposed Conditions								Historical Elevations ^C		PondNET Information						
		Total Area (Ac)	Water Area (Ac)	Impervious Area (Ac)	Turf Area (Ac)	Existing Outlet Elevation	Existing Outlet Size (in)	Land-Locked?	Proposed Normal Elevation	Proposed Outlet Size (in) Approx	Hydrologic Evaluation Method	1% Annual Exceedance Probability Storm (100-yr) Flood Elevation	Storage (Ac-ft)	Average Discharge (cfs)	Peak Discharge (cfs)	Critical Storm Duration (hrs)	Comments	Normal Elevation	Flood Elevation	Total Direct Watershed Area (Ac)	Pond Area (Ac)	Mean Depth (ft)		Runoff Coefficient	Total Phosphorus Removal (%) Pond
551	1	6.8	0	1.7	5.1	936	OC	HFP	924.4	12	Volume Rtg	930.4	1.5	1.0	1	Need a pipe connecting east and west ponds (Equalizer Pipe).	924.4	929	6.8	NA	NA	0.18	0	0	551
552	1	5.3	0	1.3	4.0	942.1	OC	HFP	930.3	18	Volume Rtg	934.2	0.1	12.0	0.5	Pond bottom may need to be excavated.	930.3	935	5.3	NA	NA	0.18	0	0	552
553	1	4.9	0	1.2	3.7	949.9	OC	N	943	12	Volume Rtg	947.7	0.5	4.0	0.5	Pond bottom may need to be excavated.	943	947.7	4.9	NA	NA	0.18	0	0	553
554	1	2.8	0	0.7	2.1	936.1	OC	N	934.2	15	Volume Rtg	936.1	0.2	7.0	1		934.2	936.5	2.8	NA	NA	0.18	0	0	554
555	1	2.1	0	0.5	1.6	NA	NA	N	NA	18	Volume Rtg	NA	0.0	14.0	0.5	Discharge includes flow from 554.	NA	NA	2.1	NA	NA	0.18	0	0	555
556	1	11.1	0	2.8	8.3	906	15	N	906	42	Volume Rtg	908.3	0.7	90.0	0.5		907.5	909.5	11.1	NA	NA	0.18	0	59.8	556
557	1	2	0	0.5	1.5	NA	NA	N	NA	12	Volume Rtg	NA	0.0	6.0	0.5		NA	NA	2.0	NA	NA	0.18	0	0	557
558	1	6.7	0	1.7	5.0	924	OC	N	NA	24	Volume Rtg	NA	0.0	30.0	0.5	Discharge includes flow from 559, 560, and 561.	NA	NA	6.7	NA	NA	0.18	0	44.3	558
559	1	4.5	0.6	1.0	2.9	949.8	OC	N	940	12	Volume Rtg	944.1	3.2	2.0	24		940	941.5	4.5	0.6	1.9	0.18	32.2	58.3	559
560	1	4.2	0	1.1	3.2	924	OC	N	NA	18	Volume Rtg	NA	0.0	12.0	0.5		NA	NA	4.2	NA	NA	0.18	0	0	560
561	1	3.8	0.4	0.9	2.6	952.5	OC	N	946.5	12	Volume Rtg	948.5	0.8	1.0	1		944.1	946.5	3.8	0.4	2.1	0.18	48.7	48.7	561
562	1	3.5	0	0.9	2.6	959.5	OC	N	NA	15	Volume Rtg	NA	0.0	8.0	0.5		NA	NA	3.5	NA	NA	0.18	0	0	562
563	1	9.2	0	2.3	6.9	914	OC	N	NA	30	Volume Rtg	NA	0.0	53.0	0.5	Discharge includes flow from 558.	NA	NA	9.2	NA	NA	0.18	0	0	563
564	1	31.4	2.1	7.3	22.0	910.5	OC	Y	906.4	24	Volume Rtg	908.0	6.7	33.0	1		905.4	908	31.4	2.1	1.5	0.18	33.6	48.2	564
565	1	4.5	0	1.1	3.4	920	OC	N	NA	18	Volume Rtg	NA	0.0	12.0	0.5		NA	NA	4.5	NA	NA	0.18	0	0	565
566	1	13.4	0	3.4	10.1	908	OC	N	NA	27	Volume Rtg	NA	0.0	40.0	0.5	See comment for 574.	NA	NA	13.4	NA	NA	0.18	0	0	566

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City of Minnetonka, Water Resources Management Plan

Nine Mile Creek Watershed

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City of Minnetonka, Water Resources Management Plan

Nine Mile Creek Watershed

Subwatershed No.	Foot Notes ^A	Hydrologic Modeling															Water Quality Modeling						Subwatershed No.				
		Watershed Characteristics				Existing Conditions			Proposed Conditions								Historical Elevations ^C		PondNET Information								
		Total Area (Ac)	Water Area (Ac)	Impervious Area (Ac)	Turf Area (Ac)	Existing Outlet Elevation	Existing Outlet Size (in)	Land-Locked?	Proposed Normal Elevation	Proposed Outlet Size (in) Approx	Hydrologic Evaluation Method	1% Annual Exceedance Probability Storm (100-yr) Flood Elevation	Storage (Ac-ft)	Average Discharge (cfs)	Peak Discharge (cfs)	Critical Storm Duration (hrs)	Comments	Normal Elevation	Flood Elevation	Total Direct Watershed Area (Ac)	Pond Area (Ac)	Mean Depth (ft)		Runoff Coefficient	Total Phosphorus Removal (%) Pond	Total Phosphorus Removal (%) Total Watershed	
567	1	62.4	18	8.9	35.5	895.3	36	N	895.3	36	Volume Rtg	899.0	71.0	45.0		3	Existing pipe assumed to be adequate.	897	NA	62.4	18.0	10.0	0.15	61.3	76.7	567	
567-1	1	63	0	15.8	47.3	896	OC	N	896	OC	Volume Rtg	899.0	14.0	45.0		3		897	NA	63.0	NA	NA	0.18	0	46.5	567-1	
568	1	5.2	0	1.3	3.9	962	OC	N	NA	18	Volume Rtg	NA	0.0	10.0		0.5		NA	NA	5.2	NA	NA	0.18	0	0	568	
569	1	36.5	0	9.1	27.4	948.8	32x48	N	NA	32x48	Volume Rtg	NA	0.0	102.0		0.5	Existing pipe with overflow assumed to be adequate. Discharge includes flow from 541A and 569A.	NA	NA	36.5	NA	NA	0.18	0	4.3	569	
569A	1	16.6	0	4.2	12.5	973	OC	N	NA	30	Volume Rtg	NA	0.0	30.0		0.5		NA	NA	16.6	NA	NA	0.18	0	0	569A	
570	1	23.9	0	12.0	12.0	937	OC	N	NA	42	Volume Rtg	NA	0.0	300.0		0.5	Discharge is at the pipe entering watershed 572. Final design of outlet should consider possible inflows from pond 592A.	NA	NA	23.9	NA	NA	0.34	0	19.8	570	
571A	1	15.3	0.3	3.8	11.3	938	OC	N	936	12	Volume Rtg	940.0	2.3	1.0		1	Need to construct a berm.	934.7	939.5	15.3	0.3	0.7	0.18	26.9	26.9	571A	
571B	1	6.5	1.3	1.3	3.9	940.4	OC	N	936	24	Volume Rtg	939.5	5.4	16.0		24	Discharge includes flow from 612 and 614.	922.8	927	6.5	1.3	6.6	0.18	63.2	67.6	571B	
572	1	8.6	0.7	2.0	5.9	915	54	N	NA	54	Volume Rtg	NA	0.0	330.0		0.5		NA	NA	8.6	0.7	4.0	0.18	38.3	37.8	572	
573	1	4.5	0.7	1.0	2.9	920	OC	Y	916	12	Volume Rtg	918.0	1.6	1.0		1		915.5	917	4.5	0.7	2.0	0.18	59.4	59.4	573	
574	1	3.9	0.1	1.0	2.9	914.6	OC	N	914.1	21	Volume Rtg	914.6	0.2	10.0		0.5	Previously known as city wetland 566.	913.1	914.9	3.9	0.1	1.1	0.18	22.4	47.1	574	
612	1	12.8	0.1	3.2	9.5	942.1	OC	N	935.2	18	Volume Rtg	942.0	1.1	12.0		0.5	Pumped outlet.	935.2	942	12.8	0.1	0.6	0.18	17.3	17.3	612	
613A	1	5.4	1.2	1.1	3.2	934.2	OC	Y	924.5	12	Volume Rtg	926.0	1.9	1.0		1		919	922	5.4	1.2	5.3	0.18	62.4	62.4	613A	
613B	1	7.2	0	1.8	5.4	926.5	OC	N	NA	21	Volume Rtg	NA	0.0	19.0		0.5		NA	NA	7.2	NA	NA	0.18	0	0	613B	
614	1	18.3	0.9	4.4	13.1	932.2	OC	N	923.2	12	Volume Rtg	926.2	2.6	2.0		24	Pumped outlet.	923.2	927	18.3	0.9	0.5	0.18	17.8	38.8	614	
Subtotal		683.2	39.2	169.8	474.3															683.2							Subtotal

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<i>Upper South Fork</i>																										
575	1	6.3	0	6.0	0.3	946	OC	N	NA	30	Volume Rtg	NA	0.0	27.0		0.5		NA	NA	6.3	NA	NA	0.61	0	0	575
576A	1	11.2	3	1.5	6.7	919	OC	N	918.7	12	Volume Rtg	919.3	1.8	1.0		2		917.1	918	11.2	3.0	2.0	0.14	48.5	48.5	576A
576B	1	3.1	0.68	0.6	1.8	919.7	OC	Y	916.2	12	Volume Rtg	919.0	2.4	2.0		12		915.1	918	3.1	0.7	2.1	0.18	41	48.6	576B
579-1	10	22.7	0	9.1	13.6	895.8	48	N	893.5	2-18x24	Volume Rtg	899.0	30.0			NE	Existing Conditions from As-builts (Lake Minnetoga Outlet replacement)	897	NA	22.7	NA	NA	0.28	0	75.4	579-1
579-1A	1	11.2	2.9	2.1	6.2	899.7	12	N	899.7	12	Volume Rtg	901.0	5.1	4.0		48		NA	NA	11.2	2.9	1.0	0.18	6.8	81.5	579-1A
579-2A	1	24.9	9	4.0	11.9	899	15	N	899	15	Volume Rtg	899.6	5.6	2.0		12		NA	NA	24.9	9.0	2.0	0.18	48.6	48.6	579-2A
579-2B	1	44.9	0	18.0	26.9	893.5	48	N	893.5	48	Volume Rtg	899.0	49.0			NE	Existing pipe assumed to be adequate. Due to complicated stream hydrology discharge not estimated. FE from WMO.	897	NA	44.9	NA	NA	0.28	0	71	579-2B
579-3	1	2	0.17	0.5	1.4	907.3	OC	Y	902.1	12	Volume Rtg	904.0	0.5	1.0		12		NA	NA	2.0	0.2	1.0	0.18	24.6	52.8	579-3
579-4	1	4.2	0.63	0.9	2.7	911	OC	Y	906	12	Volume Rtg	908.0	0.7	1.0		1		NA	NA	4.2	0.6	2.9	0.18	54.3	54.3	579-4
Subtotal		130.5	16.4	42.5	71.6															130.5						Subtotal

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<i>Lower South Fork</i>																										
577	1	4.1	0.63	0.7	2.8	912.2	12	N	912.2	12	Volume Rtg	914.0	1.3	1.0		1		908.1	909.5	4.1	0.6	4.1	0.15	59.7	59.7	577
578	1	8.3	1	1.8	5.5	905.2	18	N	905.2	18	Volume Rtg	908.2	3.6	1.0		12		907.5	908.2	8.3	1.0	3.6	0.18	52.3	62.7	578
578A	1	3.4	0.11	1.2	2.1	944.6	OC	N	942	12	Volume Rtg	944.5	0.4	1.0		2		942	944	3.4	0.1	0.9	0.25	30.5	30.5	578A
581	1	121.7	0	24.3	97.4	890	72x115	N	890	72x115	Volume Rtg	899.0	78.0	NA		NE	Existing pipe assumed to be adequate. Due to complicated stream hydrology discharge not estimated. FE from WMO.	895	NA	121.7	NA	NA	0.15	0	66.5	581
581A	1	68.5	1.1	50.6	16.9	901	24	N	901	24	Volume Rtg	909.0	12.2	74.0		2		890	899.5	68.5	1.1	5.5	0.49	44	57	581A
581B (N)	1	3.2	0	0.8	2.4	887	OC	N	887	OC	Volume Rtg	895.0	0.0			NE	Existing outlet assumed to be adequate. Due to complicated stream hydrology discharge not estimated. FE from WMO.	878	NA	3.2	NA	NA	0.18	0	66.4	581B (N)
581B (S)	1	47.7	0	19.1	28.6	876.7	OC	N	876.7	OC	Volume Rtg	895.0	38.0			NE	Existing outlet assumed to be adequate. Due to complicated stream hydrology discharge not estimated. FE from WMO.	878	NA	47.7	NA	NA	0.28	0	60.7	581B (S)
582	1	76.8	17.8	23.6	35.4	NA	OC	N	898.6	12	Volume Rtg	900.0	24.4	3.0		48	Lone Lake	898.5	900	76.8	17.8	10.0	0.28	69.9	73.3	582
582-2	1	13.75	2.3	4.6	6.9	903.1	OC	N	903.1	12	Volume Rtg	904.0	2.3	3.0		2		NA	NA	13.8	2.3	1.5	0.28	37.4	51.6	582-2
583	1	13.21	0.82	3.1	9.3	915.8	OC	Y	910	12	Volume Rtg	914.0	4.0	1.0		2		910	914	13.2	0.8	4.5	0.18	59.7	59.7	583
622	1	6.01	0	3.0	3.0	947	OC	N	943.5	18	Volume Rtg	947.0	0.6	12.0		1		NA	NA	6.0	NA	NA	0.34	0	0	622
623A	1	16.97	0.28	8.3	8.3	923	18	N	923	18	Volume Rtg	930.6	4.6	10.0		12		NA	NA	17.0	0.3	3.0	0.34	37.4	52	623A
623A-1	1	7.9	0.42	3.7	3.7	948	OC	Y	946.8	21	Volume Rtg	947.5	0.3	20.0		0.5		NA	NA	7.9	0.4	2.4	0.34	51.1	51.1	623A-1
623A-6	1	4.1	0.48	1.8	1.8	954	OC	Y	946	12	Volume Rtg	948.0	1.0	1.0		3		NA	NA	4.1	0.5	5.5	0.34	66	66	623A-6
623B	1	24.14	1	11.6	11.6	918	2-18	N	918	2-18	Volume Rtg	920.0	2.7	22.0		1		NA	NA	24.1	1.0	3.0	0.34	39.9	51.3	623B
Subtotal		419.8	25.9	158.2	235.7															419.8						Subtotal

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Table 3-14c Watershed Data, Hydrologic Modeling, and Water Quality Modeling Summary

City of Minnetonka, Water Resources Management Plan

Nine Mile Creek Watershed

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City of Minnetonka, Water Resources Management Plan

Nine Mile Creek Watershed

Subwatershed No.	Foot Notes ^A	Hydrologic Modeling															Water Quality Modeling						Subwatershed No.		
		Watershed Characteristics				Existing Conditions			Proposed Conditions								Historical Elevations ^C		PondNET Information						
		Total Area (Ac)	Water Area (Ac)	Impervious Area (Ac)	Turf Area (Ac)	Existing Outlet Elevation	Existing Outlet Size (in)	Land-Locked?	Proposed Normal Elevation	Proposed Outlet Size (in) Approx	Hydrologic Evaluation Method	1% Annual Exceedance Probability Storm (100-yr) Flood Elevation	Storage (Ac-ft)	Average Discharge (cfs)	Peak Discharge (cfs)	Critical Storm Duration (hrs)	Comments	Normal Elevation	Flood Elevation	Total Direct Watershed Area (Ac)	Pond Area (Ac)	Mean Depth (ft)		Runoff Coefficient	Total Phosphorus Removal (%) Pond
<i>Eden Prairie</i>																									
581C	1	4.2	0	1.1	3.2	938.7	OC	N	936	15	Volume Rtg	941.0	0.4	8.0	1	Discharge includes flow from 581D. Need to construct a berm.	930	932	4.2	0.0	1.0	0.18	23	23	581C
581D	1	5.3	0	2.7	2.7	937.6	OC	N	932	12	Volume Rtg	937.6	0.6	4.0	1		930	932	5.3	0.0	1.0	0.34	15.8	15.8	581D
581E	1	14.9	0.32	7.3	7.3	922.9	12	N	922.9	12	Volume Rtg	924.8	2.3	4.0	0.5		925	927	14.9	0.3	1.0	0.34	27.1	27.1	581E
581F	1	42	0.9	20.6	20.6	915.9	INA	N	915.9	36	Volume Rtg	920.0	4.8	40.0	1		NA	NA	42.0	0.9	4.0	0.34	45	50	581F
581F-1	1	13	0	5.2	7.8	918	OC	N	NA	OC	Volume Rtg	NA	0.0	41.0	0.5		NA	NA	13.0	NA	NA	0.28	0	43	581F-1
581G	1	39.7	0.2	10.0	29.5	920.48	48	N	926	48	Volume Rtg	930.0	1.3	85.0	0.5	A riser is needed on the existing pipe.	NA	NA	39.7	0.2	2.8	0.19	57	57	581G
581H	1	55.1	0	44.1	11.0	NA	NA	N	NA	54	Volume Rtg	NA	0.0	190.0	0.5		NA	NA	55.1	NA	NA	0.52	0	0	581H
Subtotal		174.2	1.4	90.9	81.9														174.2						Subtotal

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City of Minnetonka, Water Resources Management Plan

Nine Mile Creek Watershed

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Nine Mile Creek Watershed

Subwatershed No.	Foot Notes ^A	Hydrologic Modeling															Water Quality Modeling							Subwatershed No.		
		Watershed Characteristics				Existing Conditions			Proposed Conditions								Historical Elevations ^C		PondNET Information							
		Total Area (Ac)	Water Area (Ac)	Impervious Area (Ac)	Turf Area (Ac)	Existing Outlet Elevation	Existing Outlet Size (in)	Land-Locked?	Proposed Normal Elevation	Proposed Outlet Size (in) Approx	Hydrologic Evaluation Method	1% Annual Exceedance Probability Storm (100-yr) Flood Elevation	Storage (Ac-ft)	Average Discharge (cfs)	Peak Discharge (cfs)	Critical Storm Duration (hrs)	Comments	Normal Elevation	Flood Elevation	Total Direct Watershed Area (Ac)	Pond Area (Ac)	Mean Depth (ft)	Runoff Coefficient		Total Phosphorus Removal (%) Pond	Total Phosphorus Removal (%) Total Watershed
North Fork																										
520A	1	85.2	2.53	74.4	8.3	898	24	N	898	54	Volume Rtg	901.0	8.3	155.0		0.5		897	903	85.2	2.5	4.0	0.58	49.1	49.1	520A
520B-2	1	35.9	5.8	22.6	7.5	INA	INA	N	891.6	48	Volume Rtg	892.0	2.4	87.0		0.5	Verify existing outlet information in Hopkins.	NA	NA	35.9	5.8	1.0	0.49	38.7	38.7	520B-2
520B-3	1	23.8	0.9	17.2	5.7	INA	INA	N	897.2	42	Volume Rtg	898.0	1.1	65.0		0.5	Verify existing outlet information in Hopkins.	NA	NA	23.8	0.9	0.5	0.49	21.7	21.7	520B-3
520C	1	41.4	0.74	30.5	10.2	927.7	24	N	927.7	24	Volume Rtg	934.0	4.1	58.0		0.5	Existing pipe with overflow assumed to be adequate. Need to construct a berm.	920	930	41.4	0.7	1.4	0.49	31.1	31.1	520C
520D	1	18.2	0	9.1	9.1	886	OC	N	NA	36	Volume Rtg	NA	0.0	61.0		0.5		NA	NA	18.2	NA	NA	0.34	0	0	520D
582A	1	20.5	0.74	14.8	4.9	945.3	18	N	945.3	18	Volume Rtg	950.0	4.0	12.0		1		945	948	20.5	0.7	3.6	0.49	49.9	49.9	582A
582B	1	47.3	0.45	23.4	23.4	948	OC	N	944.5	18	Volume Rtg	949.0	4.3	70.0		0.5	Need to construct a berm.	942	947	47.3	0.5	0.8	0.34	12.5	31.3	582B
582C	1	150.4	0	60.2	90.2	876.6	3-36	N	876.6	3-36	Volume Rtg	879.5	20.0	317.0		1		876.6	879	150.4	NA	NA	0.28	0	25.7	582C
582C-1	1	7	0.2	3.4	3.4	884	15	N	884	15	Volume Rtg	889.0	1.5	5.0		1		NA	NA	7.0	0.2	2.0	0.34	48	48	582C-1
582C-4	1	16.1	1.35	5.9	8.9	879.8	24	N	879.8	12	Volume Rtg	882.0	4.2	1.0		12		NA	NA	16.1	1.4	0.5	0.28	23.4	23.4	582C-4
582D	1	43.4	2	33.1	8.3	880.6	42	N	884	42	Volume Rtg	889.0	18.4	41.0		0.5		885.4	889.2	43.4	2.0	2.5	0.52	25.7	57.1	582D
582D-1	1	18.4	0.3	13.6	4.5	884.5	24	N	884.5	24	Volume Rtg	889.5	2.2	20.0		0.5		NA	NA	18.4	0.3	0.5	0.49	13.5	13.5	582D-1
582E	1	42.5	1.58	28.6	12.3	903	21	N	903	21	Volume Rtg	906.3	7.0	20.0		1	Existing pipe assumed to be adequate. Need to construct a berm.	903	906.2	42.5	1.6	3.0	0.46	51.3	51.3	582E
582F	1	82.5	3	67.6	11.9	885.3	48	N	885.3	48	Volume Rtg	889.0	18.1	35.0		3		889.8	890	82.5	3.0	4.0	0.55	49	56.8	582F
582F-1	1	48.2	0.86	35.5	11.8	888.8	2-30	N	888.8	2-30	Volume Rtg	893.0	4.2	85.0		0.5		NA	NA	48.2	0.9	2.9	0.49	39.9	39.9	582F-1
582G	1	13.4	2.25	6.7	4.5	917.3	12	N	917.3	12	Volume Rtg	918.7	3.0	2.0		3		917.3	917.8	13.4	2.3	3.6	0.40	60.5	60.5	582G

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582H	1	29.2	0	20.4	8.8	INA	INA	N	NA	NA	Volume Rtg	NA	NA			0.5	Criteria not set due to lack of topographic information. Verify topographic information from Eden Prairie. Outlet to be installed by Eden Prairie. Has a MDNR wetland in Eden Prairie.	NA	NA	29.2	NA	NA	0.46	NE	NE	582H
582I	1	9.3	1	6.6	1.7	891.8	36	N	891.8	36	Volume Rtg	894.0	2.5	20.0		0.5		NA	NA	9.3	1.0	3.4	0.52	57.8	57.8	582I
582I-1	1	66.9	0	53.5	13.4	INA	10x6.5' Box	N	Invert	10x6.5' Box	See Comments	877.5	NA		400.0	0.5	Watershed is in floodplain of North Fork Nine Mile Creek. Discharge and Flood Elevation set to Flood Insurance Study. Drainage area is within City boundary.	NA	NA	66.9	NA	NA	0.52	NE	NE	582I-1
Subtotal		799.6	23.7	527.2	248.7															799.6						Subtotal

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<i>Glen Lake</i>																										
584	1	5.7	0.23	1.4	4.1	1060.2	OC	Y	1054	12	Volume Rtg	1058.0	1.0	1.0		3		1054	1057	5.7	0.2	2.0	0.18	44.9	44.9	584
585	1	14	0.16	3.5	10.4	1001.3	OC	N	996	42	Volume Rtg	1000.0	1.1	53.0		0.5		994.3	999	14.0	0.2	1.3	0.18	15.3	37.6	585
586	1	22.6	0.46	5.5	16.6	1027.3	OC	Y	1014.7	12	Volume Rtg	1020.0	3.4	3.0		1		1010	1016	22.6	0.5	3.4	0.18	51.1	51.1	586
586A	1	11.4	0	2.8	8.6	NA	NA	N	NA	30	Volume Rtg	NA	0.0	33.0		0.5		NA	NA	11.4	NA	NA	0.18	0	0	586A
587	1	17.8	0	4.5	13.3	978	OC	N	NA	42	Volume Rtg	NA	0.0	48.0		0.5		NA	NA	17.8	NA	NA	0.19	0	0	587
588	1	18.5	0	4.6	13.9	NA	NA	N	NA	42	Volume Rtg	NA	0.0	53.0		0.5		NA	NA	18.5	NA	NA	0.18	0	0	588
589	1	10.6	0.45	2.5	7.7	955	24	N	955	24	Volume Rtg	961.0	3.6	9.0		1		955	962	10.6	0.5	2.5	0.18	45.3	42.9	589
590	1	36.2	0.6	8.9	26.7	914.7	18	N	914.7	42	Volume Rtg	919.5	5.5	37.0		6		914.9	920.5	36.2	0.6	2.4	0.18	17.9	58.5	590
590A	1	3	0	0.8	2.3	NA	NA	N	NA	15	Volume Rtg	NA	0.0	8.0		0.5		NA	NA	3.0	NA	NA	0.18	0	0	590A
591	1	11.8	0	3.0	8.8	949.8	33	N	949.8	33	Volume Rtg	951.0	0.2	29.0		0.5		949	949.5	11.8	NA	NA	0.19	0	0	591
591A	1	7.5	0	1.9	5.6	970	15	N	970	12	Volume Rtg	972.5	1.1	1.0		1		NA	NA	7.5	NA	NA	0.18	0	0	591A
592	1	3.8	0	1.0	2.9	INA	INA	N	NA	18	Volume Rtg	NA	0.0	12.0		0.5		NA	NA	3.8	NA	NA	0.18	0	0	592
592A	1	69	0.45	17.0	51.6	953.6	OC	Y	945.5	12	Volume Rtg	953.2	12.1	2.0		240		941.4	952	69.0	0.5	1.5	0.18	26.1	31.9	592A
592A-1	1	14.8	0.3	3.6	10.9	1011.7	OC	Y	1005	12	Volume Rtg	1011.0	3.0	1.0		2		NA	NA	14.8	0.3	2.0	0.18	42.4	42.4	592A-1
593	1	3.2	0	0.8	2.4	958.3	OC	N	955.5	12	Volume Rtg	957.5	0.3	3.0		1		955.5	NA	3.2	NA	NA	0.18	0	0	593
594	1	12.8	0	5.1	7.7	NA	NA	N	NA	42	Volume Rtg	NA	0.0	70.0		0.5		NA	NA	12.8	NA	NA	0.28	0	0	594
595	1	8.3	0	2.1	6.2	INA	INA	N	NA	42	Volume Rtg	NA	0.0	114.0		0.5		NA	NA	8.3	NA	NA	0.19	0	0	595
596	1	7.2	0	1.8	5.4	943.4	42	N	943.4	42	Volume Rtg	947.5	0.6	159.0		0.5		942.7	943	7.2	NA	NA	0.18	0	19.2	596
597	1	7	0.14	0.7	6.2	935	OC	N	924	12	Volume Rtg	926.5	0.6	3.0		1		922.5	926.5	7.0	0.1	0.6	0.09	27.5	27.5	597
597A	1	27.6	1.03	6.6	19.9	1008.6	OC	Y	1002.7	12	Volume Rtg	1005.5	4.2	1.0		12		1002	1005	27.6	1.0	2.4	0.18	47.8	47.8	597A
597A-2	1	1.6	0.1	0.4	1.1	1008	OC	Y	1003.3	12	Volume Rtg	1005.5	0.2	1.0		1		NA	NA	1.6	0.1	1.0	0.18	35.6	35.6	597A-2
598	1	62.9	1.54	15.3	46.0	963.9	30	N	963.9	36	Volume Rtg	971.0	12.2	36.0		1		962	967	62.9	1.5	5.4	0.18	50.1	60.4	598

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City of Minnetonka, Water Resources Management Plan

Nine Mile Creek Watershed

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City of Minnetonka, Water Resources Management Plan

Nine Mile Creek Watershed

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		Watershed Characteristics				Existing Conditions			Proposed Conditions								Historical Elevations ^C		PondNET Information							
		Total Area (Ac)	Water Area (Ac)	Impervious Area (Ac)	Turf Area (Ac)	Existing Outlet Elevation	Existing Outlet Size (in)	Land-Locked?	Proposed Normal Elevation	Proposed Outlet Size (in) Approx	Hydrologic Evaluation Method	1% Annual Exceedance Probability Storm (100-yr) Flood Elevation	Storage (Ac-ft)	Average Discharge (cfs)	Peak Discharge (cfs)	Critical Storm Duration (hrs)	Comments	Normal Elevation	Flood Elevation	Total Direct Watershed Area (Ac)	Pond Area (Ac)	Mean Depth (ft)		Runoff Coefficient	Total Phosphorus Removal (%) Pond	Total Phosphorus Removal (%) Total Watershed
598A-1	2	4.9	0.1	1.2	3.6	990.1	42	N	990.1	12	Volume Rtg	990.2	0.1	3.0	12	1	Existing Conditions assumed to be same as proposed; Review of As-builts needed	988.5	991	4.9	0.1	1.0	0.18	30.7	30.7	598A-1
598A-2	2	5.2	0.13	1.3	3.8	986.2	42	N	986.2	12	Volume Rtg	990.2	1.1	3.0	12	1	Existing Conditions assumed to be same as proposed; Review of As-builts needed	988.5	991	5.2	0.1	1.0	0.18	31.7	31.7	598A-2
599	2	17.1	0.98	4.0	12.1	980.5	45	N	980.5	15	Volume Rtg	982.4	2.0	9.0	15	1	Existing Conditions assumed to be same as proposed; Review of As-builts needed	976	979.5	17.1	1.0	3.3	0.18	51	56.5	599
600	2	11.2	0	2.8	8.4	967.3	48	N	967.3	18	Volume Rtg	972.6	1.4	15.0	18	1	Existing Conditions assumed to be same as proposed; Review of As-builts needed	968	972.8	11.2	NA	NA	0.18	0	51	600
601	1	27.4	0.25	6.8	20.4	933.4	33	N	933.4	21	Volume Rtg	939.1	3.6	19.0	21	1		933.5	938.5	27.4	0.3	1.7	0.18	12.1	47.6	601
602	1	23.1	1	5.5	16.6	983.6	OC	Y	980.1	15	Volume Rtg	983.5	5.5	4.0	15	12		980	983.5	23.1	1.0	3.1	0.18	43	57.4	602
603	1	18	0.75	4.3	12.9	986.5	OC	Y	981.5	12	Volume Rtg	984.8	2.7	1.0	12	6		980	984.5	18.0	0.8	3.5	0.18	54.8	54.8	603
603A	1	12.9	0.1	3.2	9.6	989	OC	HFP	982	30	Volume Rtg	984.0	0.5	29.0	30	0.5		982	984	12.9	0.1	0.5	0.18	9.4	27.7	603A
604	1	4.4	0.1	1.1	3.2	1019.6	OC	N	1014.7	12	Volume Rtg	1018.0	0.7	1.0	12	1		1014.7	1018	4.4	0.1	0.5	0.18	20.8	20.8	604
605	1	7.3	1	1.3	5.0	1023	OC	Y	1013.4	12	Volume Rtg	1014.8	1.3	1.0	12	2		1014	1015.5	7.3	1.0	4.2	0.15	59.9	59.9	605
606	1	2.6	0.26	0.6	1.8	971.7	OC	N	968	12	Volume Rtg	970.0	0.8	1.0	12	1		966.6	968.5	2.6	0.3	0.7	0.18	29.7	29.7	606
607	1	8.8	0	2.2	6.6	962.3	OC	N	957	15	Volume Rtg	960.6	0.9	8.0	15	0.5	Need to excavate pond bottom for proposed storage.	957.7	962	8.8	NA	NA	0.18	0	6.8	607
608	1	9.8	0	4.9	4.9	940.3	15	N	940.3	24	Volume Rtg	944.0	0.2	29.0	24	0.5		NA	NA	9.8	NA	NA	0.34	0	0	608
608A	1	8.3	0	3.3	5.0	946.6	33	N	NA	36	Volume Rtg	NA	0.0	35.0	36	0.5	Discharge includes flow from 607. Existing pipe with overflow assumed to be adequate.	NA	NA	8.3	NA	NA	0.27	0	9.5	608A
609	1	2.6	0	0.7	2.0	944	OC	N	NA	18	Volume Rtg	NA	0.0	8.0	18	0.5		NA	NA	2.6	NA	NA	0.18	0	0	609
609A	1	2.6	0	0.9	1.7	INA	INA	N	940	12	Volume Rtg	942.0	0.1	3.0	12	1		940	942	2.6	NA	NA	0.25	0	0	609A
610	1	11.6	0.6	2.1	8.9	916.8	42	N	916.8	42	Volume Rtg	926.4	4.0	52.0	42	6	Existing outlet with overflow assumed to be adequate. Pipe reconstruction is necessary upstream of 610 to convey flows into the proposed sedimentation pond.	917	922	11.6	0.6	4.0	0.15	18.7	57.3	610

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Table 3-14c Watershed Data, Hydrologic Modeling, and Water Quality Modeling Summary

City of Minnetonka, Water Resources Management Plan

Nine Mile Creek Watershed

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City of Minnetonka, Water Resources Management Plan

Nine Mile Creek Watershed

Subwatershed No.	Foot Notes ^A	Hydrologic Modeling																Water Quality Modeling						Subwatershed No.		
		Watershed Characteristics				Existing Conditions			Proposed Conditions									Historical Elevations ^C		PondNET Information						
		Total Area (Ac)	Water Area (Ac)	Impervious Area (Ac)	Turf Area (Ac)	Existing Outlet Elevation	Existing Outlet Size (in)	Land-Locked?	Proposed Normal Elevation	Proposed Outlet Size (in) Approx	Hydrologic Evaluation Method	1% Annual Exceedance Probability Storm (100-yr) Flood Elevation	Storage (Ac-ft)	Average Discharge (cfs)	Peak Discharge (cfs)	Critical Storm Duration (hrs)	Comments	Normal Elevation	Flood Elevation	Total Direct Watershed Area (Ac)	Pond Area (Ac)	Mean Depth (ft)	Runoff Coefficient		Total Phosphorus Removal (%) Pond	Total Phosphorus Removal (%) Total Watershed
611	1	4.4	0	1.1	3.3	919	12	N	919	12	Volume Rtg	926.0	0.5	1.0		1		920	924.5	4.4	NA	NA	0.18	0	0	611
611A	1	4	0	1.0	3.0	NA	INA	N	INA	48	Volume Rtg	NA	0.0	76.0		0.5	Discharge includes flow from 608A and 608. Existing pipe with overflow assumed to be adequate.	NA	NA	4.0	NA	NA	0.18	0	0	611A
614A	1	6	0	1.5	4.5	NA	NA	N	NA	21	Volume Rtg	NA	0.0	17.0		0.5		NA	NA	6.0	NA	NA	0.18	0	0	614A
615	1	9.6	0	2.4	7.2	NA	NA	N	NA	42	Volume Rtg	NA	0.0	68.0		0.5	Discharge includes flow from 614A and 616.	NA	NA	9.6	NA	NA	0.18	0	0	615
616	1	7.9	0	2.0	5.9	NA	NA	N	NA	36	Volume Rtg	NA	0.0	22.0		0.5		NA	NA	7.9	NA	NA	0.18	0	0	616
617	1	6.2	0.56	1.4	4.3	906.7	15	N	906.7	15	Volume Rtg	908.3	0.9	1.0		1		NA	NA	6.2	0.6	0.5	0.18	24.4	24.4	617
618	1	1.9	0.2	0.4	1.3	954.3	OC	N	952.3	12	Volume Rtg	954.0	0.5	1.0		1		943.7	946	1.9	0.2	2.8	0.18	53.3	53.3	618
619	1	22.9	0.1	5.7	17.1	903	15	N	903	42	Volume Rtg	906.0	0.4	61.0		0.5		904.3	906	22.9	0.1	4.0	0.18	40.3	40.3	619
619-2	1	7.9	0.33	1.9	5.7	929	OC	Y	924	18	Volume Rtg	925.0	0.4	12.0		0.5		NA	NA	7.9	0.3	3.0	0.18	52.1	52.1	619-2
621	1	13.1	0.07	9.8	3.3	956	21	N	956	21	Volume Rtg	960.0	0.4	44.0		0.5		956.4	962	13.1	0.1	1.0	0.49	12.3	12.3	621
623	1	41	4.62	18.2	18.2	921.3	OC	Y	908.3	12	Volume Rtg	912.0	18.3	1.0		96		905.4	907.5	41.0	4.6	6.6	0.34	63.7	65.1	623
627	1	23.5	0	17.6	5.9	920	OC	N	911.2	42	Volume Rtg	920.0	1.4	58.0		0.5		NA	NA	23.5	NA	NA	0.49	0	0	627
628	1	37.7	7.8	4.5	25.4	904	18	N	905.5	18	Volume Rtg	908.0	23.0	2.0		48	assumed to be adequate. Pipe needs a riser.	906	908	37.7	7.8	2.5	0.12	53.1	56.6	628
629	1	177.6	104.2	7.5	65.9	903.1	24	N	903.1	24	Volume Rtg	906.0	222.0	16.0		240	Glen Lake. NE and discharge set to minimize wetland impacts, additional analysis should be performed to refine values. Existing pipe assumed to be adequate.	904	NA	177.6	104.2	8.0	0.10	59.1	78.9	629
629-1	1	30	0.4	3.0	26.6	904.6	OC	N	910	OC	Volume Rtg	910.1	0.1	212.0		0.5	Water Quality pipe is to convey northeast flows to 629-1 sedimentation pond.	NA	NA	30.0	0.4	4.0	0.10	11.4	48.1	629-1
629-2	1	46.6	17.9	2.9	25.8	903.1	OC	N	903.1	OC	Volume Rtg	906.0	38.0	16.0		240	Outlet elevation controlled by 24" in 629. Existing open channel outlet for 629-2 is assumed to be adequate.	NA	NA	46.6	17.9	4.0	0.10	47	73.2	629-2

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676-1	1	21.9	0.1	6.5	15.3	933.3	OC	Y	924.5	18	Volume Rtg	931.0	4.6	13.0		2		924.2	930	21.9	0.1	1.5	0.22	7.4	36.4	676-1	
677	1	8.1	0	2.0	6.1	948	OC	N	934.1	18	Volume Rtg	942.0	0.8	15.0		0.5		938.4	943.5	8.1	NA	NA	0.19	0	1.4	677	
678	1	6.2	0	4.7	1.6	933.3	OC	N	928.9	24	Volume Rtg	933.0	0.7	24.0		1		928	933	6.2	NA	NA	0.49	0	41.2	678	
679	1	3.1	0	0.8	2.3	NA	OC	N	NA	18	Volume Rtg	NA	0.0	10.0		0.5		NA	NA	3.1	NA	NA	0.19	0	0	679	
680	1	6.3	0	1.5	4.8	942.8	OC	N	941.6	12	Volume Rtg	944.0	0.5	5.0		0.5	Need to construct a berm.	940.9	944	6.3	NA	NA	0.18	0	0	680	
681	1	12.8	2.4	6.8	3.6	941.9	OC	Y	938	12	Volume Rtg	940.0	5.6	1.0		12		929.3	936	12.8	2.4	3.0	0.43	53.5	53.1	681	
681-1	1	3.9	1.1	1.7	1.1	941.9	OC	Y	938	12	Volume Rtg	940.0	2.6	1.0		12		NA	NA	3.9	1.1	3.3	0.40	43	64.6	681-1	
682	1	2.4	0	0.2	2.2	NA	OC	N	NA	15	Volume Rtg	NA	0.0	8.0		0.5		NA	NA	2.4	NA	NA	0.09	0	0	682	
683	1	5.7	0	1.4	4.3	NA	OC	N	NA	21	Volume Rtg	NA	0.0	17.0		0.5		NA	NA	5.7	NA	NA	0.18	0	0	683	
Subtotal		1065.8	150.5	246.4	668.8															1065.8							Subtotal

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<i>Glen Lake Outlet</i>																										
624	1	4.3	0	1.1	3.2	INA	INA	N	NA	18	Volume Rtg	NA	0.0	12.0		0.5		903.5	907.5	4.3	NA	NA	0.18	0	0	624
624A	1	4.4	0	2.2	2.2	INA	INA	N	NA	18	Volume Rtg	NA	0.0	14.0		0.5		NA	NA	4.4	NA	NA	0.34	0	0	624A
625	1	2.5	1.16	1.0	0.3	911	18	N	911	18	Volume Rtg	913.2	2.0	6.0		1		903	907	2.5	1.2	2.0	0.49	46.1	46.1	625
630	1	8.4	0	2.1	6.3	INA	INA	N	911	18	Volume Rtg	914.5	0.2	15.0		0.5		NA	NA	8.4	0.0	0.0	0.18	0	0	630
631	1	24.7	0	6.2	18.5	902.2	OC	N	902.2	OC	Volume Rtg	902.7	0.1			NA	Existing outlet assumed to be adequate. Due to complicated stream hydrology discharge not estimated. FE from WMO.	903.6	NA	24.7	NA	0.0	0.18	0	80.2	631
632	1	11.1	0	2.8	8.3	928.4	OC	N	934.8	24	Volume Rtg	938.4	0.6	20.0		0.5		NA	NA	11.1	0.0	0.0	0.18	0	0	632
633	1	58.7	0.8	14.5	43.4	897.1	42	N	897.1	42	Volume Rtg	902.0	35.0			NA	Existing pipe assumed to be adequate. Due to complicated stream hydrology discharge not estimated. FE from WMO.	896.6	NA	58.7	0.8	0.4	0.18	1	75.6	633
633A	1	4.4	0	1.1	3.3	918.6	18	N	918	18	Volume Rtg	922.0	0.4	3.0		0.5		NA	NA	4.4	0.0	0.0	0.18	0	0	633A
633B	1	6.4	0	4.2	2.2	INA	18	N	NA	18	Volume Rtg	NA	0.0	26.0		0.5		NA	NA	6.4	NA	0.0	0.43	0	67.8	633B
633C	1	2	0	0.5	1.5	INA	INA	N	NA	12	Volume Rtg	NA	0.0	5.0		0.5		NA	NA	2.0	NA	0.0	0.18	0	0	633C
Subtotal		126.9	2.0	35.6	89.4															126.9						Subtotal

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City of Minnetonka, Water Resources Management Plan

Nine Mile Creek Watershed

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City of Minnetonka, Water Resources Management Plan

Nine Mile Creek Watershed

Subwatershed No.	Foot Notes ^A	Hydrologic Modeling																Water Quality Modeling						Subwatershed No.		
		Watershed Characteristics				Existing Conditions			Proposed Conditions									Historical Elevations ^C		PondNET Information						
		Total Area (Ac)	Water Area (Ac)	Impervious Area (Ac)	Turf Area (Ac)	Existing Outlet Elevation	Existing Outlet Size (in)	Land-Locked?	Proposed Normal Elevation	Proposed Outlet Size (in) Approx	Hydrologic Evaluation Method	1% Annual Exceedance Probability Storm (100-yr) Flood Elevation	Storage (Ac-ft)	Average Discharge (cfs)	Peak Discharge (cfs)	Critical Storm Duration (hrs)	Comments	Normal Elevation	Flood Elevation	Total Direct Watershed Area (Ac)	Pond Area (Ac)	Mean Depth (ft)	Runoff Coefficient		Total Phosphorus Removal (%) Pond	Total Phosphorus Removal (%) Total Watershed
<i>Holiday-Wing-Rose</i>																										
634	2, 3	3.3	0	0.8	2.5	1039	12	N	1039	12	Hydrograph	1043.4	0.3		5.9	1	Modeling from Woodgate Pond	1041.1	1044	3.3	NA	NA	0.18	0	0	634
635	2, 3	31.25	1.7	7.4	22.2	1029.3	24	N	1029.3	24	Hydrograph	1031.4	4.0		18.9	1	Modeling from Woodgate Pond	1028	1030.5	31.3	1.7	0.5	0.18	23.4	23.4	635
637	2, 3	9.3	0.1	2.3	6.9	1000.8	12	N	1000.8	12	Hydrograph	1003.0	0.4		50.6	0.5	Existing pipe with overflow assumed to be adequate; Modeling from Woodgate Pond	1000.6	1003.6	9.3	0.1	1.9	0.18	37.56	37.56	637
638	2, 3	9.1	0.25	2.2	6.6	986.9	15	N	986.9	15	Hydrograph	992.4	3.2		13.0	3	Existing pipe assumed to be adequate; Modeling from Woodgate Pond	987.5	989.5	9.1	0.3	3.4	0.18	39.2	50.5	638
639	2, 3	7.3	0.7	1.3	5.3	NA	NA	N	1028.6	12	Hydrograph	1029.7	1.1		4.7	1	Modeling from Woodgate Pond	1028	1030.5	7.3	0.7	5.0	0.15	62.27	62.27	639
640	2, 3	14.1	0.5	3.4	10.2	982	12	N	982	12	Hydrograph	985.0	4.9		0.9	3	Existing pipe assumed to be adequate; Modeling from Woodgate Pond	980	983	14.1	0.5	2.8	0.18	40.7	61.48	640
641	2, 3	26.4	0	6.6	19.8	963	21	N	963	21	Hydrograph	970.1	5.3		53.2	1	Existing pipe assumed to be adequate; Modeling from Woodgate Pond	969	978	26.4	0.0	NA	0.19	0	37.13	641
641A	2, 3	6.1	0.1	1.5	4.5	997.4	12	N	997.4	48	Hydrograph	998.8	0.1		62.2	1	Modeling from Woodgate Pond	NA	NA	6.1	0.1	0.2	0.18	5.37	26.6	641A
642	2, 3	11.6	0	2.9	8.7	NA	12&15	N	NA	15	Hydrograph	NA	0.0		49.6	0.5	Existing 15" outlet with overflow assumed to be adequate; Modeling from Woodgate Pond	NA	NA	11.6	NA	NA	0.18	0	0	642

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City of Minnetonka, Water Resources Management Plan

Nine Mile Creek Watershed

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Nine Mile Creek Watershed

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		Watershed Characteristics				Existing Conditions			Proposed Conditions								Historical Elevations ^C		PondNET Information							
		Total Area (Ac)	Water Area (Ac)	Impervious Area (Ac)	Turf Area (Ac)	Existing Outlet Elevation	Existing Outlet Size (in)	Land-Locked?	Proposed Normal Elevation	Proposed Outlet Size (in) Approx	Hydrologic Evaluation Method	1% Annual Exceedance Probability Storm (100-yr) Flood Elevation	Storage (Ac-ft)	Average Discharge (cfs)	Peak Discharge (cfs)	Critical Storm Duration (hrs)	Comments	Normal Elevation	Flood Elevation	Total Direct Watershed Area (Ac)	Pond Area (Ac)	Mean Depth (ft)		Runoff Coefficient	Total Phosphorus Removal (%) Pond	Total Phosphorus Removal (%) Total Watershed
643	2, 3	9.6	0.4	1.8	7.4	982	12	N	982	12	Hydrograph	986.0	3.1		3.0	0.5	Existing pipe assumed to be adequate; Modeling from Woodgate Pond	972	978.2	9.6	0.4	6.5	0.15	64.71	64.71	643
644	2, 3	4.6	0	1.2	3.5	990.2	OC	N	NA	OC	Hydrograph	NA	0.0		45.7	0.5	Existing outlet assumed to be adequate; Modeling from Woodgate Pond	NA	NA	4.6	NA	NA	0.18	0	0	644
645	1	1.3	0	0.3	1.0	NA	NA	N	NA	12	Hydrograph	NA	0.0		7.0	0.5		NA	NA	1.3	NA	NA	0.18	0	0	645
647	2, 3	4.2	0.75	0.9	2.6	INA	INA	N	944.4	27	Hydrograph	947.6	1.3		34.0	0.5	Existing pipe assumed to be adequate; Modeling from Woodgate Pond	954	957.5	4.2	0.8	2.0	0.18	46.06	46.06	647
647A	2, 3	4.3	0	1.1	3.2	NA	18	N	NA	18	Hydrograph	NA	0.0		22.0	0.5	Existing pipe assumed to be adequate; Modeling from Woodgate Pond	NA	NA	4.3	NA	NA	0.18	0	0	647A
648	2, 3	6.4	0	1.6	4.8	NA	NA	N	NA	24	Hydrograph	NA	0.0		32.5	0.5	Modeling from Woodgate Pond	NA	NA	6.4	NA	NA	0.18	0	0	648
649	2, 3	5.2	0.6	1.2	3.5	INA	12	N	936	12	Hydrograph	935.9	1.5		3.0	1	Existing pipe assumed to be adequate; Modeling from Woodgate Pond	932.8	939	5.2	0.6	2.5	0.18	50.33	50.33	649
649A	2, 3	11.8	0	3.0	8.9	NA	2-15	N	NA	2-15	Hydrograph	NA	0.0		61.6	0.5	Existing pipe with overflow assumed to be adequate; Modeling from Woodgate Pond	NA	NA	11.8	NA	NA	0.18	0	0	649A
650	3	34.6	1.6	8.3	24.8	931.5	15	N	931	30	Hydrograph	935.0	7.2		26.7	2	Existing Conditions from As-Built; Modeling from Woodgate Pond; Pumped outlet?	931.5	935	34.6	1.6	1.4	0.18	29.59	49.35	650
651	2, 3	14.8	0	3.7	11.1	NA	27	N	NA	27	Hydrograph	NA	0.0		82.1	0.5	Existing pipe assumed to be adequate; Modeling from Woodgate Pond	NA	NA	14.8	NA	NA	0.18	0	0	651

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City of Minnetonka, Water Resources Management Plan

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City of Minnetonka, Water Resources Management Plan

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		Watershed Characteristics				Existing Conditions			Proposed Conditions								Historical Elevations ^C		PondNET Information						
		Total Area (Ac)	Water Area (Ac)	Impervious Area (Ac)	Turf Area (Ac)	Existing Outlet Elevation	Existing Outlet Size (in)	Land-Locked?	Proposed Normal Elevation	Proposed Outlet Size (in) Approx	Hydrologic Evaluation Method	1% Annual Exceedance Probability Storm (100-yr) Flood Elevation	Storage (Ac-ft)	Average Discharge (cfs)	Peak Discharge (cfs)	Critical Storm Duration (hrs)	Comments	Normal Elevation	Flood Elevation	Total Direct Watershed Area (Ac)	Pond Area (Ac)	Mean Depth (ft)		Runoff Coefficient	Total Phosphorus Removal (%) Pond
652	2, 3	8.3	0	2.1	6.2	NA	15	N	NA	15	Hydrograph	NA	0.0	37.5	0.5	Existing pipe with overflow assumed to be adequate; Modeling from Woodgate Pond	NA	NA	8.3	NA	NA	0.18	0	0	652
653	2, 3	9.1	0	2.3	6.8	954	12	N	954	12	Hydrograph	957.2	1.2	7.0	1	Existing pipe assumed to be adequate; Modeling from Woodgate Pond	NA	NA	9.1	0.0	0.0	0.18	0	0	653
654	2, 3	14	0	3.5	10.5	NA	18	N	NA	18	Hydrograph	NA	0.0	60.8	0.5	Existing pipe assumed to be adequate; Modeling from Woodgate Pond	NA	NA	14.0	NA	NA	0.18	0	0	654
655	2, 3	11.1	0	2.8	8.3	NA	21	N	NA	21	Hydrograph	NA	0.0	54.4	0.5	Existing pipe assumed to be adequate. Pipe included in 656; Modeling from Woodgate Pond	NA	NA	11.1	NA	NA	0.18	0	0	655
656	2, 3	5.5	0	1.4	4.1	NA	21	N	NA	21	Hydrograph	952.7	0.9	44.4	1	Existing pipe with overflow assumed to be adequate; Modeling from Woodgate Pond	NA	NA	5.5	NA	NA	0.18	0	0	656
657		26.8	9.2	3.5	14.1	936.7	18	N	936.7	18	Hydrograph	944.4	1.3	34.1	1	Lake Holiday: assumed impellor improved to prevent existing flooding (0.1'). Pumped outlet; Modeling from Woodgate Pond	937.7	942.6	26.8	9.2	2.5	0.15	41.91	61.42	657
658	1	13.1	0	3.3	9.8	NA	33	N	NA	33	Hydrograph	NA	0.0	70.0	0.5		NA	NA	13.1	NA	NA	0.18	0	0	658
659	1	4.8	0	1.2	3.6	NA	INA	N	950	12	Volume Rtg	952.4	0.7	3.0	0.5		947.8	952.5	4.8	0.0	NA	0.18	0	0	659
660	1	7.3	0	1.8	5.5	0	OC	N	943.7	30	Volume Rtg	947.0	1.0	26.0	0.5		NA	NA	7.3	0.0	NA	0.18	0	0	660
660A	1	9.9	0	2.5	7.4	NA	36	N	NA	36	Hydrograph	NA	0.0	88.0	0.5		NA	NA	9.9	NA	NA	0.18	0	0	660A

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661	1	1.6	0	0.4	1.2	NA	NA	N	NA	12	Volume Rtg	NA	0.0	6.0		0.5	Flood storage is provided in Pond 659	NA	NA	1.6	NA	NA	0.18	0	0	661
662	1	3.9	0.1	1.0	2.9	960.2	OC	N	954	12	Volume Rtg	956.4	0.7	3.0		1		949.4	955.7	3.9	0.1	1.3	0.18	28.97	47.71	662
663	1	4.1	0.6	0.9	2.6	961.9	OC	N	954	12	Volume Rtg	956.4	0.5	3.0		0.5		946.1	949	4.1	0.6	3.5	0.18	57.37	57.37	663
664	1	4.3	0	1.1	3.2	NA	15	N	NA	15	Hydrograph	NA	0.0		24.0	0.5		NA	NA	4.3	NA	NA	0.18	0	0	664
665	1	33	15.1	3.6	14.3	939.8	18	N	939.8	36	Hydrograph	941.3	23.0		42.0	48	Wing Lake: proposes existing outlet improved to minimize road inundation.	939.9	942	33.0	15.1	2.5	0.15	39.46	66.1	665
666	1	10.5	0	2.6	7.9	INA	INA	N	968	24	Hydrograph	972.2	0.2		80.0	0.5	Pipe proposed to minimize gulley erosion; assumes some overflow.	970.2	927	10.5	0.0	NA	0.18	0	0	666
667	1	7.4	0	1.9	5.6	NA	NA	N	NA	18	Hydrograph	NA	0.0		36.0	0.5		NA	NA	7.4	NA	NA	0.18	0	0	667
668	1	12.2	0	3.1	9.2	NA	15	N	NA	15	Hydrograph	NA	0.0		65.0	0.5		NA	NA	12.2	NA	NA	0.18	0	0	668
669	1	4.5	0	1.1	3.4	NA	12	N	NA	12	Hydrograph	NA	0.0		25.0	0.5		NA	NA	4.5	NA	NA	0.18	0	0	669
670	1	10.1	0	2.5	7.6	NA	INA	N	NA	30	Hydrograph	NA	0.0		55.0	0.5		NA	NA	10.1	NA	NA	0.18	0	0	670
671	1	4.8	0	1.2	3.6	NA	INA	N	NA	18	Hydrograph	NA	0.0		30.0	0.5		NA	NA	4.8	NA	NA	0.18	0	0	671
695	1	37.8	0	9.5	28.4	NA	27	N	NA	42	Hydrograph	NA	0.0		150.0	0.5		NA	NA	37.8	NA	NA	0.18	0	0	695
696	1	5.6	0	1.4	4.2	NA	12&24	N	NA	24	Hydrograph	NA	0.0		35.0	0.5		NA	NA	5.6	NA	NA	0.18	0	0	696
696A	1	2.4	0	0.6	1.8	973.2	OC	N	968.7	12	Volume Rtg	971.0	0.3	3.0		0.5		960.5	966.5	2.4	0.0	NA	0.18	0	0	696A
697	1	11	0	2.8	8.3	941.9	15&24	N	941.9	36	Hydrograph	945.5	0.1		75.0	0.5	Ex. outlet appears undersized and overflow is higher than low house.	943.3	945.5	11.0	0.0	NA	0.18	0	0	697
698	1	5.8	0.2	1.4	4.2	931.8	18	N	931.8	36	Hydrograph	937.5	3.4		42.0	1		931.8	936	5.8	0.2	1.0	0.18	1.75	65.65	698
699	1	11.6	0	2.9	8.7	INA	24	N	926	36	Hydrograph	931.7	0.5		42.0	1		NA	NA	11.6	0.0	NA	0.18	0	63.58	699
700	1	24.8	10.3	2.9	11.6	941.5	12	N	941.5	12	Hydrograph	943.5	21.5		5.0	240		941.5	943.5	24.8	10.3	3.5	0.15	49.28	68.39	700
701	1	5.8	0.15	1.4	4.2	945.5	8&15	N	947	12	Volume Rtg	949.5	0.7	3.0		0.5	Raise outlet (Moderate); existing pipe (Routine)	944.9	949.5	5.8	0.2	0.8	0.18	27.48	27.48	701
708	1	72.3	28.7	6.5	37.1	927.1	18	N	925.9	18	Hydrograph	928.3	83.0		16.4	240	Lake Rose; Riser (Moderate); Existing pipe (Routine); NE at 925.0 provides FE of 927.7.	927.1	929.6	72.3	28.7	5.9	0.12	50.47	76.75	708
Subtotal		598.7	71.1	124.2	403.4															598.7						Subtotal

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Table 3-14c Watershed Data, Hydrologic Modeling, and Water Quality Modeling Summary

City of Minnetonka, Water Resources Management Plan

Nine Mile Creek Watershed

Table 3-14c Watershed Data, Hydrologic Modeling, and Water Quality Modeling Summary

City of Minnetonka, Water Resources Management Plan

Nine Mile Creek Watershed

Subwatershed No.	Foot Notes ^A	Hydrologic Modeling																Water Quality Modeling						Subwatershed No.		
		Watershed Characteristics				Existing Conditions			Proposed Conditions									Historical Elevations ^C		PondNET Information						
		Total Area (Ac)	Water Area (Ac)	Impervious Area (Ac)	Turf Area (Ac)	Existing Outlet Elevation	Existing Outlet Size (in)	Land-Locked?	Proposed Normal Elevation	Proposed Outlet Size (in) Approx	Hydrologic Evaluation Method	1% Annual Exceedance Probability Storm (100-yr Flood Elevation)	Storage (Ac-ft)	Average Discharge (cfs)	Peak Discharge (cfs)	Critical Storm Duration (hrs)	Comments	Normal Elevation	Flood Elevation	Total Direct Watershed Area (Ac)	Pond Area (Ac)	Mean Depth (ft)	Runoff Coefficient		Total Phosphorus Removal (%) Pond	Total Phosphorus Removal (%) Total Watershed
<i>South Williston</i>																										
672A	1	8.2	0.45	1.9	5.8	INA	INA	N	1012	12	Hydrograph	1015.0	1.2		3.0	0.5		1011	1015	8.2	0.5	1.0	0.18	34.95	34.95	672A
672B	1	16.3	0.7	3.9	11.7	971	OC	HFP	970.4	12	Hydrograph	974.0	3.5		3.0	0.5		967.3	973.5	16.3	0.7	2.7	0.18	47.19	52.38	672B
672C	1	11.9	0	3.0	8.9	INA	INA	N	NA	24	Hydrograph	NA	0.0		70.0	0.5		942.5	944	11.9	NA	NA	0.18	0	36.21	672C
672D	1	3.8	0	1.0	2.9	1012.5	OC	HFP	1008.4	12	Hydrograph	1012.5	0.4		5.0	0.5		1008.4	1012.5	3.8	NA	NA	0.18	0	23.72	672D
673D	1	4.7	0	1.2	3.5	962	OC	HFP	954	30	Hydrograph	957.0	0.1		30.0	0.5		954	958	4.7	NA	NA	0.18	0	0	673D
673E	1	7	0	1.8	5.3	952.7	OC	HFP	951.2	30	Hydrograph	952.7	0.1		70.0	0.5		951.9	954	7.0	NA	NA	0.18	0	0	673E
673F	1	5.6	0.4	1.6	3.6	939.5	24	N	939.5	24	Hydrograph	945.4	5.2		23.0	1	Pumped Outlet. Existing pipe assumed to be adequate.	940.7	946.5	5.6	0.4	2.3	0.22	32.12	48.27	673F
673H	1	2.6	0	0.7	2.0	INA	INA	N	NA	30	Hydrograph	NA	0.0		70.0	0.5		938	944	2.6	NA	NA	0.18	0	0	673H
674	1	10.6	0	2.7	8.0	NA	INA	N	NA	30	Hydrograph	NA	0.0		55.0	1		NA	NA	10.6	NA	NA	0.18	0	0	674
Subtotal		70.7	1.6	17.5	51.6															70.7						Subtotal

Abbreviations: INA - Information Not Available; OC - Outlet is an Open Channel; NA - Not Available; Y - Yes; N - No; HFP - High Flood Potential; DNR - Minnesota Department of Natural Resources; PWC - DNR Public Watercourse; PD - DNR Public Ditch; US - Upstream; WQ - Water Quality; Const. - Construction

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City of Minnetonka, Water Resources Management Plan

Nine Mile Creek Watershed

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City of Minnetonka, Water Resources Management Plan

Nine Mile Creek Watershed

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		Watershed Characteristics				Existing Conditions			Proposed Conditions							Historical Elevations ^C		PondNET Information								
		Total Area (Ac)	Water Area (Ac)	Impervious Area (Ac)	Turf Area (Ac)	Existing Outlet Elevation	Existing Outlet Size (in)	Land-Locked?	Proposed Normal Elevation	Proposed Outlet Size (in) Approx	Hydrologic Evaluation Method	1% Annual Exceedance Probability Storm (100-yr) Flood Elevation	Storage (Ac-ft)	Average Discharge (cfs)	Peak Discharge (cfs)	Critical Storm Duration (hrs)	Comments	Normal Elevation	Flood Elevation	Total Direct Watershed Area (Ac)	Pond Area (Ac)	Mean Depth (ft)	Runoff Coefficient	Total Phosphorus Removal (%) Pond	Total Phosphorus Removal (%) Total Watershed	
Lake Rose Outlet																										
684	1	6.3	0	1.6	4.7	953	15	N	953	15	Volume Rtg	957.1	0.6	6.0		0.5		NA	NA	6.3	0.0	0.0	0.18	0	0	684
685	1	3.6	0.3	0.8	2.5	956.9	OC	N	954	12	Volume Rtg	955.8	0.9	3.0		2		950.6	954.5	3.6	0.3	1.6	0.18	41.6	49.5	685
686	1	10.6	0	2.7	8.0	941.2	OC	N	NA	24	Volume Rtg	NA	0.0	36.0		0.5		950	952.5	10.6	NA	NA	0.18	0	26.4	686
687	1	2.3	0.4	0.5	1.4	961	OC	N	958	12	Volume Rtg	960.0	0.3	3.0		0.5		955.7	957.5	2.3	0.4	1.6	0.18	48.4	48.4	687
688	1	5.9	0	1.5	4.4	--	INA	N	948.1	21	Volume Rtg	950.0	0.1	16.0		0.5		NA	NA	5.9	0.0	0.0	0.18	0	13.6	688
689	1	7.2	0.2	1.8	5.3	932.4	15	N	932.4	21	Volume Rtg	936.9	3.5	22.0		1		932.4	938.5	7.2	0.2	0.4	0.18	7.7	34.3	689
691	1	7.7	0.7	3.5	3.5	952.7	OC	N	951.1	21	Volume Rtg	952.0	0.6	12.0		0.5		949.3	953	7.7	0.7	2.0	0.34	45.9	45.9	691
692	1	5.1	0	1.3	3.8	--	INA	N	NA	24	Volume Rtg	NA	0.0	24.0		0.5		NA	NA	5.1	NA	NA	0.18	0	35.1	692
693	1	6.6	0	1.7	5.0	--	INA	N	NA	24	Volume Rtg	NA	0.0	20.0		0.5		NA	NA	6.6	NA	NA	0.18	0	0	693
694	1	12.5	0	5.0	7.5	903.6	24	N	903.1	24	Volume Rtg	908.0	0.6	26.0		0.5		NA	NA	12.5	0.0	0.0	0.28	0	0	694
694A	1	5.4	0.2	1.8	3.4	897.2	12	N	897.2	12	Volume Rtg	900.0	0.7	3.0		0.5		NA	NA	5.4	0.2	2.0	0.25	48.2	48.2	694A
694B	1	11.6	0	2.9	8.7	--	INA	N	NA	48	Volume Rtg	NA	0.0	100.0		0.5		NA	NA	11.6	NA	NA	0.18	0	24.7	694B
702	1	3	0	0.8	2.3	944	OC	N	940	12	Volume Rtg	943.7	0.4	3.0		0.5		938.4	944	3.0	0.0	0.9	0.18	22.9	22.9	702
703	1	7.6	0	1.9	5.7	--	24	N	NA	24	Volume Rtg	NA	0.0	21.0		0.5		NA	NA	7.6	NA	NA	0.18	0	0	703
704	1	17.5	0.6	4.2	12.7	916.2	OC	N	915	24	Volume Rtg	916.2	1.3	45.0		0.5		NA	NA	17.5	0.6	0.8	0.18	28.4	29.9	704
705	1	13.1	0	3.3	9.8	--	30	N	NA	30	Volume Rtg	NA	0.0	50.0		0.5		NA	NA	13.1	NA	NA	0.18	0	31.5	705
706	1	18	0.5	4.4	13.1	920.3	18	N	920.3	18	Volume Rtg	924.0	7.2	3.0		1		918.8	925.5	18.0	0.5	2.6	0.18	46.6	46.6	706
707	1	9.2	0	2.3	6.9	NA	NA	N	NA	18	Volume Rtg	NA	0.0	28.0		0.5		NA	NA	9.2	NA	NA	0.18	0	0	707
709	1	4.7	0	1.2	3.5	--	18	N	NA	18	Volume Rtg	NA	0.0	14.0		0.5		NA	NA	4.7	NA	NA	0.18	0	0	709
710	1	16.1	0	4.0	12.1	--	30	N	NA	30	Volume Rtg	NA	0.0	140.0		0.5		NA	NA	16.1	NA	NA	0.18	0	0	710
711	1	6.7	0	1.7	5.0	--	18	N	NA	18	Volume Rtg	NA	0.0	20.0		0.5		NA	NA	6.7	NA	NA	0.18	0	0	711
712	1	1.2	0	0.3	0.9	--	42	N	NA	42	Volume Rtg	NA	0.0	160.0		0.5		NA	NA	1.2	NA	NA	0.18	0	0	712
713	1	6.6	0	2.3	4.3	--	NA	N	NA	27	Volume Rtg	NA	0.0	25.0		0.5		NA	NA	6.6	NA	NA	0.25	0	5.9	713
713A	1	6.1	0.1	2.1	3.9	935	OC	N	934	24	Volume Rtg	935.0	0.2	14.0		0.5		NA	NA	6.1	0.1	0.3	0.25	12.4	12.4	713A
714A	1	2.6	0.2	0.6	1.8	928.7	OC	N	926	12	Volume Rtg	928.0	0.5	3.0		0.5		922	925.5	2.6	0.2	1.7	0.18	38.9	53.2	714A
714B	1	12.6	0	3.2	9.5	891.4	72 Arch	N	891.4	72	Volume Rtg	901.6	0.1	260.0		0.5		895.7	905	12.6	NA	NA	0.18	0	15	714B
714C	1	18.3	0	6.4	11.9	906.4	18	N	NA	18	Volume Rtg	NA	0.0	25.0		0.5		NA	NA	18.3	NA	NA	0.25	0	0	714C
715	1	1.3	0	1.0	0.3	902.5	72 Arch	N	NA	72	Volume Rtg	NA	0.0	260.0		0.5		NA	NA	1.3	NA	NA	0.49	0	14.7	715
716	1	8.6	1.6	1.8	5.3	892.4	36	N	892.4	36	Volume Rtg	895.0	4.7	24.0		0.5		NA	NA	8.6	1.6	2.4	0.18	43.7	48.3	716
Subtotal		238.0	4.8	66.2	167.0															238.0						Subtotal
TOTAL		4994.6	484.3	1620.4	2889.9															4994.6						TOTAL

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