7.0 Lake Cornelia/Lake Edina/Adam's Hill

7.1 General Description of Drainage Area

Figure 7.1 depicts the Lake Cornelia/Lake Edina/Adam's Hill drainage basin. This drainage basin are located in the southeast portion of Edina.

7.1.1 Drainage Patterns

This chapter discusses four major watersheds within the drainage basin: North Lake Cornelia, South Lake Cornelia, Lake Edina, and the Adam's Hill Pond drainage area. These major watersheds are depicted in Figure 7.2. North and South Lake Cornelia ultimately drain to Lake Edina, which outlets into the North Fork of Nine Mile Creek. The Adam's Hill drainage area includes those watersheds within the City of Edina that drain to the Adam's Hill stormwater detention basin in Richfield. This drainage area was analyzed in conjunction with the North Cornelia watershed because the storm sewer systems draining to North Lake Cornelia and Adam's Hill Pond are adjoined at the intersection of 69th Street and York Avenue. Each of the four major watersheds have been further delineated into numerous subwatersheds. The naming convention for each subwatershed is based on the major watershed it is located within. Table 7.1 lists each major watershed and the associated subwatershed naming convention. The stormwater system within these drainage basins is comprised of storm sewers, ponding basins, drainage ditches, and overland flow paths.

Table 7.1 Major Watersheds within the Lake Cornelia/Lake Edina/Adam's Hill Drainage Basin

Major Watershed	Subwatershed Naming Convention	# of Subwatersheds	Drainage Area (acres)
Lake Cornelia- North	NC_##	154	859
Lake Cornelia- South	SC_##	9	112
Lake Edina	LE_##	47	394
Adam's Hill (Richfield)	AHR_##	20	109

7.1.1.1 North Cornelia

North Lake Cornelia has a large watershed, encompassing 859 acres. The North Cornelia watershed has been delineated into 154 subwatersheds and is characterized by several ponding basins within the watershed. Land use within this watershed is comprised of a large commercial area (including the Southdale Shopping Center), portions of T.H. 62 and T.H. 100, residential areas (high and low density), parks, wetlands, and open water. The majority of the runoff from the highly impervious commercial area drains through the France Avenue and West 66th Street storm sewer system and discharges into the Point of France pond, located just northeast of the West 66th Street and Valley View Road intersection. The Point of France pond drains to the Swimming Pool Pond west of Valley View Road, which typically drains to North Lake Cornelia. During large storms, such as the

100-year frequency event, as North Lake Cornelia nears its capacity, the Swimming Pool Pond will flow northward through the two 60-inch culverts located under T.H. 62 that connect the Swimming Pool Pond with the Brookview Pond, just north of T.H. 62. An outlet control structure located on the north side of this pond allows flows to the north into Lake Pamela when the water elevation reaches elevation 863.3 MSL.

North Lake Cornelia covers approximately 29 acres and serves as a recreation area for the City of Edina. The lake outlets to South Lake Cornelia through a 12-inch culvert beneath West 66th Street.

7.1.1.2 South Lake Cornelia

The South Lake Cornelia watershed is located south of the North Lake Cornelia watershed. The 112-acre watershed is comprised of 9 subwatersheds, with two stormwater detention areas in addition to Lake Cornelia. The land use within the watershed is low density residential and open water.

South Lake Cornelia spans approximately 32 acres. The normal elevation of the lake is controlled by a weir structure at elevation 859 MSL. Discharge from South Cornelia flows southward through a 54-inch system for approximately 1,000 feet, where it connects with a 21-inch system at the intersection of Dunberry Lane and Cornelia Drive. This system ultimately drains to Lake Edina. During extreme storm events, such as the 100-year frequency event, the 21-inch storm sewer system at Dunberry Lane and Cornelia Drive restricts flow, resulting in flow northward through the 54-inch system and into South Lake Cornelia.

7.1.1.3 Lake Edina

The Lake Edina watershed is located south of the Lake Cornelia drainage basins. The watershed encompasses approximately 394 acres and has been delineated into 47 subwatersheds. Land use within the watershed is mainly low density residential, with smaller portions of high density residential, commercial, institutional (Cornelia Elementary School), park, wetland, and open water. A wetland is located along the west side of Lake Edina, directly east of T.H. 100, that receives runoff from an area of approximately 36 acres. Flow from this wetland discharges into Lake Edina via a weir structure and pipe system.

Lake Edina spans an area of approximately 23 acres. The normal elevation of the lake is controlled by a weir structure at elevation 822 MSL. Discharge from Lake Edina flows through a 36-inch system underneath T.H. 100 and into the North Fork of Nine Mile Creek.

7.1.1.4 Adam's Hill Pond

The Adam's Hill drainage area discussed in this analysis includes the area within the City of Edina that drains to the Adam's Hill Pond in Richfield. The outlet from Adam's Hill Pond is a pumped outlet that discharges 10 cfs to Centennial Lakes.

7.2 Stormwater System Analysis and Results

7.2.1 Hydrologic/Hydraulic Modeling Results

The 10-year and 100-year frequency flood analyses were performed for the Lake Cornelia/Lake Edina/Adam's Hill drainage basins. The 10-year analysis was based on a ½-hour storm of 1.65 inches of rain. The 100-year analysis was based on a 24-hour storm event of 6 inches of rain. Table 7.2 presents the watershed information and the results for the 10-year and 100-year hydrologic analyses.

The results of the 10-year and 100-year frequency hydraulic analysis for the Lake Cornelia/Lake Edina/Adam's Hill drainage areas are summarized in Table 7.3 and Table 7.4. The column headings in Table 7.3 are defined as follows:

Node/Subwatershed ID—XP-SWMM node identification label. Each XP-SWMM node represents a manhole, catchbasin, pond, or other junction within the stormwater system.

Downstream Conduit—References the pipe downstream of the node in the storm sewer system.

Flood Elevation—The maximum water elevation reached in the given pond/manhole for each referenced storm event (mean sea level). In some cases, an additional flood elevation has been given in parenthesis. This flood elevation reflects the 100-year flood elevation of Nine Mile Creek, per the *Nine Mile Creek Watershed Management Plan*, May 1996.

Peak Outflow Rate—The peak discharge rate (cfs) from a given ponding basin for each referenced storm event. The peak outflow rates reflect the combined discharge from the pond through the outlet structure and any overflow.

NWL—The normal water level in the ponding basin (mean sea level). The normal water levels for the ponding basins were assumed to be at the outlet pipe invert or at the downstream control elevation.

Flood Bounce—The fluctuation of the water level within a given pond for each referenced storm event.

Volume Stored—The maximum volume (acre-ft) of water that was stored in the ponding basin during the storm event. The volume represents the live storage volume only.

Table 7.4 summarizes the conveyance system data used in the model and the model results for the storm sewer system within the Lake Cornelia/Lake Edina/Adam's Hill drainage basins. The peak flows through each conveyance system for the 10-year and 100-year frequency storm events are listed in the table. The values presented represent the peak flow rate through each pipe system only and do not reflect the combined total flow from an upstream node to the downstream node when overflow from a manhole/pond occurs.

Figure 7.3 graphically represents the results of the 10-year and 100-year frequency hydraulic analyses. The figure depicts the boundaries of the drainage areas, subwatershed boundaries, the modeled storm sewer network, surcharge conditions for the XP-SWMM nodes (typically manholes), and the flood prone areas identified in the modeling analyses.

One of the objectives of the hydraulic analyses was to evaluate the level of service provided by the current storm sewer system. The level of service of the system was examined by determining the surcharge conditions of the manholes and catch basins within the storm sewer system during the 10-year and 100-year frequency storm events. An XP-SWMM node was considered surcharged if the hydraulic grade line at that node breached the ground surface (rim elevation). Surcharging is typically the result of limited downstream capacity and tailwater impacts. The XP-SWMM nodes depicted on Figure 7.3 were color coded based on the resulting surcharge conditions. The green nodes signify no surcharging occurred during the 100-year or 10-year storm event, the yellow nodes indicate surcharging during the 100-year event, and the red nodes identify that surcharging is likely to occur during both a 100-year and 10-year frequency storm event. Figure 7.3 illustrates that several XP-SWMM nodes within the Lake Cornelia/Lake Edina/Adam's Hill drainage areas are predicted to experience surcharged conditions during both the 10-year and 100-year frequency storm events. This indicates a probability greater than 10 percent *in any year* that the system will be overburdened and unable to meet the desired level of service at these locations. These manhole and catch basin are more likely to experience inundation during the smaller, more frequent storm events of various durations.

Another objective of the hydraulic analyses was to evaluate the level of protection offered by the current stormwater system. Level of protection is defined as the capacity provided by a municipal drainage system (in terms of pipe capacity and overland overflow capacity) to prevent property damage and assure a reasonable degree of public safety following a rainstorm. A 100-year frequency event is recommended as a standard for design of stormwater management basins. To evaluate the level of protection of the stormwater system within the Lake Cornelia/Lake Edina/Adam's Hill drainage areas, the 100-year frequency flood elevations for the ponding basins and depressed areas were compared to the low elevations of structures surrounding each basin. The low elevations were initially determined using 2-foot topographic information and aerial imagery in ArcView. Where 100-year flood levels of the ponding areas appeared to potentially threaten structures, low house elevations were obtained through field surveys. The areas that were determined to flood and threaten structures during the 100-year frequency storm event are listed in Table 7.5 and highlighted in Figure 7.3. Discussion and recommended implementation considerations for these areas are included in Section 7.3.

7.2.2 Water Quality Modeling Results

The effectiveness of the stormwater system in removing stormwater pollutants such as phosphorus was analyzed using the P8 water quality model. The P8 model simulates the hydrology and phosphorus loads introduced from the watershed of each pond and the transport of phosphorus throughout the stormwater system. Since site-specific data on pollutant wash-off rates and sediment characteristics were not available, it was necessary to make assumptions based on national average values. Due to such assumptions and lack of in-lake water quality data for model calibration, the modeling results were analyzed based on the percent of phosphorus removal that occurred and not based on actual phosphorus concentrations.

Figure 7.4 depicts the results of the water quality modeling for the Lake Cornelia/Lake Edina/Adam's Hill drainage areas. The figure shows the fraction of total phosphorus removal for each water body as well as the cumulative total phosphorus removal in the watershed. The individual water bodies are colored various shades of blue, indicating the percent of the total annual mass of phosphorus entering the water body that is removed (through settling). It is important to note that the percent of phosphorus removal is based on total phosphorus, including phosphorus in the soluble form. Therefore, the removal rates in downstream ponds will decrease due to the large soluble fraction of incoming phosphorus that was unsettleable in upstream ponds. The watersheds are depicted in various shades of gray, indicating the cumulative total phosphorus removal achieved. The cumulative percent removal represents the percent of the total annual mass of phosphorus entering the watershed that is removed in the pond and all upstream ponds.

Ponds that had an average annual total phosphorus removal rate of 60 percent or greater, under average climatic conditions, were considered to be performing well. For those ponds with total phosphorus removal below 60 percent, the permanent pool storage volume was analyzed to determine if additional capacity is necessary. Based on recommendations from the MPCA publication *Protecting Water Quality in Urban Areas*, March 2000, the permanent pool for detention ponds should be equal to or greater than the runoff from a 2.0-inch rainfall, in addition to the sediment storage for at least 25 years of sediment accumulation. For ponds with less than 60 percent total phosphorus removal, the recommended storage volume was calculated for each pond within the drainage basin and compared to the existing permanent pool storage volume.

7.3 Implementation Considerations

The problem areas identified through the hydrologic and hydraulic XP-SWMM analyses and P8 water quality analysis were investigated to determine possible mitigation alternatives. These alternatives are discussed below.

7.3.1 Storm Sewer Capacity Projects

The 100-year frequency hydraulic analysis identified several locations within the Lake Cornelia and Lake Edina watersheds where the 100-year level of protection is not provided by the current stormwater system. The problems and potential corrective measures for these areas are discussed below.

7.3.1.1 Swimming Pool Pond (NC_3)/North Lake Cornelia (NC_62)

During the design process for the West 66th Street drainage improvements, a detailed analysis of the storm water system was performed that included the entire Lake Cornelia drainage area. The system was modeled based on several recommended improvements, many of which have been since implemented. One recommendation was to replace the 18-inch RCP pipe and orifice structure between the Swimming Pool Pond and North Lake Cornelia with a 42-inch equivalent RCP arch pipe. A 20-foot weir control structure was recommended to be installed at the inlet to this pipe. The overland flow elevation between these two areas was recommended to be lowered to 863.5 MSL. Although this recommendation has not yet been implemented, it was assumed to be implemented for the XP-SWMM modeling analysis.

7.3.1.2 Hibiscus Avenue (LE_53, LE_7, LE_10)

Stormwater runoff from a 48.5-acre subwatershed (LE_53) collects at the intersection of Hibiscus Avenue and West Shore Drive. Along the south side of this intersection, two catchbasins connect to the 54-inch storm sewer system that discharges into Lake Edina. Due to the lack of inlet capacity at this intersection, the stormwater that does not enter the storm sewer system flows west along Hibiscus Avenue toward the low area near 4708, 4709, and 4713 Hibiscus Avenue. A separate storm sewer system exists at this low area along Hibiscus, with two catchbasins on the street to allow water into the system. This system extends upstream, collecting runoff from the backyard depression area behind 4708 and 4712 Hibiscus Avenue. During the 100-year frequency event, the low area in the street becomes inundated with stormwater runoff from the watersheds directly tributary to this system and from the excess runoff coming from West Shore Drive (subwatershed LE_53). The street flooding causes the system to back up and reverse flow into the backyard depression area. The 100-year flood elevation in the street and in the backyard depression area reaches approximately 831.1 MSL. This flood elevation has the potential to affect structures at 4704, 4708, 4712, 4716 Hibiscus Avenue on the north side and 4705 Hibiscus on the south side of the street.

To alleviate this problem and ensure a 100-year level of protection is provided, it is recommended that a positive overflow drainage way be constructed between the low area of the street and Lake Edina. This will allow the street to drain and prevent the system from backing up into the backyard depression area. An option of adding additional inlet capacity to the trunk 54-inch system at the intersection of West Shore Drive and Hibiscus Avenue was considered; however, the 54-inch storm sewer system drains nearly 200 acres in addition to the 48.5 acres from subwatershed LE_53 and is already at full capacity. Adding additional inlet capacity at the intersection of West Shore Drive and Hibiscus Avenue would cause additional street flooding problems at upstream locations.

7.3.1.3 6312, 6316, 6321, 6329 Tingdale Avenue (NC_11)

A depression area exists along Tingdale Avenue, between West 63rd and West 64th Streets. Two catchbasins are located at the low portion of the street, collecting stormwater runoff. During the 100-year frequency storm event, the flood elevation at this location reaches 936.5 MSL. A field survey determined that this flood elevation would potentially impact egress windows at 6312 and 6316 Tingdale Avenue (935.24 MSL and 935.20 MSL, respectively).

7.3.1.4 St. Johns/Ashcroft and West 64th Street (NC_40, NC_26)

A low area exists directly north of North Lake Cornelia, encompassing portions of T.H. 62 and West 64th Street between Ashcroft Lane and St. Johns Avenue. The storm sewer system in this depression area includes two catchbasins on West 64th Street and several inlets along T.H. 62, including an inlet in the grassed median of T.H. 62. During extreme storm events such as the 100-year frequency event, this area is inundated with stormwater runoff, receiving flows from the subwatersheds directly tributary to the system, as well as flow not captured by the storm sewer system at the intersection of Ashcroft and West 64th Street (40 cfs) and excess T.H. 62 flows not collected upstream (160 cfs). Because of the topography and the slope of the highway at this location, during intense rainstorm events water from the highway will flow north toward the low area on West 64th Street. The 100-year frequency flood elevation for the highway and West 64th Street area is 868.1 MSL. At this flood elevation, the entire stretch of West 64th Street between Ashcroft Lane and St. Johns Avenue will be inundated, in addition to the highway and backyard area just north of West 64th Street, endangering structures at 6336 St. Johns Avenue and 6329 Ashcroft Lane.

To alleviate this situation, it is recommended that an additional pipe be installed at the low point in the T.H. 62 median that would drain to North Lake Cornelia. A 24-inch pipe would decrease the 100-year frequency flood elevation of this depression area to 867.7 MSL and alleviate the flooding concerns for 6336 St. Johns Avenue and 6329 Ashcroft Lane.

7.3.1.5 Barrie Road and Heritage Drive (NC_86, NC_97, NC_99)

A depression area exists at the intersection of Barrie Road and Heritage Drive and extends south of the intersection along Barrie Road to West 65th Street. Stormwater from this area is collected by storm sewer and flows northward, eventually connecting with the T.H. 62 system. During large storm events, this large depression area is inundated, causing street and parking lot flooding. The calculated flood elevation for the 100-year frequency storm event is 879.8 MSL. The low elevations of several properties in this area were surveyed to determine if this flood level would encroach upon and potentially cause damage to any structures. The field survey identified only one property at 6328 Barrie Road with a 878.6 MSL walkout patio elevation, with a low elevation below the 100-year frequency flood level.

The analysis of this system determined that the flooding problem in this area results from lack of capacity of the T.H. 62 system. As large stormwater flows enter the T.H. 62 storm sewer system from the highway, flow into that system from Barrie Road and Heritage Drive is restricted. To alleviate this problem, it will be necessary to re-examine the capacity of the T.H. 62 storm sewer system.

7.3.1.6 York Avenue and West 64th Street (NC_88)

A stormwater detention basin is located southeast of the intersection of York Avenue and West 64th Street. This basin has two pumped outlets, one which discharges to the west and one that discharges to the east. The outlet to the west is controlled by two pumps, each with an approximate pumping rate of 500 gpm (1.1 cfs). For the XP-SWMM model, it was assumed that the first pump on the west side turns on as the water elevation reaches 863 MSL, with the second pump turning on at water elevation 864 MSL. It was assumed the pumps turn off at water elevation 862 MSL. The pumped discharge flows west through a forcemain and connects to the gravity system along Barrie Road. The outlet to the east is also controlled by two 500 gpm pumps. Similar to the west outlet, it was assumed that the first pump on the east side turns on as the water elevation reaches 863 MSL, with the second on at elevation 864 MSL and both pumps off when the water level recedes to 862 MSL. Discharge from this outlet flows south along Xerxes Avenue, eventually connecting into the West 66th Street system.

The predicted 100-year flood elevation for this detention basin is 870.9 MSL. Based on the 2-foot topographic information, if flood waters reach this elevation the structure at 6415 York Avenue would be affected and potentially the structure at 6455 York Avenue. To prevent these structures from incurring flood damage, the pump capacity from the system should be increased. It is recommended that the capacity of both the east and west lift stations be upgraded to 1500 gpm (approximately 3 cfs) each. It is also recommended that the pumps turn on at water elevation 862.5 and off at 861.5 MSL. With implementation of these recommendations, the predicted 100-year frequency flood elevation is 870 MSL, providing a level of protection for these structures.

7.3.1.7 T.H. 62 at France Avenue (NC_132)

The modeling results indicated that isolated flooding would occur along T.H. 62 during a 100-year frequency storm event. Specifically, flooding would occur on T.H. 62 near the France Avenue crossing. The 100-year frequency flood elevation of this area is 873.2 MSL. To correct this problem, it will be necessary to re-examine the capacity of the T.H. 62 storm sewer system.

7.3.1.8 Parnell Avenue and Valley View Road (NC_135)

A backyard depression area exists between the blocks of Ryan Avenue and Parnell Avenue, just south of Valley View Road. The backyard depression area collects stormwater from its direct subwatershed of approximately 3 acres. The area is currently not connected to the storm sewer system. The predicted 100-year frequency flood elevation for this area is 910.2 MSL. Based on the 2-foot topographic data, this flood elevation would potentially impact the structures at 4801 and 4809 Valley View Road and 6112 Parnell Avenue.

7.3.2 Construction/Upgrade of Water Quality Basins

Results of the water quality modeling in the Lake Cornelia/Lake Edina drainage area indicated that the annual removal of total phosphorus from several ponds was predicted to be below the desired 60 percent removal rate, under average year conditions. For those ponds with total phosphorus removal below 60 percent, the permanent pool storage volume was analyzed to determine if additional capacity is necessary. The ponds that exhibited deficiencies in total phosphorus removal and permanent pool volume are listed below, along with recommended pond upgrades.

7.3.2.1 LE_38

Pond LE_38 is located along the west side of Lake Edina, directly east of T.H. 100 (primarily within MnDOT right-of-way). The pond receives runoff from an area of approximately 36 acres. Flow from this pond is discharged into Lake Edina via a weir structure and pipe system. Based on the recommended storage volume discussed above, Pond LE_38 is deficient in permanent pool storage volume. It is recommended that an additional 1.4 acre-feet of dead storage volume be provided to meet the MPCA design criteria for detention basins.

7.3.2.2 NC_88

Pond NC_88 is located southeast of the intersection of York Avenue and West 64th Street. This basin has two pumped outlets, with pumped discharge eventually entering both the Point of France Pond and the Swimming Pool Pond. Based on the MPCA recommended storage volume for detention basins, there is not an adequate amount of permanent pool storage in this basin. However, since the predicted total phosphorus removal rate from this pond is approximately 50 percent and the pumped stormwater leaving this basin will receive additional water quality treatment through several subsequent ponding basins, recommendations for providing additional dead-storage volume are not being made at this time.

Table 7.2
Watershed Modeling Results for Subwatersheds in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006)

Watershed Information			100-Year Storm Results 24-Hour Event		10-Year Storm Results 1/2-Hour Event	
Watershed ID	Total Area (ac)	% Impervious Area	Peak Runoff Rate (cfs)	Total Volume Runoff (ac-ft)	Peak Runoff Rate (cfs)	Total Volume Runoff (ac-ft)
AHR_1	3.4	8.2	11.3	0.7	2.9	0.1
AHR_10	1.2	79.7	5.7	0.5	4.1	0.1
AHR_11	7.8	78.3	28.4	3.2	12.2	0.8
AHR_12	4.8	80.1	22.2	2.1	15.3	0.5
AHR_13	2.1	79.5	9.3	0.9	5.6	0.2
AHR_14	8.5	39.9	36.9	2.6	21.0	0.5
AHR_15	9.2	40.0	40.3	2.8	23.8	0.6
AHR_16	4.2	40.0	19.0	1.3	12.7	0.3
AHR_17	3.0	39.9	13.5	0.9	8.6	0.2
AHR_18	2.4	79.9	10.0	1.0	5.2	0.3
AHR_19	1.0	79.8	4.8	0.4	5.7	0.1
AHR_2	2.8	44.8	13.0	0.9	11.6	0.2
AHR_20	10.5	70.0	46.4	4.1	27.3	1.0
AHR_21	1.9	67.7	9.2	0.7	9.0	0.2
AHR_3	4.3	38.8	18.8	1.3	11.2	0.3
AHR_4	24.9	35.0	89.6	7.0	42.2	1.3
AHR_5	4.9	26.4	20.6	1.3	10.6	0.2
AHR_6	1.4	70.5	6.4	0.6	4.1	0.1
AHR_7	1.1	23.0	5.2	0.3	3.3	0.1
AHR_8	9.3	77.2	37.9	3.9	18.7	1.0
LE_1	47.2	61.4	195.6	19.5	108.8	5.0
LE_10	4.6	20.0	21.2	1.4	13.8	0.4
LE_11	2.8	19.9	11.8	0.8	5.9	0.2
LE_12	8.7	20.0	32.5	2.4	15.2	0.5
LE_13	6.1	20.1	25.2	1.7	12.6	0.4
LE_14	3.0	19.9	14.1	0.8	9.8	0.2
LE_15	4.2	20.0	18.8	1.2	10.3	0.3
LE_16	4.8	20.0	19.8	1.3	11.6	0.3
LE_17	12.5	20.0	45.6	3.4	21.2	0.7
LE_18	1.7	20.1	6.4	0.4	2.8	0.1
LE_19	2.9	6.6	12.4	0.7	4.9	0.1
LE_2	3.7	21.7	17.1	1.1	10.6	0.3
LE_20	8.1	61.0	38.6	3.1	34.1	0.8
LE_21	4.7	18.7	19.3	1.3	9.4	0.3
LE_23	2.7	20.1	11.6	0.7	6.1	0.2
LE_24	23.5	33.0	94.2	7.2	50.4	1.5
LE_25	3.5	24.9	16.0	1.0	10.9	0.2
LE_26	12.9	20.0	52.5	3.5	25.7	0.7
LE_27	3.5	50.1	16.8	1.3	18.3	0.4
LE_28	16.2	20.0	63.6	4.8	31.2	1.0
LE_29	6.0	20.0	25.8	1.7	13.3	0.4
LE_3	3.9	23.7	17.4	1.2	10.3	0.3
LE_30	15.5	20.0	42.7	4.1	18.5	0.7

Table 7.2
Watershed Modeling Results for Subwatersheds in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006)

Watershed Information			100-Year Storm Results 24-Hour Event		10-Year Storm Results 1/2-Hour Event	
Watershed ID	Total Area (ac)	% Impervious Area	Peak Runoff Rate (cfs)	Total Volume Runoff (ac-ft)	Peak Runoff Rate (cfs)	Total Volume Runoff (ac-ft)
LE_31	7.7	20.0	34.7	2.2	20.0	0.5
LE_32	3.8	19.9	16.9	1.1	9.4	0.2
LE_33	7.1	20.1	32.2	2.0	18.4	0.5
LE_34	19.8	20.0	72.3	5.4	33.5	1.1
LE_35	1.8	33.5	7.8	0.5	4.8	0.1
LE_36	4.0	20.0	9.5	1.0	3.9	0.1
LE_37	1.2	50.0	5.8	0.4	5.5	0.1
LE_38	5.9	35.3	28.4	2.6	27.0	0.6
LE_39	1.0	50.0	4.8	0.4	4.2	0.1
LE_4	9.1	21.3	39.8	2.7	22.0	0.6
LE_40	5.8	20.1	22.0	1.6	10.3	0.3
LE_41	0.9	50.0	4.1	0.4	3.3	0.1
LE_43	5.2	73.3	23.6	2.1	15.4	0.5
LE_44	2.9	20.1	13.0	0.9	7.6	0.2
LE_45	2.4	19.9	10.9	0.7	6.9	0.2
LE_5	7.3	21.6	32.4	2.1	18.2	0.5
LE_51	13.1	9.2	35.5	3.1	12.1	0.5
LE_52	9.3	19.2	41.9	2.6	23.4	0.6
LE_53	48.5	20.0	165.6	13.2	75.2	2.5
LE_54	8.6	4.4	33.6	2.0	10.8	0.4
LE_6	8.3	20.0	34.7	2.4	17.7	0.5
LE_7	10.9	20.0	33.8	3.1	15.1	0.6
LE_8	2.1	19.6	9.9	0.6	7.4	0.2
LE_9	4.8	20.0	21.9	1.4	13.4	0.4
NC_10	4.1	23.8	18.0	1.2	10.2	0.3
NC_100	1.7	79.8	8.0	0.7	6.8	0.2
NC_101	16.3	80.0	74.9	6.9	51.8	1.8
NC_102	3.2	79.9	14.9	1.4	10.4	0.4
NC_103	1.8	80.1	8.5	0.8	6.8	0.2
NC_104	6.5	28.5	29.9	1.8	19.7	0.4
NC_105	1.3	20.1	6.0	0.3	3.0	0.1
NC_106	30.6	80.0	122.8	13.0	59.9	3.2
NC_107	1.3	79.7	6.1	0.5	5.1	0.1
NC_108	1.1	79.8	5.3	0.5	3.8	0.1
NC_109	1.1	80.0	5.4	0.5	5.1	0.1
NC_11	9.0	20.6	37.3	2.5	18.9	0.5
NC_110	1.8	79.9	8.6	0.8	8.0	0.2
NC_111	5.6	78.5	25.3	2.4	16.3	0.6
NC_112	7.4	80.0	32.3	3.1	19.1	0.8
NC_113	11.2	80.0	50.0	4.8	30.7	1.2
NC_114	2.1	80.0	9.8	0.9	9.0	0.2
NC_115	1.7	80.2	8.1	0.7	9.2	0.2
NC_116	0.7	79.7	3.6	0.3	3.4	0.1

Table 7.2
Watershed Modeling Results for Subwatersheds in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006)

Watershed Information			100-Year Storm Results 24-Hour Event		10-Year Storm Results 1/2-Hour Event	
Watershed ID	Total Area (ac)	% Impervious Area	Peak Runoff Rate (cfs)	Total Volume Runoff (ac-ft)	Peak Runoff Rate (cfs)	Total Volume Runoff (ac-ft)
NC_117	1.5	14.9	7.1	0.5	5.6	0.1
NC_118	1.3	13.5	6.0	0.3	4.5	0.1
NC_119	1.2	80.0	5.5	0.5	6.0	0.1
NC_12	7.5	19.9	31.2	2.1	15.6	0.4
NC_120	1.9	49.5	9.0	0.6	9.0	0.2
NC_121	5.4	80.0	24.5	2.3	16.4	0.6
NC_122	3.2	79.6	15.4	1.4	17.2	0.4
NC_123	5.4	80.0	23.8	2.3	14.1	0.6
NC_124	8.2	80.0	32.6	3.5	15.6	0.9
NC_125	1.9	80.0	8.9	0.8	9.5	0.2
NC_126	2.7	48.0	12.5	0.9	11.5	0.2
NC_127	2.8	20.1	13.0	0.8	8.7	0.2
NC_128	3.3	63.9	15.6	1.2	17.4	0.3
NC_129	3.9	80.0	18.8	1.7	21.2	0.4
NC_13	2.5	19.9	11.5	0.7	8.0	0.2
NC_131	1.7	76.9	8.1	0.7	8.2	0.2
NC_132	6.7	45.1	31.5	2.2	27.0	0.5
NC_133	3.8	48.1	18.0	1.3	17.5	0.3
NC_134	1.6	49.4	7.6	0.5	8.0	0.1
NC_135	2.9	19.9	12.2	0.8	6.2	0.2
NC_136	5.2	20.0	20.8	1.4	10.1	0.3
NC_137	2.0	76.7	9.7	0.8	9.5	0.2
NC_138	1.0	47.0	4.8	0.4	6.0	0.1
NC_139	4.8	77.7	19.9	2.0	10.4	0.5
NC_14	5.2	20.0	24.0	1.5	14.9	0.3
NC_140	2.1	78.5	9.9	0.9	7.2	0.2
NC_141	2.6	79.8	11.0	1.1	5.9	0.3
NC_142	7.9	42.7	33.8	2.6	20.0	0.6
NC_143	1.4	80.0	6.1	0.6	3.5	0.2
NC_144	7.3	79.9	34.2	3.1	27.0	0.8
NC_145	3.3	20.1	12.7	0.8	5.6	0.1
NC_146	9.8	51.0	43.9	3.3	27.7	0.7
NC_147	0.4	51.2	2.0	0.1	2.0	0.0
NC_148	0.8	22.9	4.0	0.4	3.7	0.1
NC_149	3.5	78.6	16.5	1.5	14.5	0.4
NC_15	4.7	20.0	20.4	1.3	10.9	0.3
NC_150	5.2	80.1	25.1	2.2	24.8	0.6
NC_151	0.7	79.5	3.5	0.3	4.1	0.1
NC_152	1.7	79.8	8.3	0.7	7.3	0.2
NC_153	2.6	80.0	12.5	1.1	11.5	0.3
NC_154	4.4	80.0	20.8	1.9	18.8	0.5
NC_155	2.2	79.8	10.3	0.9	8.3	0.2
NC_156	3.4	80.0	16.0	1.4	14.4	0.4

Table 7.2
Watershed Modeling Results for Subwatersheds in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006)

Watershed Information			100-Year Storm Results 24-Hour Event		10-Year Storm Results 1/2-Hour Event	
Watershed ID	Total Area (ac)	% Impervious Area	Peak Runoff Rate (cfs)	Total Volume Runoff (ac-ft)	Peak Runoff Rate (cfs)	Total Volume Runoff (ac-ft)
NC_16	5.6	20.9	24.3	1.6	13.2	0.3
NC_17	1.8	19.9	8.3	0.5	6.0	0.1
NC_18	8.9	20.0	35.6	2.5	17.3	0.5
NC_19	7.8	23.5	33.7	2.2	18.8	0.5
NC_2	11.5	59.0	54.2	4.5	42.5	1.2
NC_20	2.0	22.3	8.2	0.6	4.3	0.1
NC_21	7.2	48.0	33.1	2.5	25.1	0.6
NC_22	5.8	17.2	26.1	1.8	15.0	0.4
NC_23	3.8	50.0	18.4	1.4	19.3	0.4
NC_24	6.3	22.1	28.2	1.8	16.4	0.4
NC_25	7.7	21.1	35.3	2.2	21.4	0.5
NC_26	1.9	50.0	9.3	0.7	10.4	0.2
NC_27	12.4	49.0	59.3	4.4	58.2	1.1
NC_28	1.1	49.6	5.4	0.4	5.9	0.1
NC_29	0.7	43.9	3.2	0.2	3.2	0.1
NC_3	16.2	43.8	76.0	7.2	60.9	1.8
NC_30	21.7	58.7	95.6	8.4	59.6	2.2
NC_31	6.6	21.6	29.2	1.9	16.4	0.4
NC_32	6.4	49.9	27.6	2.3	16.8	0.5
NC_33	2.5	46.1	12.1	0.9	12.6	0.2
NC_34	1.0	50.0	4.7	0.4	5.2	0.1
NC_35	10.6	20.0	45.8	2.9	24.0	0.6
NC_36	14.1	20.0	56.9	3.9	27.7	0.8
NC_37	2.2	18.5	10.1	0.7	6.0	0.2
NC_38	3.9	14.8	17.6	1.2	10.0	0.3
NC_39	4.7	22.3	20.7	1.3	11.7	0.3
NC_4	12.1	69.0	54.7	4.9	35.1	1.3
NC_40	7.0	23.1	28.0	2.0	14.3	0.4
NC_41	7.8	51.1	34.7	2.8	22.5	0.7
NC_42	8.3	50.4	22.9	2.8	9.3	0.6
NC_43	13.9	22.6	58.6	4.0	31.0	0.9
NC_44	2.8	50.0	13.0	1.0	10.1	0.2
NC_45	1.8	21.5	8.5	0.5	6.3	0.1
NC_46	8.9	23.7	30.7	2.5	14.6	0.5
NC_47	3.2	41.2	14.5	1.1	10.3	0.3
NC_48	8.2	20.0	34.3	2.3	17.2	0.5
NC_49	1.9	20.1	8.9	0.5	6.9	0.1
NC_5	8.6	64.1	40.8	3.4	32.4	0.9
NC_50	3.3	20.1	15.5	1.1	11.0	0.3
NC_51	3.7	58.0	17.7	1.4	16.8	0.4
NC_52	7.6	20.0	34.5	2.2	20.0	0.5
NC_53	2.2	19.9	9.6	0.6	5.2	0.1
NC_54	5.6	49.4	24.7	2.0	15.7	0.5

Table 7.2
Watershed Modeling Results for Subwatersheds in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006)

Watershed Information			100-Year Storm Results 24-Hour Event		10-Year Storm Results 1/2-Hour Event	
Watershed ID	Total Area (ac)	% Impervious Area	Peak Runoff Rate (cfs)	Total Volume Runoff (ac-ft)	Peak Runoff Rate (cfs)	Total Volume Runoff (ac-ft)
NC_55	2.5	12.0	11.6	0.8	6.9	0.2
NC_56	23.5	21.4	82.9	6.5	38.7	1.3
NC_57	4.8	80.0	21.6	2.0	14.2	0.5
NC_58	11.6	20.0	50.3	3.2	26.4	0.7
NC_59	20.6	21.8	80.7	5.8	39.8	1.2
NC_6	5.1	51.3	24.2	1.8	21.9	0.5
NC_60	4.1	19.9	17.8	1.1	9.3	0.2
NC_61	2.1	20.2	9.6	0.5	5.7	0.1
NC_62	61.7	52.0	231.7	25.7	117.1	6.3
NC_63	1.7	24.6	8.1	0.6	7.9	0.2
NC_64	3.8	20.1	15.7	1.1	7.8	0.2
NC_65	2.2	49.3	10.9	0.9	13.4	0.2
NC_66	1.8	50.3	8.6	0.7	8.7	0.2
NC_67	1.4	23.2	6.6	0.4	4.2	0.1
NC_68	1.9	49.7	9.2	0.7	10.9	0.2
NC_69	2.6	76.1	12.2	1.1	10.5	0.3
NC_7	5.4	20.5	23.3	1.5	12.1	0.3
NC_70	2.5	19.9	11.7	0.7	7.8	0.2
NC_71	1.6	27.4	7.5	0.5	6.2	0.1
NC_72	0.8	46.1	4.0	0.3	4.6	0.1
NC_73	1.6	45.7	7.8	0.6	7.6	0.1
NC_74	1.1	19.8	5.2	0.3	4.2	0.1
NC_75	5.1	35.7	24.1	1.8	18.6	0.4
NC_76	1.2	60.2	5.9	0.5	6.4	0.1
NC_77	0.9	80.6	4.5	0.4	5.9	0.1
NC_78	3.1	31.1	14.5	1.3	10.9	0.3
NC_79	3.3	20.1	13.7	0.9	6.8	0.2
NC_8	3.3	20.9	12.0	0.9	5.7	0.2
NC_80	1.1	50.5	5.0	0.4	5.2	0.1
NC_81	6.2	66.9	29.3	2.4	22.3	0.6
NC_82	7.6	22.3	29.8	2.1	14.8	0.4
NC_83	2.8	57.0	12.9	1.0	8.4	0.2
NC_84	5.9	48.0	27.4	1.9	23.0	0.4
NC_85	7.8	40.2	30.0	2.3	14.3	0.5
NC_86	9.9	40.0	41.7	3.0	22.7	0.6
NC_87	2.7	70.0	12.8	1.1	12.5	0.3
NC_88	20.8	37.7	89.0	6.1	49.9	1.2
NC_89	5.1	75.3	24.3	2.1	19.5	0.5
NC_9	1.3	25.6	5.9	0.4	4.9	0.1
NC_90	5.2	80.1	22.5	2.2	12.6	0.6
NC_91	1.6	80.0	7.5	0.7	8.4	0.2
NC_92	3.4	9.6	14.1	0.7	4.2	0.1
NC_93	7.8	15.3	27.7	2.0	11.6	0.4

Table 7.2
Watershed Modeling Results for Subwatersheds in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006)

Watershed Information			100-Year Storm Results 24-Hour Event		10-Year Storm Results 1/2-Hour Event	
Watershed ID	Total Area (ac)	% Impervious Area	Peak Runoff Rate (cfs)	Total Volume Runoff (ac-ft)	Peak Runoff Rate (cfs)	Total Volume Runoff (ac-ft)
NC_94	4.2	22.2	17.6	1.2	9.3	0.3
NC_95	9.1	18.9	36.4	2.5	17.3	0.5
NC_96	10.2	20.0	38.5	2.8	18.1	0.6
NC_97	10.6	40.7	47.4	3.3	29.4	0.7
NC_98	1.6	20.3	7.4	0.4	4.9	0.1
NC_99	12.5	60.0	52.0	4.5	26.2	1.0
SC_1	55.2	69.5	239.9	22.9	144.8	6.0
SC_2	14.4	25.4	63.5	4.4	38.0	1.0
SC_3	11.7	25.6	52.3	3.4	31.6	0.8
SC_4	12.4	20.0	53.5	3.5	28.2	0.8
SC_5	2.8	20.1	13.1	1.0	8.8	0.3
SC_6	1.9	20.2	9.0	0.5	6.1	0.1
SC_7	6.0	20.0	24.7	1.7	12.2	0.4
SC_8	1.4	20.3	6.4	0.4	4.1	0.1
SC_9	6.6	20.1	28.4	1.9	14.9	0.4

Table 7.3
Hydraulic Modeling Results for XP-SWMM Subwatersheds/Nodes in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006).

Subwatershed or Node	Downstream Conduit	100-Year Storm Results 24-Hour Event				10-Year Storm Results 1/2-Hour Event		
		Flood Elevation (ft)	Type of Storage[1]	NWL (ft)	Flood Bounce (ft)	Flood Elevation (ft)	NWL (ft)	Flood Bounce (ft)
98	1862_p	876.3				876.1		
99	1587_p	865.1				862.9		
687	499_p	868.1				866.0		
693	504_p	874.7				874.4		
694	505_p	876.7				875.6		
696	507_p	939.0				936.6		
697	508_p	938.4				936.0		
698	509_p	937.8				934.9		
699	510_p	937.7				934.7		
700	511_p	937.2				934.1		
701	512_p	936.7				933.5		
703	514_p	935.9				932.8		
711	522_p	923.0				913.3		
712	2247_p	922.0				913.2		
715	524_p	918.2	street			913.0		
718	528_p	915.5				907.4		
719	529_p	910.4				903.8		
720	530_p	868.6				868.5		
721	531_p	867.2				867.1		
722	532_p	866.9				866.7		
723	533_p	866.4				865.8		
725	535_p	864.8				863.3		
727	536_p	868.8				867.0		
728	537_p	869.5				869.1		
734	543_p	865.5				864.8		
738	1697_p	912.7				912.5		
741	549_p	892.1				888.6		
742	550_p	881.6				876.7		
743	551_p	875.3				867.4		
747	553_p	867.1				867.1		
749	555_p	868.9				868.4		
755	561_p	881.7				881.6		
760	566_p	888.7				888.7		
766	572_p	865.4				864.1		
768	573_p	866.7				865.0		
769	574_p	868.1				865.9		
771	576_p	868.1				866.8		
776	580_p	865.3				861.4		
777	581_p	865.1				860.8		
778	582_p	864.8				860.8		
779	583_p	864.8				860.8		
782	585_p	867.0	hwy ditch	862.7	4.2	866.0	862.7	3.2
783	586_p	866.8				865.7		
785	outfall	865.9				865.8		
790	591_p	865.1				863.3		
793	593_p	867.3				865.2		
796	595_p	866.6				864.6		
797	596_p	867.6				865.0		
798	597_p	867.1				864.8		
805	601_p	864.8				860.8		
808	603_p	864.9				862.7		
809	604_p	866.5				863.7		
813	608_p	867.7				866.5		
816	611_p	868.8				867.4		

Table 7.3
Hydraulic Modeling Results for XP-SWMM Subwatersheds/Nodes in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006).

Subwatershed or Node	Downstream Conduit	100-Year Storm Results 24-Hour Event				10-Year Storm Results 1/2-Hour Event		
		Flood Elevation (ft)	Type of Storage[1]	NWL (ft)	Flood Bounce (ft)	Flood Elevation (ft)	NWL (ft)	Flood Bounce (ft)
818	613_p	870.1				868.0		
819	614_p	870.1	street			868.4		
820	615_p	870.1				868.5		
821	616_p	870.1				868.7		
822	617_p	870.0				868.7		
823	618_p	869.9				868.7		
824	619_p	877.1				876.4		
825	620_p	874.0				874.6		
826	621_p	873.1				869.6		
830	lift station	870.7				865.2		
831	625_p	879.8				879.2		
838	629_p	861.0				860.5		
839	630_p	862.8				861.6		
841	632_p	864.0				862.6		
842	633_p	864.6				862.7		
843	634_p	865.0				862.8		
844	635_p	865.4				863.0		
846	636_p	867.9				863.9		
848	638_p	866.1				863.6		
849	639_p	866.2				863.8		
850	640_p	866.3				864.0		
851	641_p	866.5				864.3		
852	642_p	866.5				864.5		
853	643_p	866.6				864.8		
855	645_p	866.6				865.2		
856	646_p	866.7				865.7		
859	650_p	867.0				863.1		
860	651_p	866.4				863.0		
861	652_p	865.2				862.7		
863	654_p	862.1				860.3		
868	659_p	842.0				842.0		
869	660_p	841.3				841.3		
871	662_p	838.4				838.4		
874	665_p	831.6				831.2		
876	667_p	830.9				830.3		
879	670_p	827.5				826.8		
880	671_p	826.4				826.0		
881	672_p	825.2				824.9		
882	673_p	824.9				824.7		
883	674_p	824.5				824.2		
886	676_p	830.9				829.4		
889	678_p	833.4				833.1		
909	694_p	855.2				849.8		
914	699_p	857.0				856.1		
1369	1076_p	864.6				861.6		
1373	1078_p	868.1				868.1		
1377	1082_p	878.3				877.7		
1379	1085_p	876.8				876.2		
1381	1086_p	874.9				872.8		
1390	1098_p	879.3				877.4		
1391	1099_p	878.5				877.1		
1393	1787_p	876.1				875.4		
1553	1237_p	878.0				877.8		
1555	1239_p	876.3				875.8		

Table 7.3
Hydraulic Modeling Results for XP-SWMM Subwatersheds/Nodes in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006).

Subwatershed or Node	Downstream Conduit	100-Year Storm Results 24-Hour Event				10-Year Storm Results 1/2-Hour Event		
		Flood Elevation (ft)	Type of Storage[1]	NWL (ft)	Flood Bounce (ft)	Flood Elevation (ft)	NWL (ft)	Flood Bounce (ft)
1557	1241_p	872.5				872.4		
1558	1242_p	867.7				863.8		
1560	1243_p	868.8				865.0		
1563	1246_p	865.8				861.2		
1564	1248_p	860.3				854.7		
1566	1250_p	857.3				851.9		
1567	1251_p	853.5				848.4		
1568	1255_p	849.3				843.3		
1569	1252_p	852.0				849.3		
1570	1253_p	851.8				845.5		
1574	outfall	834.9				833.8		
1576	1259_p	878.3				877.5		
1577	1261_p	877.1				876.8		
1578	1262_p	877.1				876.8		
1579	1263_p	877.1				876.8		
1581	1265_p	876.7				876.3		
1582	1266_p	876.3				875.8		
1583	1267_p	875.4				875.2		
1584	1268_p	874.7				874.5		
1586	1269_p	870.7				868.4		
1587	1270_p	866.7				864.8		
1681	1384_p	873.8				869.3		
1833	1487_p	871.9				870.6		
1834	3117_p	869.5				868.6		
1972	1579_p	824.3				820.4		
1974	outfall	823.9				819.4		
1996	1585_p	863.1				861.6		
1997	1586_p	864.1				862.2		
2020	1604_p	885.0				882.4		
2021	1605_p	883.0				881.3		
2027	1615_p	876.4				876.2		
2057	1625_p	877.5				875.5		
2062	1630_p	878.0				876.4		
2063	1631_p	878.1				876.5		
2065	1633_p	877.5				876.1		
2066	1634_p	875.4				875.1		
2067	1635_p	874.8				874.7		
2068	1636_p	873.5				873.3		
2069	1637_p	873.2				873.1		
2138	1698_p	866.6				864.5		
2143	1702_p	869.1				868.7		
2144	1703_p	869.0				868.7		
2148	1707_p	861.4				855.5		
2150	1709_p	868.9	street			865.1		
2153	1712_p	857.4	street			854.0		
2154	1713_p	857.5				856.1		
2155	1714_p	857.3				856.1		
2171	2009_p	872.6				872.6		
2172	1728_p	872.6				872.6		
2186	3121_p	867.8				866.1		
2188	1747_p	873.0				872.7		
2189	1748_p	878.0				877.9		
2215	1762_p	870.2				868.8		
2216	1763_p	870.9				869.6		

Table 7.3
Hydraulic Modeling Results for XP-SWMM Subwatersheds/Nodes in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006).

Subwatershed or Node	Downstream Conduit	100-Year Storm Results 24-Hour Event				10-Year Storm Results 1/2-Hour Event		
		Flood Elevation (ft)	Type of Storage[1]	NWL (ft)	Flood Bounce (ft)	Flood Elevation (ft)	NWL (ft)	Flood Bounce (ft)
2217	1764_p	872.5				871.2		
2219	1766_p	874.5				872.9		
2220	1767_p	875.0				874.1		
2221	1768_p	878.2				877.6		
2222	1769_p	878.7				878.4		
2223	1771_p	879.3				879.2		
2224	1772_p	873.2				871.5		
2225	1773_p	875.2				873.3		
2228	1776_p	873.9	hwy ditch	866.4	7.5	872.2	866.4	5.8
2229	1777_p	873.2				872.1		
2230	1778_p	874.8				872.7		
2232	1780_p	874.4				873.3		
2233	1781_p	874.4				873.5		
2234	1782_p	874.5				873.8		
2238	1784_p	880.0				877.2		
2240	1788_p	876.3				876.2		
2286	1873_p	883.0				882.9		
2299	1854_p	882.2				879.6		
2300	1839_p	875.7				873.6		
2301	1840_p	875.2				873.3		
2302	1841_p	875.0				873.1		
2303	1842_p	874.4				872.6		
2304	1843_p	873.5				871.7		
2305	1844_p	880.2				879.7		
2306	1845_p	879.2				878.5		
2307	2228_p	877.8				877.4		
2308	1847_p	877.4				877.2		
2312	1852_p	876.9				874.8		
2313	1851_p	880.6				880.3		
2314	1853_p	882.6				879.7		
2315	1855_p	883.0				879.8		
2317	1857_p	883.7				879.7		
2318	1858_p	883.1				879.4		
2324	1898_p	876.6				876.4		
2327	1864_p	880.1				880.2		
2329	2555_p	883.0				881.9		
2332	1868_p	879.6				878.5		
2333	1869_p	881.4				881.3		
2334	2556_p	883.0				882.8		
2336	1874_p	883.0				882.9		
2337	1876_p	883.2				883.2		
2338	1877_p	883.1				883.0		
2340	1880_p	878.2				877.8		
2345	1884_p	917.1				914.1		
2347	1885_p	916.7				913.4		
2350	1888_p	918.8				915.9		
2351	1889_p	917.0				913.4		
2352	1890_p	917.6				913.5		
2354	1892_p	918.6				913.6		
2355	1893_p	919.1				915.0		
2356	1894_p	919.4				916.6		
2357	1895_p	920.9				918.5		
2358	1896_p	922.6				920.3		
2360	1899_p	877.3				876.8		

Table 7.3
Hydraulic Modeling Results for XP-SWMM Subwatersheds/Nodes in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006).

Subwatershed or Node	Downstream Conduit	100-Year Storm Results 24-Hour Event				10-Year Storm Results 1/2-Hour Event		
		Flood Elevation (ft)	Type of Storage[1]	NWL (ft)	Flood Bounce (ft)	Flood Elevation (ft)	NWL (ft)	Flood Bounce (ft)
2386	2008_p	872.4				871.9		
2388	1927_p	877.5				876.9		
2466	1999_p	870.7				869.2		
2467	2000_p	873.2				873.1		
2469	2004_p	870.3				869.0		
2472	2011_p	872.4				868.7		
2473	2010_p	875.0				874.8		
2476	2015_p	871.0				863.4		
2477	2017_p	865.6				858.8		
2761	2224_p	880.6				878.3		
2767	2231_p	869.0				867.9		
2769	2212_p	866.0				864.2		
2779	2554_p	880.9				880.6		
2780	2557_p	883.0				882.8		
2781	2559_p	883.3				883.3		
2786	1711_p	878.7				878.4		
2796	3115_p	869.8				868.8		
2800	3122_p	866.5				865.2		
2801	3124_p	860.8				854.1		
2802	3125_p	861.4				855.8		
2803	3126_p	861.3				857.7		
2811	3131_p	901.6				900.4		
2813	3135_p	895.7				895.6		
2816	3138_p	864.7				861.0		
2817	3139_p	864.3				861.7		
2818	3140_p	878.4				875.6		
2819	3141_p	872.5				872.5		
2829	3156_p	841.2				841.1		
2831	3157_p	843.9				843.9		
2839	3158_p	826.5				824.4		
2841	3170_p	876.2				875.2		
2842	3169_p	874.9				874.4		
2844	3166_p	875.4				875.3		
2845	3167_p	875.2				875.2		
2879	3193_p	879.4				873.0		
2903	3242_p	877.4				877.2		
2904	3243_p	877.4				877.2		
2913	3261_p	874.9				874.4		
2968	3301_p	872.0				870.1		
AHR_1	1257_p	839.9				837.4		
AHR_10	3113_p	868.9				866.0		
AHR_11	1244_p	868.8	street			865.0		
AHR_12	1925_p	876.6	parking lot			876.0		
AHR_13	1240_p	872.7				872.6		
AHR_14	3114_p	867.1	parking lot			865.2		
AHR_15	1491_p	864.5				861.3		
AHR_16	3127_p	863.7				859.0		
AHR_17	2550_p	857.2	parking lot			856.1		
AHR_18	2014_p	872.4				867.3		
AHR_19	1729_p	873.6				874.0		
AHR_2	1249_p	860.1	street			853.6		
AHR_20	3211_p	863.8	parking lot			862.0		
AHR_21	2007_p	873.2				873.2		
AHR_3	1708_p	861.4				860.4		

Table 7.3
Hydraulic Modeling Results for XP-SWMM Subwatersheds/Nodes in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006).

Subwatershed or Node	Downstream Conduit	100-Year Storm Results 24-Hour Event				10-Year Storm Results 1/2-Hour Event		
		Flood Elevation (ft)	Type of Storage[1]	NWL (ft)	Flood Bounce (ft)	Flood Elevation (ft)	NWL (ft)	Flood Bounce (ft)
AHR_4	1254_p	851.6	street			844.7		
AHR_5	1256_p	847.0				841.6		
AHR_6	1247_p	864.7				858.5		
AHR_7	2016_p	865.0				860.3		
AHR_8	1245_p	867.1	street			863.6		
LE_1	1579_p	824.3	lake	822.0	2.3	822.6	822.0	0.6
LE_10	677_p	830.9	street			829.4		
LE_11	668_p	830.0				829.1		
LE_12	664_p	833.6				833.3		
LE_13	666_p	831.6	street			831.2		
LE_14	1638_p	860.5				857.4		
LE_15	661_p	840.8				840.7		
LE_16	658_p	854.8				855.6		
LE_17	663_p	836.2				836.0		
LE_18	698_p	857.0				855.9		
LE_19	3262_p	852.5	dry pond	842.5	10.0	847.8	842.5	5.4
LE_2	3162_p	840.0				839.8		
LE_20	lift station	843.2	dry pond	833.1	10.1	841.1	833.1	8.0
LE_21	695_p	854.9	street			849.3		
LE_22	outfall	857.0				856.9		
LE_23	669_p	828.6				827.7		
LE_24	696_p	852.8	street			852.4		
LE_25	697_p	856.8				855.0		
LE_26	657_p	858.2	school/park			856.2		
LE_27	3159_p	840.0				839.8		
LE_28	1385_p	873.8	street			872.1		
LE_29	693_p	857.4	street			853.2		
LE_3	3160_p	835.5				834.9		
LE_30	650_p	867.6	street			864.8		
LE_31	637_p	873.5	street			866.4		
LE_32	649_p	866.0				863.2		
LE_33	631_p	863.6				862.4		
LE_34	644_p	866.6	street			865.1		
LE_35	648_p	866.7				866.4		
LE_36	2560_p	866.7	byd	862.3	4.4	865.2	862.3	2.9
LE_37	3161_p	839.6				839.3		
LE_38	3158_p	826.5	wetland	822.2	4.3	824.4	822.2	2.2
LE_39	3165_p	835.2				834.9		
LE_4	3164_p	833.4	street			828.8		
LE_40	653_p	864.0				863.8		
LE_41	3163_p	829.5				825.8		
LE_43	1388_p	866.7				865.7		
LE_44	landlocked	871.9	byd	869.4	2.5	870.6	869.4	1.2
LE_45	landlocked	869.1	byd	867.3	1.8	868.2	867.3	0.9
LE_5	3155_p	841.7				841.5		
LE_51	landlocked	838.2	pond	831.3	6.9	834.1	831.3	2.8
LE_52	2500_p	841.4	street			837.8		
LE_53	673_p	831.1	street			830.5		
LE_54	landlocked	846.2	park	839.2	7.0	841.9	839.2	2.7
LE_6	1390_p	833.8				833.6		
LE_7	675_p	830.9	byd	825.0	5.9	829.4	825.0	4.4
LE_8	679_p	825.1				824.4		
LE_9	680_p	826.3				825.9		
NC_10	517_p	931.0				922.4		

Table 7.3
Hydraulic Modeling Results for XP-SWMM Subwatersheds/Nodes in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006).

Subwatershed or Node	Downstream Conduit	100-Year Storm Results 24-Hour Event				10-Year Storm Results 1/2-Hour Event		
		Flood Elevation (ft)	Type of Storage[1]	NWL (ft)	Flood Bounce (ft)	Flood Elevation (ft)	NWL (ft)	Flood Bounce (ft)
NC_100	1629_p	877.9				876.2		
NC_101	1701_p	878.6	parking lot			877.1		
NC_102	2553_p	879.0				878.9		
NC_103	2226_p	880.2				879.9		
NC_104	1614_p	876.4	street			876.2		
NC_105	1616_p	876.4				876.2		
NC_106	1860_p	884.8				880.9		
NC_107	1856_p	884.2				879.9		
NC_108	2229_p	878.6				878.0		
NC_109	1849_p	877.1				875.6		
NC_11	513_p	936.5	street			933.3		
NC_110	3154_p	878.6	parking lot			878.1		
NC_111	1838_p	880.6				879.5		
NC_112	2005_p	871.2	parking lot			870.5		
NC_113	610_p	868.8	parking lot			867.5		
NC_114	1704_p	875.4				875.6		
NC_115	1264_p	877.1				876.7		
NC_116	2225_p	882.6				879.8		
NC_117	1075_p	864.2				864.0		
NC_118	602_p	864.8				861.7		
NC_119	2561_p	869.0	ditch	866.3	2.7	868.7	866.3	2.5
NC_12	516_p	936.6				936.5		
NC_120	609_p	868.3				867.0		
NC_121	1705_p	874.8				874.4		
NC_122	1706_p	873.6				873.5		
NC_123	1710_p	882.6				882.5		
NC_124	1236_p	878.9				878.8		
NC_125	3260_p	874.4				874.2		
NC_126	1100_p	877.7				877.3		
NC_127	1749_p	879.8				879.5		
NC_128	612_p	869.3				867.7		
NC_129	1628_p	877.8				875.8		
NC_13	510_p	938.8	street			938.6		
NC_131	1761_p	868.8				867.6		
NC_132	3300_p	873.2	hwy ditch	864.5	8.8	871.3	864.5	6.9
NC_133	1770_p	879.7				879.2		
NC_134	1789_p	876.4				876.4		
NC_135	landlocked	910.2	byd	905.2	5.0	908.5	905.2	3.3
NC_136	3118_p	870.0				869.8		
NC_137	3119_p	866.9				865.5		
NC_138	3120_p	868.8				867.3		
NC_139	1850_p	877.3				875.6		
NC_14	520_p	932.9				933.1		
NC_140	1867_p	883.2				883.0		
NC_141	3153_p	870.2				870.0		
NC_142	3168_p	873.8	street			873.2		
NC_143	1848_p	876.8				876.3		
NC_144	1863_p	878.8				878.7		
NC_145	2235_p	879.7	byd	875.4	4.3	877.2	875.4	1.8
NC_146	3192_p	882.4				873.8		
NC_147	1881_p	878.5				878.0		
NC_148	600_p	865.4				864.0		
NC_149	2001_p	875.0				875.0		
NC_15	521_p	928.9	street			928.7		

Table 7.3
Hydraulic Modeling Results for XP-SWMM Subwatersheds/Nodes in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006).

Subwatershed or Node	Downstream Conduit	100-Year Storm Results 24-Hour Event				10-Year Storm Results 1/2-Hour Event		
		Flood Elevation (ft)	Type of Storage[1]	NWL (ft)	Flood Bounce (ft)	Flood Elevation (ft)	NWL (ft)	Flood Bounce (ft)
NC_150	1632_p	878.0				876.5		
NC_151	1866_p	883.4	parking lot			882.0	880.3	1.8
NC_152	1828_p	884.0				884.0		
NC_153	2558_p	883.5				883.5		
NC_154	1238_p	877.8				877.2		
NC_155	1872_p	884.1				884.0		
NC_156	1870_p	882.1	parking lot			881.6	876.3	5.4
NC_16	518_p	928.9	street			920.1		
NC_17	527_p	916.3				908.2		
NC_18	542_p	874.7				874.5		
NC_19	525_p	919.0				910.6		
NC_2	579_p	865.4	pond	863.0	2.4	863.7	863.0	0.7
NC_20	522_p	926.3	street			926.2		
NC_21	3130_p	910.6				909.4		
NC_22	534_p	865.9				865.1		
NC_23	523_p	921.3				912.5		
NC_24	538_p	876.1				874.3		
NC_25	562_p	881.7				881.7		
NC_26	575_p	868.1	hwy ditch	861.3	6.8	867.1	861.3	5.8
NC_27	565_p	889.4				889.2		
NC_28	554_p	868.1				867.4		
NC_29	559_p	874.5				874.5		
NC_3	591_p	865.2	pond	862.9	2.3	864.0	862.9	1.1
NC_30	3111_p	865.2	pond	862.9	2.3	864.0	862.9	1.0
NC_31	569_p	902.4				902.3		
NC_32	568_p	893.0				892.6		
NC_33	3136_p	888.7				888.8		
NC_34	560_p	880.0				880.0		
NC_35	548_p	896.1				894.3		
NC_36	545_p	913.3				913.1		
NC_37	552_p	864.9				862.9		
NC_38	544_p	865.5				864.0		
NC_39	556_p	869.4				869.3		
NC_4	598_p	865.7	pond	862.9	2.8	864.3	862.9	1.4
NC_40	577_p	868.1	byd	861.7	6.4	866.5	861.7	4.8
NC_41	3133_p	916.3	hwy ditch	901.6	14.7	913.2	901.6	11.6
NC_42	3132_p	908.3	hwy ditch	890.0	18.3	905.9	890.0	15.9
NC_43	3134_p	895.1				894.8		
NC_44	1897_p	924.0				921.2		
NC_45	1887_p	918.9	byd	914.4	4.4	915.9	914.4	1.4
NC_46	1891_p	918.1	street			913.6		
NC_47	1886_p	918.8	byd	910.2	8.7	915.8	910.2	5.6
NC_48	592_p	869.1				865.6		
NC_49	2232_p	866.6	street			864.5	860.0	4.5
NC_5	596_p	867.7	pond	864.5	3.2	865.5	864.5	1.0
NC_50	1084_p	877.7	byd	872.9	4.8	877.1	872.9	4.2
NC_51	2233_p	871.9				868.4		
NC_52	1087_p	875.2				871.8		
NC_53	1088_p	895.0				893.3		
NC_54	1080_p	869.0				867.9		
NC_55	1081_p	878.0	byd	874.9	3.1	877.0	874.9	2.1
NC_56	1083_p	878.7				878.3		
NC_57	1859_p	881.5				878.4		
NC_58	1077_p	877.1				877.0		

Table 7.3
Hydraulic Modeling Results for XP-SWMM Subwatersheds/Nodes in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006).

Subwatershed or Node	Downstream Conduit	100-Year Storm Results 24-Hour Event				10-Year Storm Results 1/2-Hour Event		
		Flood Elevation (ft)	Type of Storage[1]	NWL (ft)	Flood Bounce (ft)	Flood Elevation (ft)	NWL (ft)	Flood Bounce (ft)
NC_59	1089_p	904.8				904.6		
NC_6	landlocked	867.0	pond	864.2	2.8	865.4	864.2	1.2
NC_60	1700_p	869.5				869.3		
NC_61	605_p	867.4	byd	861.3	6.2	865.0	861.3	3.8
NC_62	3940_p	864.8	pond	859.0	5.8	860.8	859.0	1.8
NC_63	2230_p	870.1	street			869.9		
NC_64	1486_p	873.4	byd	866.9	6.6	871.8	866.9	4.9
NC_65	587_p	866.7				865.6		
NC_66	584_p	867.2				867.0		
NC_67	567_p	888.9				889.1		
NC_68	590_p	866.6				867.3		
NC_69	1699_p	869.9				867.4		
NC_7	507_p	939.5	street			938.8		
NC_70	606_p	868.5	street			867.8		
NC_71	1489_p	866.0				864.8		
NC_72	landlocked	864.8	pond	860.2	4.6	862.6	860.2	2.4
NC_73	3123_p	866.9				865.7		
NC_74	1746_p	869.5				868.4		
NC_75	607_p	867.4	street			864.1		
NC_76	1304_p	866.6				866.6		
NC_77	1878_p	879.5				876.8		
NC_78	landlocked	864.8	pond	860.3	4.5	861.3	860.3	1.0
NC_79	3116_p	869.0				868.7		
NC_8	508_p	938.5	byd	936.2	2.3	936.1	936.2	-0.1
NC_80	1775_p	874.8				874.7		
NC_81	1627_p	880.4				877.9		
NC_82	1774_p	875.3				874.6		
NC_83	1879_p	875.7				874.8		
NC_84	1765_p	873.9				872.2		
NC_85	2138_p	881.0				880.8		
NC_86	1097_p	879.8	street			878.6		
NC_87	1490_p	885.8				885.8		
NC_88	623_p	870.9	pond	862.0	8.9	865.4	862.0	3.4
NC_89	1861_p	876.1				876.0		
NC_9	515_p	935.0				927.9		
NC_90	2219_p	880.8				878.9		
NC_91	2002_p	885.3				885.2		
NC_92	2006_p	884.3	park	878.9	5.4	883.4	878.9	4.5
NC_93	1786_p	880.4				877.1		
NC_94	1785_p	880.6				877.6		
NC_95	1603_p	884.3	street			883.8		
NC_96	1604_p	885.4				884.4		
NC_97	1098_p	879.8	street			877.6		
NC_98	1779_p	881.7				880.9		
NC_99	619_p	879.8	street			879.4		
SC_1	1074_p	860.5	lake	859.0	1.5	859.3	859.0	0.3
SC_2	498_p	873.0	dry pond	867.5	5.5	871.7	867.5	4.2
SC_3	506_p	877.4	pond	874.7	2.7	875.7	874.7	1.0
SC_4	500_p	868.0				864.8		
SC_5	501_p	866.1	street			863.2		
SC_6	496_p	873.7				873.6		
SC_7	495_p	867.7	street			864.6		
SC_8	494_p	862.1				861.8		
SC_9	497_p	864.9				864.8		

Table 7.4
Conduit Modeling Results for Subwatersheds in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006)

Conduit ID	Upstream Node	Downstream Node	Conduit Shape	Conduit Dimensions* (ft)	Roughness Coefficient	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Conduit Length (ft)	Slope (%)	100Y Peak Flow through Conduit (cfs)	10Y Peak Flow through Conduit (cfs)
2247_p	712	NC_23	Circular	4	0.013	909.60	907.98	136	1.2	102.5	93.0
499_p	687	SC_4	Circular	1.25	0.013	865.62	863.13	58	4.3	3.4	2.4
504_p	693	SC_4	Circular	2	0.013	874.09	863.13	307	3.6	8.3	2.8
505_p	694	693	Circular	1.5	0.013	874.59	874.59	135	0.0	8.3	2.8
507_p	696	697	Circular	1.75	0.013	933.38	932.80	145	0.4	11.2	10.6
508_p	697	698	Circular	1.75	0.013	932.80	932.22	145	0.4	18.9	13.7
509_p	698	699	Circular	2.25	0.013	932.22	931.95	67.3	0.4	18.9	13.9
510_p	699	700	Circular	2.25	0.013	931.95	931.37	145	0.4	20.9	18.4
511_p	700	701	Circular	2.25	0.013	931.37	930.79	145	0.4	20.7	18.5
512_p	701	NC_11	Circular	2.25	0.013	930.79	930.67	30	0.4	20.6	18.5
514_p	703	NC_9	Circular	3	0.013	930.09	929.49	150	0.4	49.7	34.5
522_p	711	712	Circular	4	0.013	909.87	909.60	38.5	0.7	102.4	92.6
528_p	718	719	Circular	3	0.013	903.85	896.51	50	14.7	126.1	122.3
529_p	719	720	Circular	2.5	0.013	896.51	860.12	315	11.6	126.1	119.6
532_p	722	723	Circular	4	0.013	859.44	858.80	100	0.6	114.6	108.5
533_p	723	NC_22	Circular	4	0.013	858.80	858.50	42	0.7	114.6	108.5
550_p	742	743	Circular	2.5	0.013	873.30	872.91	74	0.5	100.3	50.1
551_p	743	NC_37	Circular	2.5	0.013	866.21	855.34	77.5	14.0	101.8	50.0
553_p	747	NC_62	Circular	3.5	0.013	859.23	859.23	30	0.0	135.0	130.0
555_p	749	NC_28	Circular	1.25	0.013	863.08	861.70	51	2.7	8.3	9.4
561_p	755	NC_34	Circular	1.25	0.013	875.08	874.55	51	1.0	11.7	12.1
566_p	760	NC_27	Circular	1.25	0.013	884.73	883.71	51	2.0	-6.0	4.2
579_p	NC_2	776	Circular	3.5	0.024	860.00	860.20	24	-0.8	48.0	26.1
580_p	776	777	Circular	3.5	0.013	860.00	858.80	175	0.7	47.1	26.0
581_p	777	778	Circular	3.5	0.013	858.80	857.62	296	0.4	47.1	26.0
582_p	778	779	Circular	3.5	0.013	857.62	857.10	131	0.4	47.1	25.9
583_p	779	NC_62	Circular	3.5	0.024	857.10	857.00	24	0.4	47.1	25.9
585_p	782	783	Circular	1.5	0.013	862.73	862.49	53	0.5	7.4	7.6
586_p	783	NC_65	Circular	1.5	0.013	862.49	862.27	50	0.4	7.5	7.6
591_p	790	NC_62	Arch	42" eq	0.013	858.92	857.00	420	0.5	69.7	70.2
596_p	797	798	Circular	4	0.024	861.50	861.50	24	0.0	63.4	44.1
597_p	798	796	Circular	4	0.013	861.50	860.46	169	0.6	63.4	44.1
603_p	808	NC_118	Circular	3.5	0.013	859.61	858.71	469	0.2	57.4	46.1
604_p	809	808	Circular	3.5	0.013	860.63	859.61	467	0.2	57.4	46.4
611_p	816	NC_120	Circular	3	0.013	861.00	859.85	321	0.4	26.5	25.6
613_p	818	NC_128	Circular	2	0.013	862.15	861.68	149	0.3	16.7	11.5
616_p	821	820	Circular	2	0.013	864.40	863.56	298	0.3	6.7	9.0
617_p	822	821	Circular	2	0.013	864.75	864.40	136	0.3	-4.0	-3.8
618_p	823	822	Circular	1.75	0.013	865.11	864.75	145.5	0.2	-4.0	3.2
619_p	824	825	Circular	2	0.013	870.70	868.78	425	0.5	20.6	17.1
621_p	826	NC_88	Circular	2	0.013	868.60	859.20	223	4.2	20.5	26.0
629_p	838	839	Circular	4.5	0.013	856.00	855.53	200	0.2	-119.3	-79.9
630_p	839	LE_33	Circular	4.5	0.013	855.53	855.39	143.5	0.1	-119.3	-79.5
632_p	841	842	Circular	4.5	0.013	855.24	855.07	166	0.1	-92.2	-65.4
633_p	842	843	Circular	4.5	0.013	855.07	854.92	152	0.1	-92.2	-65.3
634_p	843	844	Circular	4.5	0.013	854.92	854.82	101	0.1	-92.2	-66.7
635_p	844	LE_32	Circular	4.5	0.013	854.82	854.79	226	0.0	-92.2	-69.2
636_p	846	LE_32	Circular	3	0.013	855.96	854.98	140	0.7	55.9	36.3
638_p	848	LE_32	Circular	3	0.013	855.21	854.79	310	0.1	43.4	30.3

Table 7.4
Conduit Modeling Results for Subwatersheds in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006)

Conduit ID	Upstream Node	Downstream Node	Conduit Shape	Conduit Dimensions* (ft)	Roughness Coefficient	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Conduit Length (ft)	Slope (%)	100Y Peak Flow through Conduit (cfs)	10Y Peak Flow through Conduit (cfs)
639_p	849	848	Circular	3	0.013	855.47	855.21	130	0.2	43.3	30.2
640_p	850	849	Circular	3	0.013	855.64	855.47	115	0.1	43.4	30.1
641_p	851	850	Circular	3	0.013	856.00	855.64	150	0.2	43.7	30.1
643_p	853	852	Circular	3	0.013	856.49	856.30	95	0.2	39.9	34.5
645_p	855	LE_34	Circular	2	0.013	860.27	860.00	25	1.1	14.5	13.1
646_p	856	855	Circular	1.5	0.013	860.84	860.27	171	0.3	14.4	13.1
650_p	859	860	Circular	1.75	0.013	853.85	853.65	99.9	0.2	15.8	12.3
667_p	876	LE_11	Circular	4	0.013	824.24	823.79	327	0.1	67.1	72.1
670_p	879	880	Circular	4	0.013	821.99	821.38	277.1	0.2	81.4	76.0
671_p	880	881	Circular	4	0.013	821.38	820.77	277.1	0.2	81.4	75.1
672_p	881	882	Circular	4.5	0.013	820.77	820.59	83.5	0.2	81.3	74.9
673_p	882	883	Circular	4.5	0.013	820.59	820.00	234	0.3	92.6	82.9
676_p	886	LE_10	Circular	1.25	0.013	823.33	822.82	42.4	1.2	5.8	5.6
678_p	889	LE_1	Circular	1.5	0.013	823.47	822.00	366.5	0.4	16.5	16.4
699_p	914	LE_16	Circular	1.75	0.013	838.74	838.00	310	0.2	17.1	16.5
1852_p	2312	2300	Circular	3.5	0.013	865.12	864.53	399.6	0.1	71.7	75.2
1855_p	2315	NC_107	Circular	3	0.013	864.37	864.27	214.2	0.0	-45.7	48.8
1858_p	2318	NC_57	Circular	3.5	0.013	863.48	862.33	261.8	0.4	75.1	78.2
1870_p	NC_156	2333	Circular	1.25	0.013	876.25	872.60	19	19.2	14.0	13.9
1873_p	2286	2336	Circular	1.25	0.013	877.30	876.94	37.5	1.0	5.1	5.1
1878_p	NC_77	2057	Circular	3.5	0.013	862.23	861.63	190	0.3	98.2	100.6
1880_p	2340	2220	Circular	1.25	0.013	871.39	870.38	54	1.9	12.2	14.4
1885_p	2347	NC_41	Circular	3.25	0.013	906.92	901.60	231	2.3	40.0	23.9
1887_p	NC_45	NC_47	Circular	1.5	0.013	914.44	910.28	70	5.9	7.1	8.1
1888_p	2350	NC_47	Circular	1	0.013	912.90	910.58	100	2.3	1.3	-1.0
1892_p	2354	NC_46	Circular	2	0.013	912.55	911.08	80.3	1.8	12.1	10.1
1889_p	2351	2347	Circular	3	0.013	907.94	906.92	63	1.6	40.1	24.9
1890_p	2352	2351	Circular	3.25	0.013	910.45	907.94	250.6	1.0	40.1	25.5
1896_p	2358	2357	Circular	1.5	0.01	919.12	917.70	159	0.9	13.0	10.1
1898_p	2324	2360	Circular	2	0.013	865.89	866.69	57	-1.4	-22.5	-25.9
1927_p	2388	1579	Circular	1.5	0.013	871.90	870.97	48	1.9	6.6	5.6
1999_p	2466	NC_69	Circular	1.5	0.013	865.51	864.30	92	1.3	14.7	13.1
2005_p	NC_112	2469	Circular	1	0.024	866.50	864.74	18	9.8	5.9	6.6
2006_p	NC_92	2221	Circular	1.25	0.013	878.90	868.67	233	4.4	14.2	13.5
2007_p	AHR_21	1557	Circular	1	0.013	868.60	867.78	83.5	1.0	5.0	6.8
2009_p	2171	2819	Circular	1	0.013	868.60	868.15	35	1.3	2.6	5.5
2011_p	2472	AHR_18	Circular	1.25	0.013	866.55	866.50	15.7	0.3	10.1	11.7
3115_p	2796	1834	Circular	1	0.013	865.00	864.70	8	3.8	4.3	4.2
2014_p	AHR_18	2476	Circular	2	0.013	865.70	862.30	381	0.9	17.7	16.8
1636_p	2068	2067	Circular	1.5	0.013	868.13	867.65	75	0.6	-11.2	-12.7
2212_p	2769	NC_2	Circular	3.5	0.024	860.00	855.90	24	17.1	76.9	47.4
2225_p	NC_116	2314	Circular	3	0.013	876.97	876.80	77	0.2	3.7	7.2
2232_p	NC_49	2769	Circular	4	0.013	860.00	860.00	158	0.0	76.9	47.4
2550_p	AHR_17	2155	Circular	1.25	0.013	854.58	854.57	10	0.1	7.5	4.6
2555_p	2329	2779	Circular	1.25	0.013	876.15	875.64	20	2.6	10.9	9.3
2558_p	NC_153	2781	Circular	1.25	0.013	878.41	878.05	37.4	1.0	6.8	8.3
3111_p	NC_30	NC_3	Circular	5	0.024	858.00	858.00	226	0.0	-56.9	-67.5
3112_p	NC_30	NC_3	Circular	5	0.024	858.00	858.00	226	0.0	-56.9	-67.5
3118_p	NC_136	NC_74	Circular	1.25	0.013	866.34	865.49	53	1.6	10.1	10.0

Table 7.4
Conduit Modeling Results for Subwatersheds in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006)

Conduit ID	Upstream Node	Downstream Node	Conduit Shape	Conduit Dimensions* (ft)	Roughness Coefficient	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Conduit Length (ft)	Slope (%)	100Y Peak Flow through Conduit (cfs)	10Y Peak Flow through Conduit (cfs)
3119_p	NC_137	2800	Circular	1.5	0.013	862.65	862.57	8	1.0	9.7	9.4
3122_p	2800	NC_71	Circular	1.5	0.013	862.57	861.24	20	6.7	9.7	9.3
3125_p	2802	2801	Circular	1.5	0.013	853.72	853.23	50	1.0	15.6	12.8
3136_p	NC_33	NC_27	Circular	1.25	0.013	884.64	883.71	51	1.8	7.4	-4.2
3139_p	2817	2816	Circular	2	0.013	856.20	857.04	32	-2.6	27.7	-24.5
3155_p	LE_5	2829	Circular	1.5	0.013	836.77	836.60	28	0.6	15.7	15.9
3156_p	2829	LE_27	Circular	1.75	0.013	836.00	834.20	221	0.8	14.0	15.2
3159_p	LE_27	LE_3	Circular	2	0.013	833.55	827.80	350	1.6	31.6	35.2
3161_p	LE_37	LE_3	Circular	1	0.013	838.90	829.60	67.8	13.7	5.8	5.5
3162_p	LE_2	LE_27	Circular	2	0.013	834.50	834.20	6	5.0	11.4	14.6
3170_p	2841	NC_109	Circular	2	0.013	867.17	866.50	187	0.4	-14.8	14.6
3192_p	NC_146	2879	Circular	2	0.013	866.32	865.00	60	2.2	41.8	28.8
3243_p	2904	2903	Circular	1.25	0.013	872.34	872.14	53.1	0.4	5.3	7.4
3260_p	NC_125	2913	Circular	1.5	0.013	868.22	868.06	32	0.5	-10.4	9.6
3261_p	2913	2842	Circular	1.5	0.013	868.06	867.95	22	0.5	7.3	9.8
3301_p	2968	2216	Circular	1.25	0.013	864.11	863.19	19	4.8	12.1	15.0
3940_p	NC_62	SC_1	Circular	1	0.013	859.00	859.00	80	0.0	6.7	4.0
3158_p	2839	LE_1	Circular	3	0.024	818.35	817.60	112	0.7	49.3	50.0
1895_p	2357	2356	Circular	1.5	0.01	917.70	915.10	134	1.9	13.0	10.1
1881_p	NC_147	2340	Circular	1.5	0.013	872.23	871.39	57	1.5	8.8	9.6
3165_p	LE_39	LE_4	Circular	1.25	0.013	834.70	823.10	45	25.8	4.8	5.7
1891_p	NC_46	2352	Circular	3.25	0.013	910.88	910.45	77.5	0.6	40.1	25.1
1893_p	2355	2354	Circular	1.75	0.01	914.09	912.55	4	38.5	12.1	10.1
1886_p	NC_47	2345	Circular	1.5	0.013	910.18	905.63	261	1.7	13.4	13.8
1884_p	2345	NC_41	Circular	1.75	0.013	905.63	904.00	295	0.6	12.1	12.9
3166_p	2844	2845	Circular	1.25	0.013	871.80	871.55	50	0.5	6.8	9.9
3163_p	LE_41	LE_38	Circular	3	0.013	822.55	820.80	177	1.0	73.2	73.1
698_p	LE_18	914	Circular	1.75	0.013	839.51	838.74	319.6	0.2	10.8	9.4
695_p	LE_21	LE_19	Circular	1.5	0.013	847.50	842.47	40	12.6	25.8	19.8
3164_p	LE_4	LE_41	Circular	3	0.013	822.85	822.55	319.3	0.1	69.7	70.4
3167_p	2845	2841	Circular	1.25	0.013	870.38	870.28	10	1.0	8.2	9.9
697_p	LE_25	LE_18	Circular	1.75	0.013	841.03	839.51	630.9	0.2	10.8	14.8
693_p	LE_29	909	Circular	1.5	0.013	851.23	847.70	280	1.3	12.6	11.9
637_p	LE_31	846	Circular	2.25	0.013	862.50	856.02	162	4.0	55.9	37.7
649_p	LE_32	859	Circular	1.75	0.013	854.59	853.85	370	0.2	-14.3	9.3
631_p	LE_33	841	Circular	4.5	0.013	855.39	855.24	152	0.1	-92.2	-65.4
648_p	LE_35	LE_36	Circular	1	0.024	863.84	863.50	83.5	0.4	2.8	2.9
675_p	LE_7	886	Circular	1	0.013	825.00	823.33	172	1.0	5.8	5.6
679_p	LE_8	LE_1	Circular	1.5	0.013	823.50	821.00	200	1.3	9.9	7.4
680_p	LE_9	LE_1	Circular	1.5	0.013	822.75	821.42	133	1.0	13.8	13.4
657_p	N543	LE_16	Circular	1	0.013	848.67	847.69	249.5	0.4	6.2	-2.7
3133_p	NC_41	NC_21	Circular	2.5	0.013	901.60	892.00	375	2.6	50.2	41.6
2557_p	2780	2333	Circular	1.5	0.013	873.04	872.60	115	0.4	12.9	13.6
2559_p	2781	2337	Circular	1.25	0.013	878.05	877.92	13	1.0	6.3	7.7
513_p	NC_11	703	Circular	3	0.013	930.67	930.09	145	0.4	45.8	34.6
3140_p	2818	2057	Circular	1	0.013	873.29	872.30	42	2.4	4.3	-1.7
2004_p	2469	821	Circular	1.25	0.013	864.74	864.30	51	0.9	5.9	6.6
1851_p	2313	NC_111	Circular	1.25	0.013	873.36	872.86	49.2	1.0	-4.0	-6.6
602_p	NC_118	805	Arch	42" eq	0.013	858.71	857.64	317	0.3	62.2	48.3

Table 7.4
Conduit Modeling Results for Subwatersheds in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006)

Conduit ID	Upstream Node	Downstream Node	Conduit Shape	Conduit Dimensions* (ft)	Roughness Coefficient	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Conduit Length (ft)	Slope (%)	100Y Peak Flow through Conduit (cfs)	10Y Peak Flow through Conduit (cfs)
3153_p	NC_141	819	Circular	1	0.013	863.30	862.74	67	0.8	5.4	5.8
3154_p	NC_110	2388	Circular	1.25	0.013	873.35	872.10	169.2	0.7	6.6	5.6
3157_p	2831	LE_27	Circular	1.25	0.013	843.90	835.45	55	15.4	0.0	0.0
3193_p	2879	NC_84	Circular	2	0.013	865.00	863.64	60	2.3	43.7	29.0
612_p	NC_128	816	Circular	3	0.013	861.68	861.00	314	0.2	26.6	25.7
3117_p	1834	NC_74	Circular	1.25	0.013	864.70	864.39	9	3.4	7.7	9.5
3242_p	2903	2307	Circular	1.25	0.013	872.14	871.48	17.4	3.8	-6.2	8.2
600_p	NC_148	NC_3	Circular	1.25	0.024	862.93	861.27	30	5.5	4.0	3.7
521_p	NC_15	711	Circular	3.5	0.013	911.10	909.87	205	0.6	100.7	89.6
3121_p	2186	NC_73	Circular	3	0.013	862.35	861.93	71.7	0.6	50.4	32.6
1874_p	2336	2334	Circular	1.25	0.013	876.93	873.47	29	11.9	5.1	4.9
1897_p	NC_44	2358	Circular	1.5	0.013	919.91	919.12	72	1.1	13.0	10.1
527_p	NC_17	718	Circular	4	0.013	904.44	903.91	75	0.7	126.1	122.5
525_p	NC_19	NC_17	Circular	4	0.013	906.29	904.44	305	0.6	123.7	118.4
534_p	NC_22	725	Circular	4	0.013	858.80	858.26	133.5	0.4	158.6	135.6
523_p	NC_23	NC_19	Circular	4	0.013	907.98	906.29	297	0.6	106.0	103.6
562_p	NC_25	755	Circular	1.25	0.013	875.13	875.08	18	0.3	12.2	12.5
554_p	NC_28	747	Circular	1.25	0.013	861.70	860.41	126	1.0	10.0	10.0
598_p	NC_4	NC_3	Circular	5.5	0.024	859.08	859.23	149	-0.1	84.5	73.3
569_p	NC_31	NC_32	Circular	1	0.013	895.50	877.07	365	5.0	8.4	7.9
560_p	NC_34	NC_29	Circular	3.5	0.013	870.07	867.85	215	1.0	125.6	124.5
552_p	NC_37	NC_72	Circular	4	0.013	855.34	855.19	103.5	0.1	111.4	55.8
556_p	NC_39	749	Circular	1.25	0.013	863.20	863.08	18	0.7	8.3	9.4
1857_p	2317	2318	Circular	4	0.013	863.88	863.48	160.1	0.3	75.1	78.3
1862_p	98	NC_89	Circular	2	0.013	868.35	866.45	216	0.9	12.9	12.9
1853_p	2314	2315	Circular	3	0.013	864.47	864.37	63	0.2	-45.7	49.0
3132_p	NC_42	2811	Circular	2.5	0.013	890.00	884.00	188	3.2	68.1	61.4
605_p	NC_61	809	Circular	1.3	0.013	861.85	860.83	99	1.0	8.5	7.1
2017_p	2477	AHR_6	Circular	3	0.013	856.40	854.00	73	3.3	57.6	46.7
587_p	NC_65	NC_30	Circular	1.5	0.013	862.27	861.97	73	0.4	14.1	13.5
567_p	NC_67	760	Circular	1.25	0.013	886.26	884.73	50	3.1	-6.0	5.9
590_p	NC_68	NC_30	Circular	1.25	0.013	864.36	863.00	62	2.2	9.2	10.8
3131_p	2811	2813	Circular	2.5	0.013	884.00	881.00	195	1.5	68.1	61.4
2138_p	NC_85	NC_147	Circular	1	0.013	873.18	872.23	134	0.7	7.8	7.7
3211_p	AHR_20	2817	Circular	2	0.013	857.27	856.20	10	10.7	27.7	24.1
607_p	NC_75	809	Circular	3.5	0.013	860.75	860.83	193	0.0	52.5	40.2
2016_p	AHR_7	2477	Circular	2	0.013	856.25	856.40	45	-0.3	-28.0	-26.5
3116_p	NC_79	1834	Circular	1.25	0.013	865.17	864.70	56	0.8	5.9	6.6
3300_p	NC_132	2968	Circular	1.25	0.013	864.46	864.11	66	0.5	12.1	15.2
1866_p	NC_151	2329	Circular	1	0.013	880.29	876.15	44	9.4	3.1	4.2
3123_p	NC_73	NC_71	Circular	3	0.013	861.93	861.30	210	0.3	34.7	34.5
515_p	NC_9	NC_12	Circular	3	0.013	925.14	923.20	484	0.4	46.6	37.1
498_p	SC_2	687	Circular	0.75	0.013	867.50	866.00	255	0.6	2.6	2.4
506_p	SC_3	694	Circular	1.5	0.013	874.71	874.59	56	0.2	8.3	2.8
501_p	SC_5	SC_1	Circular	3	0.013	859.94	858.90	378	0.3	61.5	36.6
496_p	SC_6	SC_1	Circular	1	0.013	872.92	858.66	163.5	8.7	9.0	6.1
495_p	SC_7	SC_1	Circular	1.25	0.013	861.00	859.00	140	1.4	13.0	10.1
494_p	SC_8	SC_1	Circular	1.25	0.013	861.00	859.00	135	1.5	6.4	4.1
497_p	SC_9	SC_1	Circular	1	0.024	863.22	860.52	20	13.5	5.8	5.5

Table 7.4
Conduit Modeling Results for Subwatersheds in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006)

Conduit ID	Upstream Node	Downstream Node	Conduit Shape	Conduit Dimensions* (ft)	Roughness Coefficient	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Conduit Length (ft)	Slope (%)	100Y Peak Flow through Conduit (cfs)	10Y Peak Flow through Conduit (cfs)
1074_p	SC_1	NC_117	Circular	1	0.024	860.22	859.55	90	0.7	-2.5	
1075_p	NC_117	1369	Circular	1	0.024	859.55	859.28	28	1.0	5.4	5.3
1076_p	1369	NC_62	Circular	1.25	0.024	859.28	859.51	25	-0.9	5.4	-5.3
1077_p	NC_58	1373	Circular	1.5	0.013	869.65	865.25	145	3.0	25.3	25.0
1082_p	1377	NC_56	Circular	2.5	0.013	872.80	872.30	71	0.7	6.3	6.0
1084_p	NC_50	1379	Circular	1	0.013	872.90	871.60	124	1.0	7.0	6.8
1086_p	1381	NC_52	Circular	2.5	0.013	868.30	867.70	51	1.2	48.4	35.1
1087_p	NC_52	NC_51	Circular	3.5	0.013	866.80	866.00	150	0.5	119.5	95.1
1097_p	NC_86	1390	Circular	1.75	0.013	873.59	869.44	150.5	2.8	25.1	23.6
1098_p	1390	1391	Circular	2.5	0.013	869.44	868.97	117	0.4	36.5	26.3
1099_p	1391	NC_126	Circular	2.5	0.013	868.97	868.39	145	0.4	36.5	26.4
1238_p	NC_154	1555	Circular	2.25	0.013	872.00	870.83	175	0.7	29.2	27.4
1239_p	1555	AHR_13	Circular	2.25	0.013	870.83	866.70	509	0.8	25.5	24.0
1242_p	1558	AHR_6	Circular	2.25	0.013	862.74	854.90	130	6.0	40.4	36.4
1244_p	AHR_11	AHR_8	Circular	2	0.013	862.00	860.04	310	0.6	26.0	17.0
1245_p	AHR_8	1563	Circular	2.75	0.013	860.04	857.19	285	1.0	59.7	49.2
1246_p	1563	AHR_6	Circular	2.75	0.013	857.19	854.00	226	1.4	59.7	47.6
1247_p	AHR_6	1564	Circular	4	0.013	854.00	849.75	465	0.9	134.7	126.8
1250_p	1566	1567	Circular	4	0.013	845.86	843.34	280	0.9	157.7	138.3
1251_p	1567	1568	Circular	4	0.013	843.34	840.51	225	1.3	157.8	138.2
1252_p	1569	1570	Circular	2.5	0.013	849.25	845.49	436	0.9	4.0	0.0
1253_p	1570	AHR_4	Circular	3	0.013	845.49	842.75	428	0.7	-10.3	0.0
1254_p	AHR_4	1568	Circular	3.5	0.013	842.75	841.00	160	1.0	103.5	52.3
1255_p	1568	AHR_5	Circular	5	0.013	839.52	838.05	120	1.2	280.0	204.6
1256_p	AHR_5	AHR_1	Circular	5	0.013	838.05	831.88	467	1.3	297.7	211.6
1257_p	AHR_1	1574	Circular	5.5	0.013	831.88	830.43	168	0.9	308.4	213.7
1259_p	1576	NC_154	Circular	2	0.013	871.81	871.72	84	0.1	18.3	17.1
1260_p	NC_154	1577	Circular	2	0.013	871.72	871.46	118	0.2	15.1	19.9
1261_p	1577	1578	Circular	2.5	0.013	871.46	871.19	210	0.1	14.9	18.2
1262_p	1578	1579	Circular	2.5	0.013	871.19	870.97	90	0.2	14.7	18.0
1263_p	1579	NC_115	Circular	2.5	0.013	870.97	870.56	180	0.2	14.3	19.3
1264_p	NC_115	1581	Circular	2.5	0.013	870.56	870.21	252	0.1	21.0	28.2
1265_p	1581	1582	Circular	3	0.013	870.21	869.77	237	0.2	30.4	30.4
1266_p	1582	1583	Circular	3	0.013	869.77	869.13	220	0.3	38.8	32.6
1267_p	1583	1584	Arch	36" eq	0.024	869.13	868.71	160	0.3	21.8	40.7
1268_p	1584	NC_122	Arch	36" eq	0.024	868.71	868.48	140	0.2	26.2	49.6
1269_p	1586	1587	Circular	3.5	0.013	861.51	860.79	402	0.2	89.2	78.6
1270_p	1587	NC_4	Circular	4.5	0.024	860.79	860.10	100	0.7	95.7	79.9
1304_p	NC_76	NC_4	Arch	72" eq	0.024	861.08	860.50	119	0.5	191.0	170.3
1486_p	NC_64	1833	Circular	1	0.013	867.07	866.25	116	0.7	4.3	4.1
1487_p	1833	2796	Circular	1	0.013	866.25	865.00	228	0.5	4.3	4.2
1489_p	NC_71	NC_3	Circular	3	0.013	861.24	861.15	33	0.3	51.0	47.8
1579_p	1972	1974	Circular	3	0.013	819.00	818.00	240	0.4	40.2	17.9
1585_p	1996	LP_22	Circular	2	0.024	856.96	855.71	405	0.3	12.8	10.5
1586_p	1997	1996	Circular	2	0.013	857.73	856.93	258	0.3	12.8	10.5
1587_p	99	1997	Circular	2	0.013	859.00	857.73	258	0.5	12.8	10.5
1604_p	2020	2021	Circular	1.25	0.013	879.00	878.85	22	0.7	15.8	11.4
1605_p	2021	NC_133	Circular	1.25	0.013	878.85	869.98	66	13.4	15.8	13.7
1614_p	NC_104	2027	Circular	2	0.013	870.13	869.49	297	0.2	12.0	14.6

Table 7.4
Conduit Modeling Results for Subwatersheds in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006)

Conduit ID	Upstream Node	Downstream Node	Conduit Shape	Conduit Dimensions* (ft)	Roughness Coefficient	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Conduit Length (ft)	Slope (%)	100Y Peak Flow through Conduit (cfs)	10Y Peak Flow through Conduit (cfs)
1615_p	2027	NC_105	Circular	2	0.013	869.49	868.81	269	0.3	12.0	12.6
1616_p	NC_105	98	Circular	2	0.013	868.81	868.35	182	0.3	12.8	12.7
1625_p	2057	NC_76	Circular	3.5	0.013	861.63	861.08	234	0.2	185.2	165.6
1626_p	1586	NC_81	Circular	1.25	0.013	875.20	872.76	66	3.7	-11.0	-6.9
1627_p	NC_81	2057	Circular	2	0.013	872.76	870.78	124	1.6	31.5	32.6
1628_p	NC_129	2057	Circular	4.5	0.013	862.37	861.63	130	0.6	72.3	66.2
1630_p	2062	NC_100	Circular	4.5	0.013	863.92	863.27	217	0.3	64.4	-59.4
1631_p	2063	2062	Circular	4.5	0.013	864.67	863.92	251	0.3	64.0	60.9
1632_p	NC_150	2063	Circular	3.5	0.013	865.46	864.67	264	0.3	35.3	42.5
1633_p	2065	NC_150	Circular	3.5	0.013	866.16	865.46	238	0.3	-45.0	-41.6
623_p	NC_88	830	Circular	1	0.013	860.00	859.50	40	1.3	2.3	2.3
1698_p	2138	NC_3	Circular	2	0.013	860.76	860.31	32	1.4	27.2	22.6
1699_p	NC_69	2138	Circular	2	0.013	864.52	863.22	119	1.1	27.2	22.6
1700_p	NC_60	NC_128	Circular	1	0.013	862.30	861.68	63	1.0	6.8	9.0
1701_p	NC_101	2063	Circular	4	0.013	865.53	864.67	220	0.4	77.8	58.0
1702_p	2143	823	Circular	1	0.013	865.61	865.23	35	1.1	-4.0	3.4
1703_p	2144	2143	Circular	1.25	0.013	865.62	865.66	66	-0.1	-4.0	-3.4
1704_p	NC_114	1584	Circular	1.5	0.013	869.70	868.71	86	1.2	7.1	9.6
1705_p	NC_121	2067	Arch	36" eq	0.024	868.09	867.65	176	0.3	29.2	49.8
1706_p	NC_122	NC_121	Arch	36" eq	0.024	868.56	868.09	179	0.3	-24.1	-39.3
1707_p	2148	AHR_4	Circular	1	0.013	850.00	844.75	82	6.4	13.5	10.3
1709_p	2150	1560	Circular	1.75	0.013	864.39	863.40	134	0.7	10.2	4.1
1710_p	NC_123	2786	Circular	1	0.013	879.00	875.38	54	6.7	9.9	9.7
1711_p	2786	1581	Circular	1.25	0.013	875.38	873.28	64	3.3	9.9	10.3
1712_p	2153	1566	Circular	1.5	0.013	853.70	845.86	37	21.2	8.5	4.6
1713_p	2154	2153	Circular	1.5	0.013	854.37	853.70	168	0.4	7.6	4.6
1714_p	2155	2154	Circular	1.25	0.013	854.57	854.37	45	0.4	7.5	4.6
666_p	LE_13	876	Circular	4	0.013	824.77	824.24	327	0.2	67.2	72.7
669_p	LE_23	879	Circular	4	0.013	822.60	821.99	277.1	0.2	81.4	77.3
1729_p	AHR_19	2172	Circular	1	0.01	870.50	870.00	50	1.0	4.8	5.7
677_p	LE_10	LE_1	Circular	1.5	0.013	822.82	822.00	205.5	0.4	17.7	16.1
696_p	LE_24	LE_25	Circular	2	0.013	841.93	841.03	463.5	0.2	-19.9	-16.5
1747_p	2188	NC_74	Circular	2	0.013	872.00	865.50	300	2.2	13.0	8.8
1748_p	2189	2188	Circular	2	0.013	877.08	872.00	300	1.7	13.0	8.8
1749_p	NC_127	2189	Circular	2	0.013	878.30	877.08	244	0.5	13.0	8.7
1760_p	NC_73	NC_3	Circular	5	0.013	860.31	859.66	180.9	0.4	174.8	152.6
1761_p	NC_131	NC_73	Circular	5	0.013	860.87	860.31	360	0.2	151.6	149.7
1762_p	2215	NC_131	Circular	5	0.013	861.66	860.87	358	0.2	147.9	140.6
1763_p	2216	2215	Circular	5	0.013	862.01	861.66	206	0.2	125.0	128.6
1764_p	2217	2216	Circular	4.5	0.013	862.88	862.01	390	0.2	118.1	118.6
1765_p	NC_84	2217	Circular	4.5	0.013	863.64	862.88	306	0.2	118.1	118.6
1766_p	2219	NC_84	Circular	4.5	0.013	864.49	863.64	340	0.3	93.4	96.5
1768_p	2221	NC_126	Circular	3.5	0.013	868.67	867.89	300	0.3	40.4	39.5
1769_p	2222	2221	Circular	3	0.013	869.23	868.67	225	0.2	31.4	30.2
1770_p	NC_133	2222	Circular	3	0.013	869.98	869.23	310	0.2	31.3	29.4
1771_p	2223	NC_133	Circular	2.5	0.013	870.71	869.98	292	0.3	-22.3	-21.7
1775_p	NC_80	NC_131	Circular	1.25	0.013	873.82	872.49	34	3.9	5.4	5.2
1777_p	2229	2228	Circular	1.5	0.013	867.49	866.42	51	2.1	-15.0	4.9
1778_p	2230	2229	Circular	1.25	0.013	870.51	867.49	122	2.5	7.3	5.4

Table 7.4
Conduit Modeling Results for Subwatersheds in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006)

Conduit ID	Upstream Node	Downstream Node	Conduit Shape	Conduit Dimensions* (ft)	Roughness Coefficient	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Conduit Length (ft)	Slope (%)	100Y Peak Flow through Conduit (cfs)	10Y Peak Flow through Conduit (cfs)
1779_p	NC_98	2230	Circular	1.25	0.013	879.99	877.96	92	2.2	7.4	4.9
1780_p	2232	2219	Circular	1.25	0.013	868.72	867.50	51	2.4	5.7	8.6
1781_p	2233	2232	Circular	1.25	0.013	869.62	868.63	50	2.0	6.1	8.5
1784_p	2238	2220	Circular	1.25	0.013	871.29	869.02	142	1.6	11.2	9.2
1785_p	NC_94	2238	Circular	1.5	0.013	872.22	871.29	22	4.2	11.3	9.2
1786_p	NC_93	2220	Circular	1.25	0.013	875.00	870.34	130	3.6	13.5	12.1
1788_p	2240	1393	Circular	1.25	0.013	874.24	872.40	51	3.6	6.7	8.0
1789_p	NC_134	2240	Circular	1.25	0.013	874.60	874.24	36	1.0	6.6	8.0
1384_p	1681	LE_31	Circular	1.75	0.013	865.03	863.70	140	0.7	24.1	22.9
1828_p	NC_152	2286	Circular	1.25	0.013	879.45	877.35	208	1.0	4.9	5.1
1838_p	NC_111	2299	Circular	3	0.013	864.63	864.70	245.4	0.0	-49.0	-46.0
1839_p	2300	2301	Circular	4	0.013	864.53	863.38	300	0.4	58.6	64.3
1840_p	2301	2302	Circular	4	0.013	863.38	863.38	190	0.0	56.3	60.0
1841_p	2302	2303	Circular	3.5	0.013	863.38	863.15	44.6	0.5	72.9	72.2
1842_p	2303	2304	Circular	3.5	0.013	863.15	862.14	128.9	0.8	71.9	71.8
1843_p	2304	1586	Circular	3.5	0.013	862.14	861.51	482.9	0.1	71.3	73.1
1845_p	2306	NC_111	Circular	3	0.013	865.05	864.63	283.1	0.1	-44.3	-33.9
1849_p	NC_109	NC_139	Circular	3	0.013	866.50	866.11	129.9	0.3	30.0	32.6
1850_p	NC_139	2312	Circular	3.5	0.013	866.11	865.12	484.6	0.2	72.4	75.8
500_p	SC_4	SC_5	Circular	2.5	0.013	863.13	859.94	207	1.5	44.1	30.0
516_p	NC_12	NC_10	Circular	3	0.013	923.10	921.08	337	0.6	46.5	39.7
517_p	NC_10	NC_16	Circular	3	0.013	915.00	913.50	270	0.6	75.5	57.3
518_p	NC_16	NC_15	Circular	3.5	0.013	913.50	911.10	400	0.6	94.8	78.5
520_p	NC_14	NC_15	Circular	1	0.013	923.20	920.00	320	1.0	6.0	6.6
524_p	715	NC_19	Circular	1.25	0.013	913.00	912.54	116	0.4	-10.4	0.0
530_p	720	721	Circular	3	0.013	860.12	859.56	140	0.4	80.3	86.3
531_p	721	722	Circular	4	0.013	859.56	859.44	38	0.3	101.6	100.1
535_p	725	NC_62	Circular	5	0.024	858.26	858.00	36	0.7	152.4	135.1
536_p	727	NC_22	Circular	1.75	0.013	861.26	860.20	78	1.4	27.3	20.9
537_p	728	727	Circular	1.75	0.013	863.98	861.26	200	1.4	19.6	19.3
538_p	NC_24	728	Circular	1.75	0.013	867.06	863.98	226	1.4	27.0	23.5
542_p	NC_18	734	Circular	1	0.013	870.29	860.75	298	3.2	7.2	7.5
543_p	734	NC_38	Circular	1.5	0.013	860.75	860.55	29	0.7	19.7	17.0
544_p	NC_38	NC_78	Circular	2.25	0.013	860.55	859.00	90	1.7	42.9	35.8
545_p	NC_36	738	Circular	2	0.013	901.75	901.19	8	7.0	26.4	26.7
548_p	NC_35	741	Circular	2	0.013	885.45	884.71	96.5	0.8	52.4	50.0
549_p	741	742	Circular	2	0.013	882.11	874.80	219.5	3.3	56.5	50.0
559_p	NC_29	747	Circular	3.5	0.013	862.28	859.15	285	1.1	127.1	125.9
565_p	NC_27	NC_34	Circular	3	0.013	873.08	870.07	298	1.0	113.9	110.7
568_p	NC_32	NC_27	Circular	2.75	0.013	877.07	873.08	266	1.5	88.7	89.6
572_p	766	NC_62	Circular	1.75	0.013	860.69	860.62	16	0.4	26.2	20.6
573_p	768	766	Circular	1.75	0.013	860.83	860.69	22	0.6	26.2	20.6
574_p	769	768	Circular	1.75	0.013	860.99	860.83	35	0.5	25.9	20.6
575_p	NC_26	769	Circular	1.75	0.013	861.27	860.99	50	0.6	20.7	20.6
576_p	771	NC_26	Circular	1.5	0.013	861.53	861.27	50	0.5	11.9	12.0
577_p	NC_40	771	Circular	1.25	0.013	861.68	861.53	16	0.9	11.0	12.0
584_p	NC_66	782	Circular	1.25	0.013	864.16	862.73	296	0.5	4.8	6.0
592_p	NC_48	793	Circular	2.25	0.013	863.22	862.62	100	0.6	38.8	18.4
593_p	793	NC_49	Circular	2.25	0.013	862.62	862.00	106	0.6	24.5	18.4

Table 7.4
Conduit Modeling Results for Subwatersheds in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006)

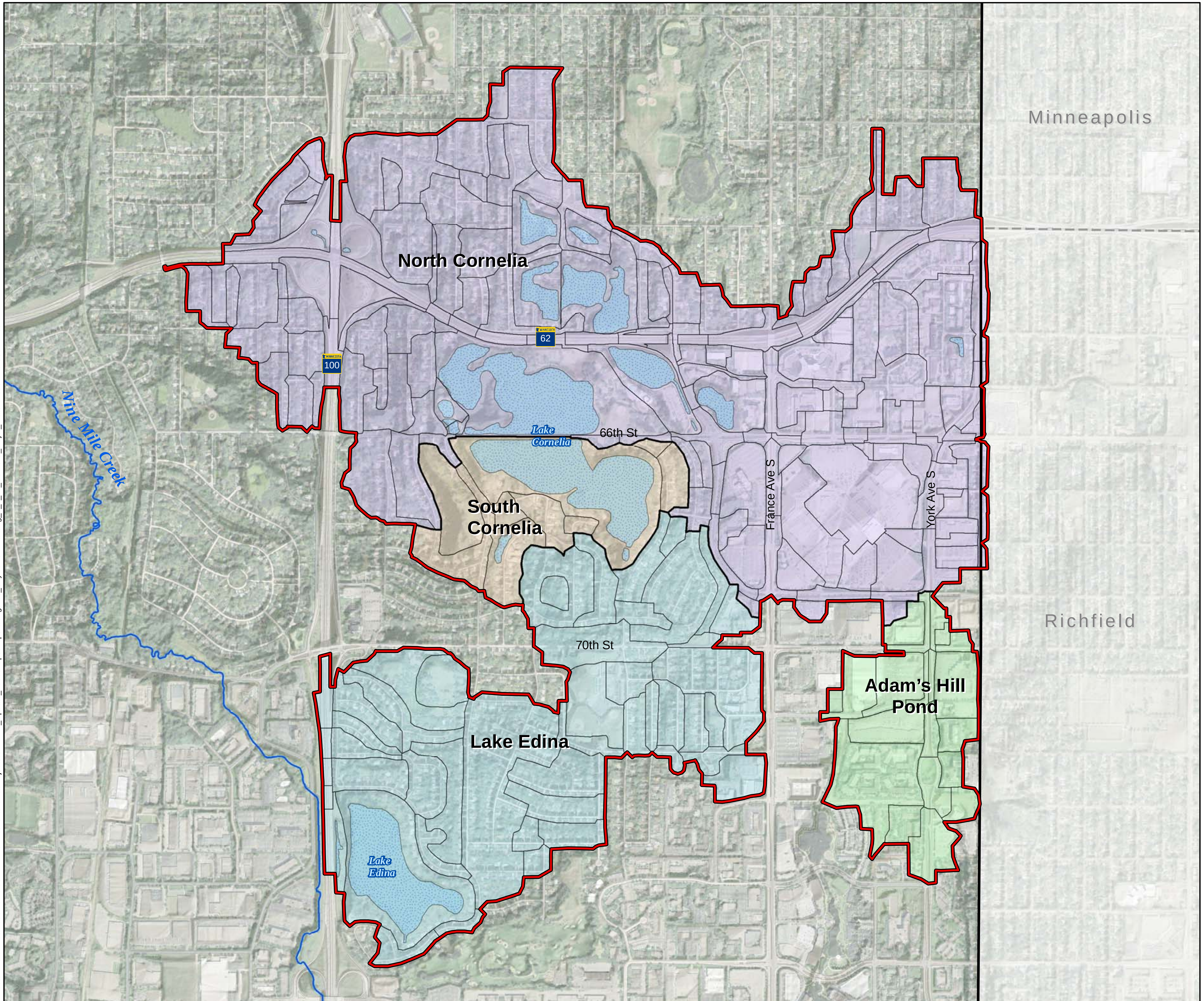
Conduit ID	Upstream Node	Downstream Node	Conduit Shape	Conduit Dimensions* (ft)	Roughness Coefficient	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Conduit Length (ft)	Slope (%)	100Y Peak Flow through Conduit (cfs)	10Y Peak Flow through Conduit (cfs)
595_p	796	NC_49	Circular	4	0.013	860.46	860.00	25.5	1.8	27.3	44.1
598_p	NC_4	NC_3	Circular	5.5	0.024	859.08	859.23	149	-0.1	84.5	-57.8
601_p	805	NC_62	Arch	54" eq	0.024	857.64	857.59	44	0.1	62.2	48.3
606_p	NC_70	NC_61	Circular	1	0.013	862.02	861.25	207	0.4	3.5	4.0
608_p	813	NC_75	Circular	3	0.024	859.48	858.77	127	0.6	30.6	29.2
609_p	NC_120	813	Circular	3	0.013	859.85	859.48	223	0.2	33.2	29.2
610_p	NC_113	NC_120	Circular	2	0.013	862.00	861.22	193	0.4	16.1	17.3
614_p	819	818	Circular	2	0.013	862.66	862.15	162	0.3	10.8	11.4
615_p	820	819	Circular	2	0.013	863.56	862.66	204	0.4	6.8	7.9
620_p	825	826	Circular	2	0.013	868.78	868.60	36	0.5	20.5	26.9
625_p	831	NC_86	Circular	1.75	0.013	876.50	875.23	635	0.2	6.9	5.3
642_p	852	851	Circular	3	0.013	856.30	856.00	150	0.2	39.0	32.7
644_p	LE_34	853	Circular	3	0.013	856.86	856.49	183	0.2	36.4	36.4
651_p	860	861	Circular	1.75	0.013	853.65	853.26	196.3	0.2	14.9	11.9
652_p	861	LE_40	Circular	1.75	0.013	853.26	852.42	421.9	0.2	14.0	11.8
653_p	LE_40	863	Circular	1.75	0.013	852.42	851.81	305	0.2	18.1	15.3
654_p	863	LE_16	Circular	1.75	0.013	848.61	848.00	304	0.2	24.5	17.0
658_p	LE_16	868	Circular	2	0.013	838.00	835.32	318.9	0.8	45.3	46.5
659_p	868	869	Circular	2	0.013	835.32	835.25	13	0.5	31.7	31.8
660_p	869	LE_15	Circular	2	0.013	835.25	835.01	48	0.5	33.0	33.6
661_p	LE_15	871	Circular	2.25	0.013	835.01	833.04	231	0.9	37.7	38.1
662_p	871	LE_17	Circular	2.25	0.013	833.04	830.52	231	1.1	37.7	37.7
663_p	LE_17	LE_12	Circular	3	0.013	830.52	827.70	330	0.9	54.4	54.5
664_p	LE_12	874	Circular	3	0.013	827.70	825.32	299	0.8	60.4	62.8
665_p	874	LE_13	Circular	3	0.013	825.32	824.77	48	1.1	60.1	62.5
668_p	LE_11	LE_23	Circular	4	0.013	823.79	822.60	355	0.3	71.6	74.5
674_p	883	LE_1	Circular	4.5	0.024	820.00	820.00	36	0.0	92.6	82.9
694_p	909	LE_21	Circular	1.5	0.013	847.70	847.50	28	0.7	12.5	11.7
1078_p	1373	NC_5	Circular	1.5	0.024	865.50	864.50	24	4.2	12.2	12.2
1080_p	NC_54	NC_5	Circular	1.5	0.013	864.05	863.80	15	1.7	17.8	15.7
1081_p	NC_55	1377	Circular	1	0.013	874.90	873.40	45.5	3.3	6.3	5.8
1083_p	NC_56	1379	Circular	2.5	0.013	872.30	870.70	287	0.6	33.2	33.7
1085_p	1379	1381	Circular	2.5	0.013	870.70	868.30	528	0.5	37.3	35.1
1088_p	NC_53	NC_52	Circular	2	0.013	888.60	870.80	329.8	5.4	50.7	43.9
1089_p	NC_59	NC_53	Circular	1.5	0.013	900.20	888.60	360	3.2	21.0	21.4
1100_p	NC_126	1393	Circular	3.5	0.013	867.84	867.03	300	0.3	70.5	60.4
1236_p	NC_124	1553	Circular	1.25	0.013	875.78	874.08	74	2.3	9.2	9.4
1237_p	1553	NC_154	Circular	1.25	0.013	874.08	873.58	30	1.7	10.7	10.7
1240_p	AHR_13	1557	Circular	2.25	0.013	866.55	866.25	69	0.4	30.1	24.5
1241_p	1557	1558	Circular	2.25	0.013	866.25	862.74	564	0.6	35.3	27.4
1243_p	1560	AHR_11	Circular	1.75	0.013	863.40	862.00	164	0.9	10.4	4.1
1248_p	1564	AHR_2	Circular	4	0.013	849.75	849.07	70	1.0	134.7	127.8
1249_p	AHR_2	1566	Circular	4	0.013	849.07	845.86	196	1.6	152.9	136.1
1385_p	LE_28	1681	Circular	1.75	0.013	866.01	865.03	140	0.7	22.8	22.9
1388_p	LE_43	856	Circular	2	0.013	860.67	860.84	38	-0.4	8.2	-13.0
1390_p	LE_6	889	Circular	1.25	0.013	828.00	823.47	46	9.8	13.8	14.0
1490_p	NC_87	NC_91	Circular	1.25	0.013	874.52	878.70	255	-1.6	8.2	-9.9
1491_p	AHR_15	1568	Circular	1.5	0.013	855.84	843.74	265	4.6	25.7	23.8
1603_p	NC_95	NC_92	Circular	1	0.013	879.80	878.90	217	0.4	4.2	4.4

Table 7.4
Conduit Modeling Results for Subwatersheds in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006)

Conduit ID	Upstream Node	Downstream Node	Conduit Shape	Conduit Dimensions* (ft)	Roughness Coefficient	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Conduit Length (ft)	Slope (%)	100Y Peak Flow through Conduit (cfs)	10Y Peak Flow through Conduit (cfs)
1629_p	NC_100	NC_129	Circular	4.5	0.013	863.27	862.37	300	0.3	67.4	59.0
1634_p	2066	2065	Arch	42" eq	0.024	867.02	866.16	285	0.3	-39.8	-47.5
1635_p	2067	2066	Arch	42" eq	0.024	867.65	867.02	208	0.3	26.4	47.6
1637_p	2069	2068	Circular	1.25	0.013	868.88	868.13	146	0.5	4.5	4.1
1638_p	LE_14	914	Circular	1.25	0.013	855.11	838.74	28	58.5	14.1	10.0
1697_p	738	NC_35	Circular	1.5	0.013	901.19	885.45	337	4.7	26.8	26.3
1708_p	AHR_3	2148	Circular	1	0.013	852.50	850.00	40.5	6.2	10.5	10.4
1728_p	2172	2171	Circular	1	0.013	869.30	869.30	8	0.0	3.0	5.6
1746_p	NC_74	NC_138	Circular	2.5	0.013	864.39	863.50	269	0.3	25.1	29.2
1767_p	2220	2219	Circular	4	0.013	865.50	864.49	300	0.3	87.1	91.2
1772_p	2224	2215	Circular	1.5	0.013	865.50	864.17	72	1.8	18.8	14.6
1773_p	2225	2224	Circular	1.5	0.013	866.75	865.50	80	1.6	18.6	14.7
1774_p	NC_82	2225	Circular	1.25	0.013	868.98	867.60	40	3.5	14.0	14.7
1776_p	2228	NC_84	Circular	1.5	0.013	866.42	865.50	51	1.8	-13.2	-13.6
1782_p	2234	2233	Circular	1.25	0.013	870.76	869.62	26	4.4	6.6	8.5
1787_p	1393	2220	Circular	3.5	0.013	866.99	865.61	300	0.5	62.7	65.4
1844_p	2305	NC_111	Circular	1.25	0.013	875.49	874.64	84	1.0	7.0	9.2
1847_p	2308	2307	Circular	3	0.013	865.65	865.58	33.5	0.2	-41.1	33.0
1848_p	NC_143	NC_109	Circular	2	0.013	866.63	866.50	20	0.7	24.5	28.4
1854_p	2299	2314	Circular	3	0.013	864.70	864.47	71.9	0.3	-46.0	45.9
1856_p	NC_107	2317	Circular	4	0.013	864.27	863.88	108.3	0.4	79.8	90.9
1859_p	NC_57	NC_77	Circular	3.5	0.013	862.33	862.23	290.1	0.0	89.7	90.4
1860_p	NC_106	NC_107	Circular	3	0.013	876.80	864.27	43	29.1	89.7	60.0
1861_p	NC_89	2324	Circular	2	0.013	866.45	865.89	153	0.4	21.3	26.2
1863_p	NC_144	2308	Circular	2	0.013	873.09	865.65	244	3.0	17.2	34.6
1864_p	2327	NC_144	Circular	1.5	0.013	874.40	873.09	250	0.5	8.2	7.9
1867_p	NC_140	2329	Circular	1	0.013	877.96	876.15	57	3.2	6.2	6.1
1868_p	2332	1576	Circular	2	0.013	872.33	871.81	167	0.3	18.3	17.2
1869_p	2333	2332	Circular	1.5	0.013	872.60	872.33	128	0.2	18.3	16.8
1872_p	NC_155	2334	Circular	1	0.013	879.85	873.47	157.5	4.1	4.8	4.8
1876_p	2337	2338	Circular	1.25	0.013	877.92	874.30	11.5	31.5	5.8	6.7
1877_p	2338	2334	Circular	1.5	0.013	874.30	873.47	160.8	0.8	5.3	6.2
1879_p	NC_83	2234	Circular	1.25	0.013	870.36	869.76	60	1.0	9.4	8.5
1894_p	2356	2355	Circular	1.5	0.01	915.10	914.09	88.5	1.1	12.2	10.1
1899_p	2360	NC_139	Circular	2	0.013	866.69	865.62	71.5	1.5	36.0	34.1
1925_p	AHR_12	2473	Circular	1.25	0.013	869.39	867.75	54	3.0	10.1	10.7
2000_p	2467	2466	Circular	1.5	0.013	867.58	865.51	323	0.6	12.1	12.4
2001_p	NC_149	2467	Circular	1.5	0.013	870.59	867.58	183	1.6	11.9	12.2
2002_p	NC_91	2302	Circular	1.25	0.013	865.77	864.00	385	0.5	13.1	14.6
2008_p	2386	2472	Circular	1.25	0.013	867.30	866.55	47.6	1.6	10.1	11.7
2010_p	2473	2386	Circular	1.25	0.013	867.50	867.30	17.7	1.1	14.8	14.8
2015_p	2476	2477	Circular	2	0.013	862.30	856.40	232	2.5	37.9	21.5
2219_p	NC_90	2761	Circular	2	0.013	874.00	873.00	103	1.0	18.1	12.8
2224_p	2761	NC_81	Circular	2	0.013	873.00	872.00	112	0.9	22.3	12.9
2226_p	NC_103	2305	Circular	1.25	0.013	875.75	875.49	26.2	1.0	5.6	7.4
2228_p	2307	NC_108	Circular	3	0.013	865.84	865.38	121.3	0.4	-45.0	-37.9
2229_p	NC_108	2306	Circular	3	0.013	865.38	865.05	156	0.2	-39.1	-34.1
2230_p	NC_63	785	Circular	1	0.013	865.72	865.54	40.5	0.4	5.2	4.0
2231_p	2767	NC_54	Circular	1	0.013	864.40	864.05	28	1.3	-0.3	-0.3

Table 7.4
Conduit Modeling Results for Subwatersheds in the Lake Cornelia/Lake Edina/Adam's Hill Pond Drainage Areas (Revised 12/2006)

Conduit ID	Upstream Node	Downstream Node	Conduit Shape	Conduit Dimensions* (ft)	Roughness Coefficient	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Conduit Length (ft)	Slope (%)	100Y Peak Flow through Conduit (cfs)	10Y Peak Flow through Conduit (cfs)
2233_p	NC_51	NC_5	Circular	4	0.013	866.00	861.40	138	3.3	177.0	111.0
2235_p	NC_145	NC_93	Circular	1.5	0.013	875.36	875.00	22	1.6	-16.2	7.7
2500_p	LE_52	LE_51	Circular	1.5	0.013	831.97	831.30	232	0.3	16.1	13.8
2553_p	NC_102	NC_144	Circular	1.5	0.013	874.11	873.09	30	3.4	7.1	8.8
2554_p	2779	2327	Circular	1.5	0.013	875.64	874.40	70	1.8	10.8	8.6
2556_p	2334	2780	Circular	1.5	0.013	873.47	873.04	52.5	0.8	13.1	13.9
2560_p	LE_36	856	Circular	1	0.024	862.27	860.84	101	1.4	3.8	3.4
2561_p	NC_119	2144	Circular	1	0.013	866.27	865.62	120	0.5	2.3	3.4
3111_p	NC_30	NC_3	Circular	5	0.024	858.00	858.00	226	0.0	-56.9	-67.5
3113_p	AHR_10	2150	Circular	1.25	0.013	865.24	864.39	37	2.3	4.7	4.1
3114_p	AHR_14	AHR_8	Circular	1.5	0.013	861.29	860.04	19	6.6	22.9	18.7
3120_p	NC_138	2186	Circular	2.5	0.013	863.50	862.35	154.1	0.7	38.8	33.4
3124_p	2801	AHR_2	Circular	1.5	0.013	853.23	849.07	23	18.1	15.5	12.7
3126_p	2803	2802	Circular	1.25	0.013	854.25	853.72	36	1.5	15.2	12.7
3127_p	AHR_16	2803	Circular	1.25	0.013	854.36	854.25	9	1.2	17.9	12.7
3130_p	NC_21	NC_42	Circular	2.5	0.013	892.00	890.00	105	1.9	62.6	59.0
3134_p	NC_43	NC_32	Circular	2.5	0.013	879.00	877.07	150	1.3	71.9	73.2
3135_p	2813	NC_43	Circular	2.5	0.013	881.00	879.00	225	0.9	58.7	60.6
3138_p	2816	AHR_7	Circular	2	0.013	857.50	857.00	18	2.8	27.7	24.5
3141_p	2819	AHR_13	Circular	1.5	0.013	868.15	867.79	8.3	4.3	-5.1	-7.0
3160_p	LE_3	LE_4	Circular	2.5	0.013	827.80	822.85	350	1.4	53.3	56.3
3168_p	NC_142	2842	Circular	1.25	0.013	870.00	869.71	58	0.5	10.2	12.3
3169_p	2842	2841	Circular	2	0.013	867.64	867.17	155	0.3	-18.2	-16.8
3262_p	LE_19	LE_24	Circular	1	0.013	842.47	841.93	213	0.3	6.4	-6.5



City of Edina Boundary
Roads/Highways
Creek/Stream
Lake/Wetland
Lake Cornelia/Lake Edina/ Adam's Hill Pond Drainage Basin
Major Watershed
Subwatershed

Imagery Source: Aerials Express, 2008

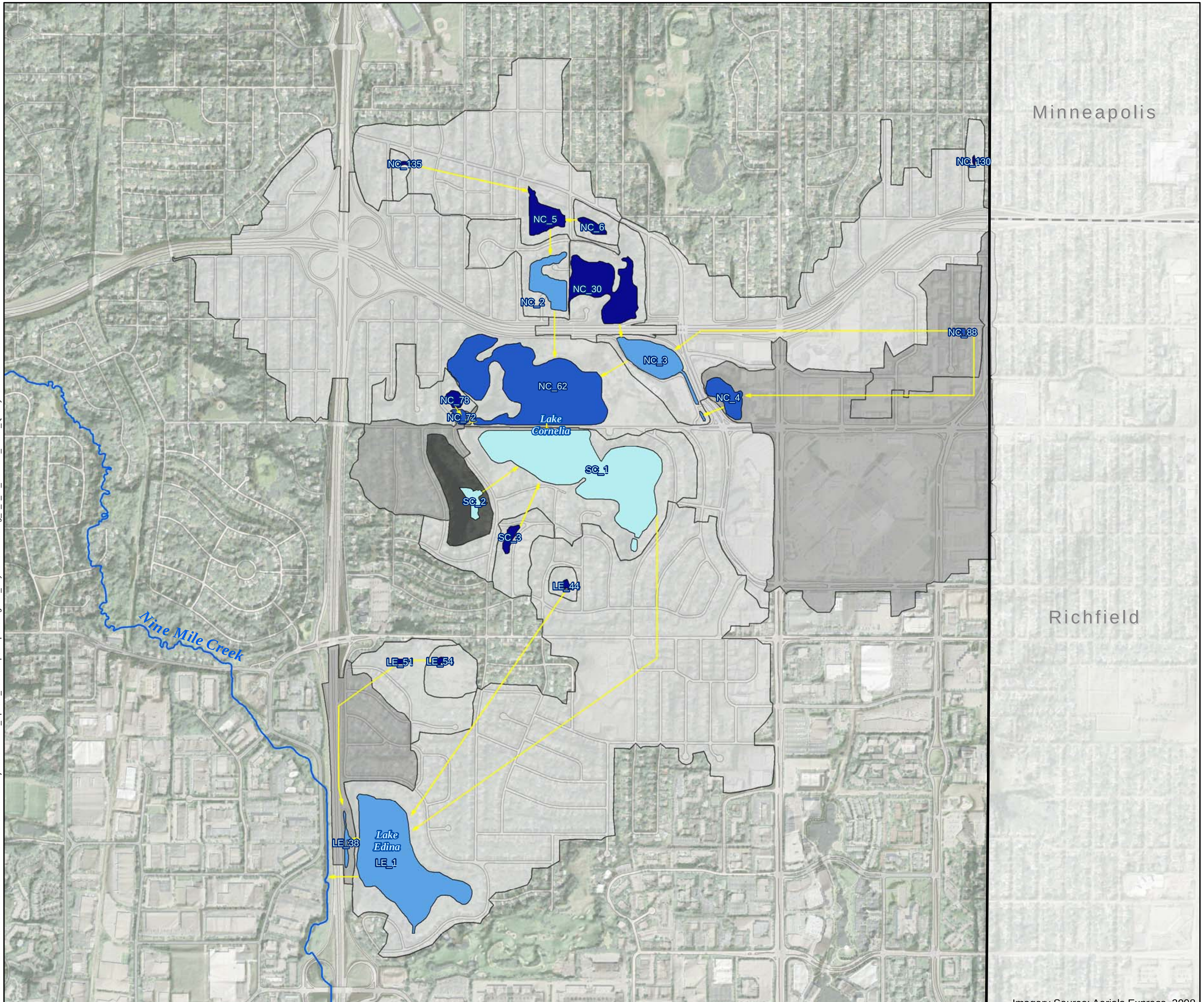
Feet
1,200 0 1,200

Meters
400 0 400

DRAFT

Figure 7.2

LAKE CORNELIA/LAKE EDINA/
ADAM'S HILL POND
MAJOR WATERSHEDS
Comprehensive Water Resource
Management Plan
City of Edina, Minnesota



Percent TP Removal in Water Body*

This number represents the percent of the total annual mass of phosphorus entering the water body that is removed.

- 0 - 25% (Poor/No Removal)
- 25 - 40% (Moderate Removal)
- 40 - 60% (Good Removal)
- 60 - 100% (Excellent Removal)

Cumulative TP Removal in Watershed*

This number represents the percent of the total annual mass of phosphorus entering the watershed and upstream watersheds that is removed in the pond and all upstream ponds.

- 0 - 25% (Poor/No Removal)
- 25 - 40% (Moderate Removal)
- 40 - 60% (Good Removal)
- 60 - 100% (Excellent Removal)

*Data based on results of P8 modeling.

Flow Direction

N

Feet
1,200 0 1,200

Meters
400 0 400

DRAFT

Figure 7.4

LAKE CORNELIA/LAKE EDINA
WATER QUALITY
MODELING RESULTS
Comprehensive Water Resource
Management Plan
City of Edina, Minnesota