Village of Algonquin
Committee of the Whole
February 17, 2026
7:45 PM
Ganek Municipal Center
2200 Harnish Drive, Algonquin

Trustee Brehmer – Chairperson
Trustee Auger
Trustee Spella
Trustee Glogowski
Trustee Dianis
Trustee Smith
President Sosine

1. **Roll Call - Establish a Quorum**
2. **Public Comment - Audience Participation**
   (Persons wishing to address the Committee must register with the Chairperson prior to roll call.)
3. **Community Development**
4. **General Administration**
   A. FY 2026/2027 Proposed Budget Review – Enterprise & Special Funds (Cemetery, Swimming Pool, Water & Sewer Operating, Building Services, Vehicle Maintenance)
   B. Consider an Agreement with Revize for Website Hosting Services
5. **Public Works & Safety**
   A. Consideration of a Resolution Approving the 2025 Woods Creek and Jelkes Creek Watershed Plans
   B. Consider Resolutions Approving the 2023 Wastewater Master Plan and the 2024 Water System Master Plan
   C. Consider a Resolution Approving the 2025 Village-wide Pavement Management Report as a Guide for Pavement Improvement Planning
   D. Review and Discussion of the 2026 - 2031 Capital Improvement Plan
   E. Consider an Agreement with M.E. Simpson Co., Inc. for the Water Distribution Leak Survey
   F. Consider an Agreement with Water Well Solutions Illinois, LLC for the Well 15 Casing to Well Screen Transition Repair
   G. Consider Certain Items to be Deemed Surplus
6. **Executive Session, if Required**
7. **Other Business**
8. **Adjournment**

VILLAGE OF ALGONQUIN

GENERAL SERVICES ADMINISTRATION

– M E M O R A N D U M –

DATE: February 10, 2026

TO: Committee of the Whole

FROM: Tim Schloneger, Village Manager

SUBJECT: *Proposed Budget – 2026/2027 - Water and Sewer Operating Fund*

The Water and Sewer Operating fund is a separate enterprise fund that receives no tax revenue because its revenue is derived solely from the use of the Village's water and sewer services. Water, sewers, and all other utilities are businesses, regardless of who owns them. The Village's Water & Sewer utilities are government-owned businesses. For this reason, the fund is classified as a proper enterprise fund. It is the pure business of providing water and sewer services. The revenues and expenditures are directly related to the demand for these water and sewer services and are not supplemented by any other fund or tax dollars.

The fiscal year 2026/2027 Water and Sewer Operating Fund budget proposed estimated expenditures of $18,199,200, which includes $1,585,000 in loan/debt service payments and a $6,450,000 transfer to the Water and Sewer Capital Fund.

ANTICIPATED REVENUE - WATER AND SEWER OPERATING FUND – ($16,432,000)

Approximately $15,445,000 is expected to be generated from water, sewer, and fixed fees. This source alone accounts for 94% of the revenue needed to operate the Village's water and sewer system. Other revenue sources are interest on cash reserves, service charges, late charges, cell tower rental fees, and new meter sales.

PROPOSED EXPENDITURES - WATER AND SEWER OPERATING FUND – ($18,199,200)

The expenditure format for the Water and Sewer Operating Fund separates the Water and Sewer Divisions; however, many expenditure items are split between Water Division and Sewer Division line items.

Utilities Division staff will focus on operating and maintaining the wastewater treatment plant, maintaining water and sewer distribution lines, and operating the three water treatment plants. The priority of this year's water and sewer operating budget is continued maintenance of the existing system and environmental protection of our water and sewer utility system.

PERSONNEL - (Water $2,197,200 - Sewer $2,231,000)

ACCOUNTS 41103, 41104, AND 41105—These accounts are calculated at the statutory rates for IMRF, FICA, and unemployment tax and are fixed according to the divisions' salaries and pay ranges.

ACCOUNT 41106, HEALTH INSURANCE - This item is budgeted to account for distributing health insurance costs to the divisions.

ACCOUNTS 41110 AND 41140, SALARIES/OVERTIME - These items include salaries for office and utility maintenance personnel, with anticipated overtime expenditures. This account consists of the existing staff of the Water and Sewer Divisions.

Potential salary increases that will be discussed under the Village's Merit Compensation Plan at the end of the budget process are included for nonunion personnel. The salaries for union personnel will depend on the current collective bargaining agreement.

WATER AND SEWER CONTRACTUAL SERVICES - (Water $1,121,400 - Sewer $1,367,100)

The line items under Contractual Services include services that the Village will contract with outside vendors to provide. These services are for the divisions' use of utilities, legal services, engineering, professional services, publications, rental equipment, and physical exams. These are generally proportioned evenly between the Water and Sewer Divisions. The proposed budget reflects increased expenditures for contractual services, primarily due to higher liability insurance premiums and additional outsourced expenses (i.e., utility locating and valve exercising).

ACCOUNT 42212, ELECTRIC – (Water $383,600 – Sewer $408,000)
The energy cost to operate the pumps and motors for the water and sewer system is the largest line item under contractual services.

ACCOUNT 42225, BANK PROCESSING - (Water $55,000—Sewer $55,000) The water and Sewer Divisions share the cost of the lockbox system, which receives and processes billing payments.

ACCOUNT 42234, PROFESSIONAL SERVICES – (Water $368,300 – Sewer $334,300)
This account includes the costs for services of lab testing, valve maintenance, water system leak audit, outsourcing of utility billing, JULIE utility locating, maintenance of the SCADA system, and the state's increased fee for the sewage treatment plant NPDES fee.

ACCOUNT 42262, SLUDGE REMOVAL - Under the Sewer Division, this item covers the contract cost for sludge hauling and disposal ($200,000) based on the estimated volume of sludge generated at the sewage treatment plant. Due to new regulations and prevailing wage mandates, landfilling sludge is increasing the cost of this line item relative to prior years.

SUPPLIES AND MATERIALS - (Water $674,300 - Sewer $593,300)

This budget category covers supplies and materials for the production and treatment of water and sewage. Purchasing supplies and materials includes a wide range of items, including parts, tools, traffic safety equipment, and chemicals. Some of the larger purchases proposed under supplies and materials are as follows:

Account #	***100% Water Division***		***Account #***	***100% Sewer Division***	
43342	Softening Salt	$23,000	43342	Ferric Chloride	$100,000
43342	Citric Acid	$31,500	43342	Polymer for Rotary Drum/ Filter Press	$60,000
43342	Sodium Hypochlorite	$125,000			
43342	Orthophosphate	$55,000			
43342	Fluoride	$10,000			

Account #	***50% Water and 50% Sewer Divisions***	
43317	Postage for Water & Sewer Bills and Notices	$83,400
43348	Meters & Meter Supplies	$277,600

MAINTENANCE - (Water $1,013,900 - Sewer $643,800)

This general category covers the day-to-day maintenance requirements for water and sewer facilities. As various parts of this system age, expenses increase to keep the facilities operating effectively. Some of the larger maintenance projects proposed for this fiscal year are as follows:

Account #	***100% Water Division***		***Account #***	***100% Sewer Division***	
44418	Remove & Inspect Well #7	$40,000	44412	Gate Actuators Installation Final Clarifiers	$70,000
44418	Remove & Inspect Well #8	$100,000	44412	Admin AC Unit	$25,000
44418	Install Fence around Well #13	$29,000	44412	Make Up Air Unit	$48,000

CAPITAL EXPENDITURES - (Water $250,000 - Sewer $0)

ACCOUNT 45590, CAPITAL PURCHASES – The Water & Sewer Divisions are allocated a combined $250,000 for: Dehumidifier Replacement WTP 3.

OTHER CHARGES - (Water $39,800 - Sewer $32,400)

Other Charges include the Water and Sewer Divisions' share of travel, training, dues, uniforms, and personnel protective equipment required by the Public Works Department.

SUMMARY - WATER AND SEWER OPERATING FUND

Maintaining safe drinking water and environmentally sound sewer services is one of the most essential responsibilities of the Village of Algonquin. As providing Water and sewer services becomes more expensive, the Village faces the constant challenge of balancing its commitment to offering a fundamental public health service at an affordable price with the need to manage its systems in a financially sustainable manner.

The Water and Sewer Operating Fund budget proposes a significant contribution to the maintenance and construction of our water and sewer utility assets, pursuant to the water and

sewer rate and fee study. Operation and maintenance costs are increasing due to the expansion of water and sewer distribution and treatment processes, and the system's continued aging.

The water and sewer operating budgets allocate operation and maintenance costs equally between the Water and Sewer Divisions (approximately 50% water—50% sewer). There is one active bond issue in the Water and Sewer Operating Fund, which will mature in 2026. Loan servicing through the Illinois Environmental Protection Agency will be present in this budget and future budgets until maturity in 2040.

The Village must continue the day-to-day operations and maintenance of this enterprise fund. Environmental Protection Agency requirements consistently tighten the quality standards for drinking water and sanitary sewer effluent. This, in turn, raises the bar for product quality across the Water and Sewer Divisions to benefit our citizens.

Attachments

			FY 22/23 Actual	FY 23/24 Actual	FY 24/25 Actual	FY 25/26 Q2	FY 25/26 Budget	FY 26/27 Budget
07000400	33035	Donations - Operating - W&S	$ 14,309.17	$ 4,269.83	$ 2,614.79	$ 6,045.16	$ -	$ 2,000.00
07000400	33235	Grants - Operating	-	-	-	-	-	-
07000400	33252	Grants - Capital - Public Works	3,300,000.00	-	-	-	-	-
07000400	34100	Rental Income[1]	91,247.33	89,277.79	88,359.59	10,000.00	100,000.00	104,000.00
07000400	34200	Miscellaneous Billings	-	-	-	-	-	-
07000400	34700	Water Fees	4,836,426.09	5,343,355.03	5,721,059.48	2,792,120.72	5,585,000.00	6,030,000.00
07000400	34710	Sewer Fees	6,427,929.49	7,060,802.02	7,538,201.76	3,675,883.59	7,385,000.00	7,965,000.00
07000400	34715	Infrastructure Fee	1,353,854.29	1,372,049.81	1,394,326.76	733,344.24	1,375,000.00	1,450,000.00
07000400	34720	Administrative Fees	4,212.34	5,646.67	5,966.94	2,814.00	4,000.00	5,000.00
07000400	34730	Late Charges	104,196.27	125,556.29	125,046.28	64,812.95	110,000.00	120,000.00
07000400	34740	Reinstatement Fees	17,718.11	22,228.70	24,077.89	13,210.48	20,000.00	21,000.00
07000400	34820	Meter Sales	102,132.00	127,706.00	93,290.20	86,232.00	100,000.00	105,000.00
07000500	36001	Interest		32,736.64	57,331.10	72,390.23	21,000.00	40,000.00
07000500	36020	Interest - Investment Pools	344,947.17	731,138.61	795,838.09	285,706.39	600,000.00	550,000.00
07000400	37100	Restitution	10,000.00	430.00	2,493.79	-	-	-
07000500	37110	Insurance Claims	-	19,897.01	1,093.79	-	-	-
07000500	37900	Miscellaneous Revenue	-	-	-	-	-	-
07000400	37905	Sale of Surplus Property	69,012.50	88,243.08	25,895.68	4,787.00	40,000.00	40,000.00
Water & Sewer Operating Fund Total			**$ 16,675,984.76**	**$ 15,023,337.48**	**$ 15,875,596.14**	**$ 7,747,346.76**	**$ 15,340,000.00**	**$ 16,432,000.00**
Actual figures have been adjusted, per auditor.								
[1] - Accounts for rental from wireless service providers for tower rental fees.								

Water and Sewer Operating Fund

Total Expenses

			FY 22/23 Actual	FY 23/24 Actual	FY 24/25 Actual	FY 25/26 Q2	FY 25/26 Budget	FY 26/27 Dept.	FY 26/27 Manager	FY 26/27 Budget
07700400		Water Division Total	$ 3,582,989.16	$ 4,316,044.80	$ 4,505,431.83	$ 2,213,221.49	$ 5,487,400.00	$ 5,295,168.71	$ 5,296,600.00	
07800400		Sewer Division Total	3,022,316.08	3,576,762.48	4,087,065.10	2,011,574.96	4,783,300.00	4,853,461.41	4,867,600.00	
07080400	46700	IEPA Loan Principal Expense								
		W1750 - Stage 2 Utilities	124,293.55	126,591.07	128,931.07	65,356.52	131,315.00	133,741.61	133,750.00	
		W1840 - Phase 6B WWTF	634,512.10	701,640.77	715,743.76	363,248.86	730,135.00	744,805.82	744,850.00	
		W1950 - Stage 3 Utilities	271,180.31	276,631.03	282,191.32	143,215.60	287,865.00	293,649.42	293,650.00	
07080400	46701	IEPA Loan Interest Expense								
		W1750 - Stage 2 Utilities	47,558.53	43,436.57	43,012.74	20,664.81	40,730.00	38,301.05	38,350.00	
		W1840 - Phase 6B WWTF	403,862.00	303,376.06	335,190.26	146,235.63	288,840.00	274,163.16	274,200.00	
		W1950 - Stage 3 Utilities	120,385.78	114,889.63	76,721.51	53,697.36	105,965.00	100,176.50	100,200.00	
07080400	46680	Bond Principal Payment	770,000.00	815,000.00	830,000.00	-	-	-	-	
07080400	46681	Bond Interest Expense	62,484.91	39,272.41	5,339.81	-	-	-	-	
07080400	46682	Bond Fees	428.00	802.50	-	-	-	-	-	
07800500	48012	Transfer to W/S Capital	4,525,043.68	1,372,049.81	4,944,286.76	733,344.24	3,244,150.00	1,450,000.00	6,450,000.00	
Subtotal			**$ 13,565,054.10**	**$ 11,686,497.13**	**$ 15,953,914.16**	**$ 5,750,559.47**	**$ 15,099,700.00**	**$ 13,183,467.68**	**$ 18,199,200.00**	**$ -**
Non Budgeted Expense										
07800400	46702	ARO Amortization	$ 8,409.00	$ 8,409.00	$ 8,409.00	$ -	$ -	$ -	$ -	$ -
07700400	47796	SBITA Amortization	-	-	4,666.02	-	-	-	-	-
07800400	47796	SBITA Amortization	-	-	4,666.02	-	-	-	-	-
07700400	47853	Pension Expense W/S	43,007.00	(154,534.00)	230,295.35	-	-	-	-	-
07800400	47853	Pension Expense W/S	37,081.00	(134,710.00)	196,842.34	-	-	-	-	-
07700400	47854	OPEB Expense W/S	7,909.00	7,411.00	19,556.00	-	-	-	-	-
07800400	47854	OPEB Expense W/S	6,313.00	6,559.00	18,008.00	-	-	-	-	-
07800400	47785	Depreciation Expense	4,305,289.00	4,220,940.00	4,288,315.00	-	-	-	-	-
07700400	47790	Interest Expense	-	2,599.83	3,005.76	-	-	-	-	-
07800400	47790	Interest Expense	-	226.00	508.30	-	-	-	-	-
07700400	47795	Lease Amoritization Expense	12,453.16	21,683.93	18,680.08	-	-	-	-	-
07800400	47795	Lease Amoritization Expense	7,772.25	7,662.76	3,497.42	-	-	-	-	-
Subtotal			**$ 4,428,233.41**	**$ 3,986,247.52**	**$ 4,796,449.29**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Water and Sewer Operating Fund Total			**$ 17,993,287.51**	**$ 15,672,744.65**	**$ 20,750,363.45**	**$ 5,750,559.47**	**$ 15,099,700.00**	**$ 13,183,467.68**	**$ 18,199,200.00**	**$ -**

Depreciation Expense, which is an adjustment made by the auditors each year, has been moved from the Sewer Division budget to this summary budget.

Public Works - Water Division

Expenses

			FY 22/23 Actual	FY 23/24 Actual	FY 24/25 Actual	FY 25/26 Q2	FY 25/26 Budget	FY 26/27 Dept.	FY 26/27 Manager	FY 26/27 Budget
Personnel										
07700400	41103	IMRF	$ 118,685.76	$ 112,767.78	$ 127,471.10	$ 70,332.47	$ 153,000.00	$ 156,000.00	$ 156,000.00	$ -
07700400	41104	FICA	98,428.25	103,642.47	116,118.26	60,151.47	126,000.00	120,000.00	121,000.00	-
07700400	41105	Unemployment Tax	2,295.73	2,195.34	2,940.51	250.10	3,000.00	3,000.00	3,000.00	-
07700400	41106	Health Insurance	200,924.97	202,896.92	234,520.34	115,805.57	265,000.00	290,000.00	290,000.00	-
07700400	41110	Salaries	1,310,480.75	1,368,078.21	1,605,011.17	784,381.85	1,630,000.00	1,560,000.00	1,560,000.00	-
07700400	41140	Overtime	51,611.25	49,482.64	50,827.45	20,909.73	67,200.00	67,200.00	67,200.00	-
Subtotal			$ 1,782,426.71	$ 1,839,063.36	$ 2,136,888.83	$ 1,051,831.19	$ 2,244,200.00	$ 2,196,200.00	$ 2,197,200.00	$ -
Contractual Services										
07700400	42210	Telephone	$ 18,788.79	$ 17,574.87	$ 18,676.65	$ 8,223.14	$ 24,800.00	$ 27,055.71	$ 27,100.00	$ -
07700400	42211	Natural Gas	30,713.99	15,922.79	18,139.24	5,702.04	43,000.00	43,000.00	43,000.00	-
07700400	42212	Electric	182,011.34	348,430.02	373,738.28	157,366.48	365,300.00	383,610.00	383,600.00	-
07700400	42215	Radio Communications	10,279.85	6,795.06	2,360.95	1,578.01	3,700.00	4,020.00	4,100.00	-
07700400	42225	Bank Processing Fees	38,113.11	44,908.66	50,668.33	28,577.41	52,000.00	55,000.00	55,000.00	-
07700400	42226	ACH Rebate	29,175.50	30,917.50	32,700.00	16,928.00	32,400.00	35,400.00	35,400.00	-
07700400	42230	Legal Services	231.25	3,158.45	-	-	4,000.00	4,000.00	4,000.00	-
07700400	42231	Audit Services	6,293.25	6,712.50	6,345.00	4,285.50	7,100.00	7,500.00	7,500.00	-
07700400	42232	Engineering Services	1,618.83	-	-	-	4,000.00	4,000.00	4,000.00	-
07700400	42234	Professional Services	355,267.65	334,343.58	358,707.72	128,702.65	357,400.00	368,248.00	368,300.00	-
07700400	42236	Insurance	106,717.30	142,129.07	133,348.73	140,276.75	162,000.00	152,000.00	152,000.00	-
07700400	42242	Publications	580.60	664.97	444.50	444.50	1,100.00	1,100.00	1,100.00	-
07700400	42243	Printing & Advertising	4,097.33	8,250.39	1,439.01	311.19	1,100.00	5,200.00	5,200.00	-
07700400	42260	Physical Exams	365.00	533.31	1,178.01	42.50	1,600.00	1,600.00	1,600.00	-
07700400	42270	Equipment Rental	303.75	270.00	-	322.00	1,000.00	1,000.00	1,000.00	-
07700400	42272	Principal Lease Payments	4,615.69	7,013.02	7,800.95	11,576.98	30,900.00	28,500.00	28,500.00	-
Subtotal			$ 789,173.23	$ 967,624.19	$ 1,005,547.37	$ 504,337.15	$ 1,091,400.00	$ 1,121,233.71	$ 1,121,400.00	$ -

Public Works - Water Division

Expenses

			FY 22/23 Actual	FY 23/24 Actual	FY 24/25 Actual	FY 25/26 Q2	FY 25/26 Budget	FY 26/27 Dept.	FY 26/27 Manager	FY 26/27 Budget
Supplies & Materials										
07700400	43308	Office Supplies	$ 332.00	$ 436.31	$ -	$ 93.79	$ 500.00	$ 500.00	$ 500.00	$ -
07700400	43309	Materials	26,046.80	46,993.24	37,885.51	30,614.65	49,000.00	54,000.00	54,000.00	-
07700400	43317	Postage	29,954.93	33,286.71	36,842.18	19,890.48	34,400.00	41,640.00	41,700.00	-
07700400	43320	Tools, Equipment & Supplies	11,530.32	12,878.66	42,561.05	14,635.48	25,500.00	14,000.00	14,000.00	-
07700400	43332	Office Furniture & Equipment	12,203.05	317.33	5,748.60	-	-	7,000.00	7,000.00	-
07700400	43333	IT Equipment	76,045.28	82,786.20	143,638.96	60,753.57	142,900.00	134,305.00	134,300.00	-
07700400	43340	Fuel (S)	26,526.58	24,365.44	20,801.56	8,914.09	20,000.00	22,000.00	22,000.00	-
07700400	43342	Chemicals	240,310.83	265,823.84	244,141.52	111,751.78	243,100.00	248,600.00	248,600.00	-
07700400	43345	Lab Supplies	20,656.08	14,768.19	11,015.30	6,736.16	13,400.00	13,400.00	13,400.00	-
07700400	43348	Meters & Meter Supplies	73,137.51	51,760.04	61,082.43	25,782.23	111,300.00	138,800.00	138,800.00	-
Subtotal			$ 516,743.38	$ 533,415.96	$ 603,717.11	$ 279,172.23	$ 640,100.00	$ 674,245.00	$ 674,300.00	$ -
Maintenance										
07700400	44410	Booster Station	$ 18,154.43	$ 6,398.68	$ 66,583.03	$ 9,911.52	$ 67,600.00	$ 32,330.00	$ 32,400.00	$ -
07700400	44411	Storage Facility	48,054.26	70,963.30	160,166.81	68,863.56	109,500.00	138,000.00	138,000.00	-
07700400	44412	Treatment Facility	37,200.02	65,433.07	72,354.77	44,119.74	305,200.00	505,470.00	255,500.00	-
07700400	44415	Distribution System	98,392.89	99,922.30	164,318.56	14,558.97	160,200.00	160,500.00	160,500.00	-
07700400	44418	Wells	56,295.68	60,204.26	62,808.50	50,571.37	186,800.00	199,150.00	199,200.00	-
07700400	44420	Vehicle Maintenance (S)	51,340.97	60,888.21	50,670.08	21,647.12	59,000.00	68,000.00	68,000.00	-
07700400	44421	Equipment Maintenance (S)	42,209.14	26,913.93	24,345.84	29,824.42	49,000.00	38,500.00	38,500.00	-
07700400	44423	Building Services (S)	112,229.59	94,240.89	109,129.13	49,318.65	123,000.00	121,000.00	121,000.00	-
07700400	44426	Office Equipment Maintenance	410.46	390.39	186.53	198.40	400.00	800.00	800.00	-
Subtotal			$ 464,287.44	$ 485,355.03	$ 710,563.25	$ 289,013.75	$ 1,060,700.00	$ 1,263,750.00	$ 1,013,900.00	$ -
Capital Expenditures										
07700400	43335	Vehicles & Equipment	$ 7,500.00	$ -	$ 16,839.25	$ 8,664.67	$ 10,800.00	$ -	$ -	$ -
07700400	45590	Capital Purchase	(0.01)	-	-	57,990.50	182,500.00	-	250,000.00	-
07700400	45593	Capital Improvement	-	467,265.00	-	-	220,000.00	-	-	-
Subtotal			$ 7,499.99	$ 467,265.00	$ 16,839.25	$ 66,655.17	$ 413,300.00	$ -	$ 250,000.00	$ -
Other Charges										
07700400	47740	Travel/Training/Dues	$ 11,597.25	$ 8,287.03	$ 14,892.80	$ 12,491.25	$ 17,700.00	$ 17,940.00	$ 18,000.00	$ -
07700400	47760	Uniforms & Safety Items	8,171.25	7,698.58	10,440.67	7,010.23	12,400.00	11,800.00	11,800.00	-
07700600	47790	Interest Lease Expense	3,089.91	7,335.65	6,542.55	2,710.52	7,600.00	10,000.00	10,000.00	-
Subtotal			$ 22,858.41	$ 23,321.26	$ 31,876.02	$ 22,212.00	$ 37,700.00	$ 39,740.00	$ 39,800.00	$ -
Water Total			**$ 3,582,989.16**	**$ 4,316,044.80**	**$ 4,505,431.83**	**$ 2,213,221.49**	**$ 5,487,400.00**	**$ 5,295,168.71**	**$ 5,296,600.00**	**$ -**
Non Budgeted Expense										
07700400	47796	SBITA Amortization	$ -	$ -	$ 4,666.02	$ -	$ -	$ -	$ -	$ -
07700400	47853	Pension Expense W/S	43,007.00	(154,534.00)	230,295.35	-	-	-	-	-
07700400	47854	OPEB Expense W/S	7,909.00	7,411.00	19,556.00	-	-	-	-	-
07700400	47790	Interest Expense	-	2,599.83	3,005.76	-	-	-	-	-
07700400	47795	Lease Amortization Expense	12,453.16	21,683.93	18,680.08	-	-	-	-	-
Water Total (Audited)			**$ 3,646,358.32**	**$ 4,193,205.56**	**$ 4,781,635.04**	**$ 2,213,221.49**	**$ 5,487,400.00**	**$ 5,295,168.71**	**$ 5,296,600.00**	**$ -**

Public Works - Sewer Division

Expenses

			FY 22/23 Actual	FY 23/24 Actual	FY 24/25 Actual	FY 25/26 Q2	FY 25/26 Budget	FY 26/27 Dept.	FY 26/27 Manager	FY 26/27 Budget
Personnel										
07800400	41103	IMRF	$ 96,789.52	$ 101,117.03	$ 108,976.72	$ 61,039.68	$ 133,000.00	$ 158,000.00	$ 162,000.00	$ -
07800400	41104	FICA	80,303.08	93,240.78	99,395.44	51,711.00	107,000.00	125,000.00	125,000.00	-
07800400	41105	Unemployment Tax	2,212.35	2,188.30	2,298.34	111.60	2,500.00	3,000.00	3,000.00	-
07800400	41106	Health Insurance	172,036.41	199,826.33	216,033.53	109,003.84	235,000.00	300,000.00	300,000.00	-
07800400	41110	Salaries	1,062,038.30	1,233,092.62	1,378,509.68	671,849.47	1,388,000.00	1,590,000.00	1,600,000.00	-
07800400	41140	Overtime	32,158.16	40,552.05	49,165.25	21,116.82	39,900.00	41,100.00	41,000.00	-
Subtotal			$ 1,445,537.82	$ 1,670,017.11	$ 1,854,378.96	$ 914,832.41	$ 1,905,400.00	$ 2,217,100.00	$ 2,231,000.00	$ -
Contractual Services										
07800400	42210	Telephone	$ 17,525.82	$ 13,933.98	$ 14,512.40	$ 6,755.29	$ 25,100.00	$ 25,305.71	$ 25,300.00	$ -
07800400	42211	Natural Gas	34,967.83	17,697.81	21,168.40	5,285.00	38,200.00	38,200.00	38,200.00	-
07800400	42212	Electric	177,997.73	410,702.79	395,904.21	136,553.54	388,600.00	407,930.00	408,000.00	-
07800400	42215	Radio Communications	10,279.85	6,795.06	2,360.95	1,578.01	3,700.00	4,020.00	4,100.00	-
07800400	42225	Bank Processing Fees	38,113.12	44,908.70	50,668.38	28,577.44	52,000.00	55,000.00	55,000.00	-
07800400	42226	ACH Rebate	29,302.50	31,047.50	32,846.00	17,002.50	32,400.00	35,400.00	35,400.00	-
07800400	42230	Legal Services	-	2,150.62	4,650.00		4,000.00	4,000.00	4,000.00	-
07800400	42231	Audit Services	6,293.25	6,712.50	6,345.00	4,285.50	7,100.00	7,500.00	7,500.00	-
07800400	42232	Engineering Services	62,875.67	-	7,164.75		4,000.00	4,000.00	4,000.00	-
07800400	42234	Professional Services	246,306.01	251,367.48	267,367.59	144,513.43	344,900.00	334,318.00	334,300.00	-
07800400	42236	Insurance	99,757.12	119,319.32	128,648.54	128,305.99	136,000.00	228,200.00	228,200.00	-
07800400	42242	Publications	768.50	543.43	444.50	444.50	1,100.00	1,100.00	1,100.00	-
07800400	42243	Printing & Advertising	733.81	866.56	756.29	133.93	1,100.00	1,100.00	1,100.00	-
07800400	42260	Physical Exams	1,470.00	217.31	447.75	42.50	1,600.00	1,600.00	1,600.00	-
07800400	42262	Sludge Removal	95,768.70	111,699.50	161,935.50	51,368.25	200,000.00	200,000.00	200,000.00	-
07800400	42270	Equipment Rental	4.74	1,168.56	55.66	3.95	1,200.00	1,180.00	1,200.00	-
07800400	42272	Principal Lease Payments	4,263.96	8,830.90	9,775.91	6,945.09	16,800.00	18,100.00	18,100.00	-
Subtotal			$ 826,428.61	$ 1,027,962.02	$ 1,105,051.83	$ 531,794.92	$ 1,257,800.00	$ 1,366,953.71	$ 1,367,100.00	$ -
Supplies & Materials										
07800400	43308	Office Supplies	$ 401.03	$ 290.79	$ 148.31	$ -	$ 500.00	$ 500.00	$ 500.00	$ -
07800400	43309	Materials	-	19,207.45	11,131.53	1,000.00	40,500.00	15,000.00	15,000.00	-
07800400	43317	Postage	29,954.85	33,602.29	37,060.44	20,211.82	34,400.00	41,640.00	41,700.00	-
07800400	43320	Tools, Equipment & Supplies	13,999.81	13,929.60	39,716.50	2,754.80	33,900.00	19,500.00	19,500.00	-
07800400	43332	Office Furniture & Equipment	6,458.74	12,639.39	5,689.27	-	-	7,000.00	7,000.00	-
07800400	43333	IT Equipment	72,039.54	86,048.68	117,739.68	69,507.45	162,200.00	138,392.70	138,400.00	-
07800400	43340	Fuel (S)	29,112.64	22,860.62	20,556.00	9,115.75	25,000.00	23,000.00	23,000.00	-
07800400	43342	Chemicals	118,709.29	101,574.18	109,340.69	64,267.54	170,200.00	175,000.00	175,000.00	-
07800400	43345	Lab Supplies	16,592.41	32,601.74	43,317.60	23,432.94	28,600.00	34,400.00	34,400.00	-
07800400	43348	Meters & Meter Supplies	70,341.33	51,559.79	60,379.44	25,782.23	111,300.00	138,800.00	138,800.00	-
Subtotal			$ 357,609.64	$ 374,314.53	$ 445,079.46	$ 216,072.53	$ 606,600.00	$ 593,232.70	$ 593,300.00	$ -

Public Works - Sewer Division

Expenses

			FY 22/23 Actual	FY 23/24 Actual	FY 24/25 Actual	FY 25/26 Q2	FY 25/26 Budget	FY 26/27 Dept.	FY 26/27 Manager	FY 26/27 Budget
Maintenance										
07800400	44412	Treatment Facility	$ 100,596.50	$ 189,505.71	$ 305,225.55	$ 115,413.20	$ 269,100.00	$ 288,400.00	$ 288,400.00	$ -
07800400	44414	Lift Station Maintenance	43,457.13	57,636.50	67,503.84	38.89	114,200.00	67,000.00	67,000.00	-
07800400	44416	Collection System Maintenance	36,067.43	10,517.96	7,046.53	-	31,000.00	23,500.00	23,500.00	-
07800400	44420	Vehicle Maintenance (S)	43,275.37	47,303.04	62,987.85	23,954.83	50,000.00	65,000.00	65,000.00	-
07800400	44421	Equipment Maintenance (S)	38,750.53	46,924.02	34,924.95	27,687.08	50,900.00	50,000.00	50,000.00	-
07800400	44423	Building Services (S)	108,277.81	99,925.40	161,951.17	103,664.23	141,000.00	149,000.00	149,000.00	-
07800400	44426	Office Equipment Maintenance	458.66	497.15	258.12	187.00	500.00	875.00	900.00	-
Subtotal			$ 370,883.43	$ 452,309.78	$ 639,898.01	$ 270,945.23	$ 656,700.00	$ 643,775.00	$ 643,800.00	$ -
Capital Expenditures										
07800400	43335	Vehicles & Equipment	$ 7,500.00	$ 26,821.00	$ 16,839.25	$ 8,664.67	$ 10,800.00	$ -	$ -	$ -
07800400	45590	Capital Purchase	(0.01)	-	-	57,990.50	552,500.00	-	-	-
07800400	45597	Capital Lease Payment	-	-	-	-	-	-	-	-
Subtotal			$ 7,499.99	$ 26,821.00	$ 16,839.25	$ 66,655.17	$ 563,300.00	$ -	$ -	$ -
Other Charges										
07800400	47740	Travel/Training/Dues	$ 3,578.21	$ 11,266.27	$ 13,611.64	$ 3,829.23	$ 15,900.00	$ 15,100.00	$ 15,100.00	$ -
07800400	47760	Uniforms & Safety Items	7,832.54	9,905.18	8,546.06	4,750.12	11,400.00	10,800.00	10,800.00	-
07800600	47790	Interest Lease Expense	2,945.84	4,166.59	3,659.89	2,695.35	6,500.00	6,500.00	6,500.00	-
Subtotal			$ 14,356.59	$ 25,338.04	$ 25,817.59	$ 11,274.70	$ 33,800.00	$ 32,400.00	$ 32,400.00	$ -
Sewer Total			**$ 3,022,316.08**	**$ 3,576,762.48**	**$ 4,087,065.10**	**$ 2,011,574.96**	**$ 4,783,300.00**	**$ 4,853,461.41**	**$ 4,867,600.00**	**$ -**
Non Budgeted Expense										
07800400	46702	ARO Amortization	$ 8,409.00	$ 8,409.00	$ 8,409.00	$ -	$ -	$ -	$ -	$ -
07800400	47796	SBITA Amortization	-	-	4,666.02	-	-	-	-	-
07800400	47853	Pension Expense W/S	37,081.00	(134,710.00)	196,842.34	-	-	-	-	-
07800400	47854	OPEB Expense W/S	6,313.00	6,559.00	18,008.00	-	-	-	-	-
07800400	47790	Interest Expense		226.00	508.30	-				
07800400	47795	Lease Amortization Expense	7,772.25	7,662.76	3,497.42	-	-	-	-	-
Sewer Total (Audited)			**$ 2,726,852.25**	**$ 3,081,891.33**	**$ 4,318,996.18**	**$ 2,011,574.96**	**$ 4,783,300.00**	**$ 4,853,461.41**	**$ 4,867,600.00**	**$ -**

VILLAGE OF ALGONQUIN

GENERAL SERVICES ADMINISTRATION

– M E M O R A N D U M –

DATE: February 10, 2026

TO: Committee of the Whole

FROM: Tim Schloneger, Village Manager

SUBJECT: *Proposed Budget – 2026/2027 - Cemetery & Swimming Pool Funds*

Attached are the proposed budgets for the cemetery and swimming pool special funds. The budgets include anticipated revenues and expenditures for fiscal year 2026/2027. Each of these special funds operates independently from the General Fund. The Swimming Pool Fund is supported by a budgeted transfer ($282,700) from the General Fund to balance revenues and expenditures.

Interest from the monies in the Cemetery Trust Account is intended to fund the perpetual care of the property once all gravesites have been sold. The proposed expenditures for the Cemetery Fund and Swimming Pool Fund are balanced with expenditures of $66,400 and $419,800, respectively.

ANTICIPATED REVENUE - CEMETERY FUND - $68,000

The Cemetery Fund operates like a true enterprise fund, with user fees as the primary source of revenue for operational expenditures. User fees in this fund must correspond directly to expenditures to ensure the long-term financial stability of the Algonquin Cemetery. Further, implementing administrative rules under the Cemetery Oversight Act requires additional performance standards and licensing fees for municipal cemeteries, which are accounted for in the fee schedule.

Estimated revenue for the Cemetery Fund includes interest, purchases of gravesites, fees for grave openings, and revenue from the telecommunications tower located on the cemetery site (rental income).

The $1,200 under the perpetual care revenue line item is from proceeds from the sale of gravesites. It will be used for cemetery repair and perpetual maintenance, anticipated in the future (when there are no further sales of gravesites). Revenues from this source should not be used for annual maintenance expenses.

ESTIMATED EXPENDITURES - CEMETERY FUND $66,400

ACCOUNT 42225, BANK PROCESSING FEES - $500 – This line item accounts for bank processing fees for point-of-sale credit card purchases for cemetery items.

ACCOUNT 42232, ENGINEERING/DESIGN SERVICES - $0

ACCOUNT 42234, PROFESSIONAL SERVICES - $51,700 - This item accounts for most cemetery expenditures. It reflects the current contract for maintenance of the cemetery, which consists of all lawn mowing, weed control, trimming, snow removal, and leaf raking. When monuments or markers become so dilapidated as to disfigure the remainder of the cemetery, the Village as trustee may require either that the markers or monuments be repaired by the friends or relatives of the owner of the lot or that the markers be removed.

ACCOUNT 42236, INSURANCE - $2,200 - This item identifies the portion of the liability insurance premium that is allocated to the Cemetery Fund.

ACCOUNT 42290, GRAVE OPENINGS - $12,000 - This expenditure is estimated based on the number of grave openings anticipated throughout the fiscal year. This revenue estimate is based solely on past trends.

ACCOUNT 45593, CAPITAL IMPROVEMENT - $0

SUMMARY - CEMETERY FUND
The recommendations in this budget align with the level of activity observed over the past few years. Needed maintenance can continue to improve the cemetery's appearance and respect for this facility.

ANTICIPATED REVENUE - SWIMMING POOL FUND - $419,800

RENTAL INCOME - $30,000 - This revenue item covers rental fees for pool parties scheduled after hours and reimbursement for staff time needed to oversee swim team and school use of the pool when the general public is not in attendance. It also includes locker rental and the use agreement with the Trails Swim Team for use of the facility.

SWIMMING ANNUAL FEES - $30,000 – This estimate is based on past years' participation at the pool (season passes).

DAILY FEES - $35,000 - This line item estimates the daily fees from non-pass users. Revenue typically varies from year to year due to seasonal weather and temperature conditions, but it has been reduced by the pandemic.

LESSONS - $28,000 - This account recognizes the fees collected for swim lessons, which remain one of the pool's most popular programs.

CONCESSIONS - $14,000 - Essentially flat revenue projections based on past years' experience are expected for the sale of concessions this upcoming swim season.

INTEREST - $0 - This account estimates the return on investment of any cash reserves accumulated within the Pool Fund.

TRANSFER FROM GENERAL FUND - $282,700 - This item identifies the amount to be transferred from the General Fund to supplement and balance this fund. This transfer accounts for sixty-six percent (67%) of the pool revenue.

ESTIMATED EXPENDITURES – SWIMMING POOL FUND - $419,800

PERSONNEL - $180,000 - Personnel at the swimming pool are focused on service and safety. Personnel expenditures are one of the most significant operating costs for the swimming pool. The personnel expenditures include salaries, unemployment tax, and FICA.

CONTRACTUAL SERVICES - $74,800 - Most contractual services include utilities (gas, phone, electric, and water). Contractual services are proposed at a similar level of spending as compared to the previous year. This year, $25,000 is budgeted for an aquatic facility assessment by an Illinois Department of Public Health-qualified engineering firm to evaluate existing conditions at Lions Armstrong Memorial Pool. Given the facility's age, the review will identify operational, mechanical, and code-related considerations and provide a prioritized list of improvements to support future planning and budget discussions.

SUPPLIES AND MATERIALS - $13,000 - This expenditure account includes the general operational needs for office supplies, ID supplies, software, a cash register, and pool forms.

MAINTENANCE - $126,000 - General pool and building maintenance items, including paint, chemicals, and other supplies, comprise the costs under this category. The Public Works Building Services Division will continue to maintain the pool bathhouse and will bill labor and supplies (chemicals) appropriately to the 44423 account.

OTHER CHARGES - $26,000 - These accounts cover CPR, first aid training, and the cost of concessions. Health and safety certifications for pool staff and uniform and safety items, which include bathing suits, t-shirts, first aid packs, and whistles/safety equipment, are all covered under the “Other Charges” category. The concession line item covers the purchase of concessions offered to pool customers for the entire pool season.

SUMMARY - SWIMMING POOL FUND

The Swimming Pool Fund is proposed to be balanced while addressing necessary facility improvements and ongoing maintenance. With a transfer from the General Fund to support these costs, the Village will continue to offer affordable recreational swimming opportunities during the 2026 season. As with all parks and recreation facilities, staying responsive to market trends and community expectations remains important to maintaining a successful and relevant program. The proposed FY 2026/2027 budget continues to provide residents with high-quality aquatic amenities at a strong value.

Swimming Pool Fund

Revenues

			FY 22/23 Actual	FY 23/24 Actual	FY 24/25 Actual	FY 25/26 Q2	FY 25/26 Budget	FY 26/27 Budget
05000100	33030	Donations-Operating-Gen. Gov.	$ 124.00	$ 250.00	$ 10.00	$ -	$ 200.00	$ 100.00
05000100	34100	Rental Income[1]	27,836.00	18,400.00	28,840.00	19,800.00	30,000.00	30,000.00
05000100	34500	Swimming Annual Pass	22,120.00	28,485.00	25,872.00	30,129.00	30,000.00	30,000.00
05000100	34510	Swimming Daily Fees[2]	22,807.25	28,565.66	33,008.00	46,473.50	30,000.00	35,000.00
05000100	34520	Swimming Lesson Fees	19,930.00	20,604.00	28,606.00	27,780.00	25,000.00	28,000.00
05000100	34560	Concessions	8,305.61	9,908.25	12,491.50	14,209.50	12,000.00	14,000.00
05000500	36001	Interest	0.95	1.11	1.56	0.43	-	
05000500	37900	Miscellaneous Revenue	-	-	-	-	-	
05000500	38001	Transfer from General Fund	232,673.71	297,589.56	211,682.46	224,575.00	248,500.00	282,700.00
Swimming Pool Fund Total			**$ 333,797.52**	**$ 403,803.58**	**$ 340,511.52**	**$ 362,967.43**	**$ 375,700.00**	**$ 419,800.00**

Notes:

[1] - Trails Swim Team contribution.

[2] - Includes reduced admission for groups.

[3] - Concession revenues have been consolidated into one line item.

Swimming Pool Fund

Expenditures

			FY 22/23 Actual	FY 23/24 Actual	FY 24/25 Actual	FY 25/26 Q2 YTD	FY 25/26 Budget	FY 26/27 Dept.	FY 26/27 Manager	FY 26/27 Budget
Nondepartmental Personnel										
05900100	41104	FICA	$ 8,080.38	$ 10,114.69	$ 10,321.92	$ 11,891.46	$ 12,200.00	$ 12,500.00	$ 12,500.00	$ -
05900100	41105	Unemployment Tax	765.84	1,388.18	1,418.17	1,787.63	1,400.00	1,450.00	1,500.00	-
05900100	41110	Salaries	104,805.85	131,513.33	133,616.99	154,512.93	160,000.00	165,000.00	165,000.00	-
05900100	41140	Overtime	819.68	702.40	1,308.00	585.68	1,000.00	1,000.00	1,000.00	-
Subtotal			$ 114,471.75	$ 143,718.60	$ 146,665.08	$ 168,777.70	$ 174,600.00	$ 179,950.00	$ 180,000.00	$ -
Contractual Services										
05900100	42210	Telephone	$ 2,232.10	$ 2,169.05	$ 2,510.63	$ 1,506.12	$ 3,400.00	$ 3,200.00	$ 3,200.00	$ -
05900100	42211	Natural Gas	12,544.13	5,802.97	4,771.41	5,839.09	6,500.00	6,700.00	6,700.00	-
05900100	42212	Electric	2,584.42	7,699.00	6,818.35	5,008.44	7,500.00	6,500.00	6,500.00	-
05900100	42213	Water	10,116.52	14,252.76	14,075.91	18,042.43	16,000.00	19,000.00	19,000.00	-
05900100	42225	Bank Processing Fees	797.10	1,018.53	1,701.18	2,115.83	1,800.00	2,300.00	2,300.00	-
05900100	42234	Professional Services	316.00	270.00	4,618.50	216.00	13,400.00	26,470.00	26,500.00	-
05900100	42236	Insurance	8,222.47	9,669.22	9,421.31	9,595.62	11,000.00	10,600.00	10,600.00	-
Subtotal			$ 36,812.74	$ 40,881.53	$ 43,917.29	$ 42,323.53	$ 59,600.00	$ 74,770.00	$ 74,800.00	$ -
Supplies & Materials										
05900100	43308	Office Supplies	$ 60.41	$ 1,274.75	$ 106.29	$ 156.94	$ 300.00	$ 300.00	$ 300.00	$ -
05900100	43320	Tools, Equipment & Supplies	1,643.56	1,284.20	4,025.59	4,017.13	6,900.00	8,000.00	8,000.00	-
05900100	43332	Office Furniture & Equipment	-	-	-	-	300.00	300.00	300.00	-
05900100	43333	IT Equipment	-	-	6,900.00	3,000.00	3,000.00	4,400.00	4,400.00	-
05900100	43370	Infrastructure Maintenance	-	-	-	-	-	-	-	-
Subtotal			$ 1,703.97	$ 2,558.95	$ 11,031.88	$ 7,174.07	$ 10,500.00	$ 13,000.00	$ 13,000.00	$ -
Maintenance										
05900100	44423	Building Services (S)	$ 119,462.98	$ 108,498.50	$ 126,113.78	$ 96,095.56	$ 105,000.00	$ 126,000.00	$ 126,000.00	$ -
05900100	44445	Outsourced Building Maint.	43,396.22	93,973.84	7,100.00	9,342.97	-	-	-	-
Subtotal			$ 162,859.20	$ 202,472.34	$ 133,213.78	$ 105,438.53	$ 105,000.00	$ 126,000.00	$ 126,000.00	$ -
Other Charges										
05900100	47701	Recreation Programs	$ 786.25	$ 183.15	$ 1,670.34	$ 1,253.80	$ 3,000.00	$ 2,000.00	$ 2,000.00	$ -
05900100	47740	Travel/Training/Dues	6,742.37	4,320.00	4,376.15	4,229.18	6,000.00	6,200.00	6,200.00	-
05900100	47760	Uniforms & Safety Items	2,522.31	3,857.49	5,034.63	4,194.23	5,500.00	5,100.00	5,100.00	-
05900100	47800	Concession Purchases	6,900.70	7,727.28	10,139.35	10,724.71	11,500.00	12,650.00	12,700.00	-
Subtotal			$ 16,951.63	$ 16,087.92	$ 21,220.47	$ 20,401.92	$ 26,000.00	$ 25,950.00	$ 26,000.00	$ -
Swimming Pool Fund Total			**$ 332,799.29**	**$ 405,719.34**	**$ 356,048.50**	**$ 344,115.75**	**$ 375,700.00**	**$ 419,670.00**	**$ 419,800.00**	**$ -**

(S) indicates those line items that reimburse the Internal Service Funds.

Note: Administrative support staff is not accounted for in Personnel line-items.

Cemetery Fund

Revenues

			FY 22/23 Actual	FY 23/24 Actual	FY 24/25 Actual	FY 25/26 Q2	FY 25/26 Budget	FY 26/27 Budget
02000100	34100	Rental Income[1]	$ 26,302.62	$ 36,621.70	$ 36,054.45	$ 35,511.58	$ 32,000.00	$ 37,500.00
02000100	34300	Lots & Graves	6,800.00	4,150.00	4,950.00	12,940.00	5,000.00	6,000.00
02000100	34310	Grave Opening	14,950.00	9,100.00	13,950.00	10,700.00	10,000.00	11,000.00
02000100	34320	Perpetual Care[2]	2,100.00	1,200.00	1,500.00	900.00	1,500.00	1,200.00
02000500	36001	Interest	6.31	2.61	66.07	3,672.85	-	4,700.00
02000500	36020	Interest - Investment Pools	8,559.81	18,836.21	20,028.91	4,734.11	6,000.00	7,500.00
02000500	36026	Interest - Cemetery Trust[2]	58.34	140.48	333.44	89.74	-	100.00
02000500	38001	Transfer - General Fund	-	10,756.09	198,675.32	-	134,800.00	-
Cemetery Fund Total			**$ 58,777.08**	**$ 80,807.09**	**$ 275,558.19**	**$ 68,548.28**	**$ 61,000.00**	**$ 68,000.00**

[1] - Rental Income includes the annual rental payment for a ground lease by a wireless service provider at the cemetery.

[2] - Restricted Account

Cemetery Fund

Expenditures

			FY 22/23 Actual	FY 23/24 Actual	FY 24/25 Actual	FY 25/26 Q2	FY 25/26 Budget	FY 26/27 Dept.	FY 26/27 Manager	FY 26/27 Budget
02400100	42225	Bank Processing Fees	$ 103.85	$ 45.23	$ 251.77	$ 401.34	$ 300.00	$ 500.00	$ 500.00	$ -
02400100	42232	Engineering/Design Services	-	11,416.09	914.50	-	-	-	-	-
02400100	42234	Professional Services	23,210.22	22,593.60	25,594.30	11,192.58	65,500.00	51,725.00	51,700.00	-
02400100	42236	Insurance	1,412.61	1,394.47	1,458.41	4,934.84	1,500.00	2,200.00	2,200.00	-
02400100	42290	Grave Opening	13,962.50	8,087.50	15,487.50	7,375.00	12,000.00	12,000.00	12,000.00	-
02400100	45593	Capital Improvement	-	-	197,760.82	-	110,000.00	-	-	-
Cemetery Fund Total			**$ 38,689.18**	**$ 43,536.89**	**$ 241,467.30**	**$ 23,903.76**	**$ 189,300.00**	**$ 66,425.00**	**$ 66,400.00**	**$ -**

VILLAGE OF ALGONQUIN

GENERAL SERVICES ADMINISTRATION

– M E M O R A N D U M –

DATE: February 10, 2026

TO: Committee of the Whole

FROM: Tim Schloneger, Village Manager

SUBJECT: Proposed Budget – 2026/2027 – Building Services Fund

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Building Services is a division of Public Works, and this fund operates similarly to the Vehicle Maintenance Service Fund. The Building Services Fund was established to enable the building maintenance staff to plan routine maintenance procedures, generate more accurate staffing levels, and provide budgeting information reflecting the demand placed on each department and division of the Village for building maintenance. All equipment, supplies, and labor incurred in maintaining municipal buildings are estimated and then allocated to each department based on the facilities each department or division uses. This inter-service fund more accurately reflects the true costs of operating each department and division of the Village by including the commonly called "building overhead" in each department's budget.

ANTICIPATED REVENUE - $1,183,700

The only source of revenue is payments (reimbursements) from all Village departments for the maintenance of their buildings and ancillary facilities.

PROPOSED EXPENDITURES - $1,183,700

PERSONNEL - $623,800

The line items under this category cover the statutory rates for IMRF, FICA, and unemployment tax, as well as the appropriate employee health insurance cost distributions within the Building Services Fund. The employees allocated to this fund are dedicated to the:

1. general administration & management
2. operations and maintenance
3. energy utilities and environmental stewardship
4. planning and minor construction repairs of our facilities

These employees work to increase operational efficiency across our facilities and reduce overall inventory, square footage, and building ownership costs.

CONTRACTUAL SERVICES – $39,300

The line items under contractual services include services that the Village will contract with outside vendors to provide. These line items cover the Building Services Division's share of

utility expenses, repeater lines, cleaning services, publications (such as safety manuals), printing, and vehicle lease payments.

SUPPLIES AND MATERIALS - $194,000
These line items cover the purchase of building supplies (paper towels, cleaning supplies, etc.) and equipment (plumbing, HVAC, etc.) needed to maintain the Village's facilities. These products are purchased within the service fund as inventory. When the products are used for any of the Village's departments, the supplies and labor are charged to the particular department (via a shop ticket) as a building maintenance expense. Each department will contribute its fair share of the cost for these supplies and materials, which are accounted for in the revenue side of the Building Services Fund.

MAINTENANCE $305,600
These line items (except item 44445) cover maintenance expenses within the Building Services Division. Line item 44445 (outsourced building maintenance) covers costs associated with outsourcing building or equipment maintenance to an external vendor, including repairs such as cleaning services and HVAC control maintenance. The specific department (s) will be charged for outsourcing repairs to their building space, as is done with in-house maintenance.

CAPITAL EXPENDITURES - $0
No funds are budgeted.

OTHER CHARGES - $21,000
Other charges include the Division's share of travel, training, and dues for professional organizations, as well as uniforms and safety equipment needed by Maintenance personnel.

SUMMARY – BUILDING SERVICES FUND
The Building Services Fund is a self-balancing fund, with expenditures offset by revenues generated by each Village department. Charges to each department are based on the building maintenance and supply needs of that department. Although facilities continue to age, no major capital improvements are planned. The maintenance of the Village's facilities is an investment that must be sustained to ensure long-term benefit for employees and residents. This will translate into improved public services for the Village's citizens over the long term.

			FY 22/23 Actual	FY 23/24 Actual	FY 24/25 Actual	FY 25/26 Q2	FY 25/26 Budget	FY 26/27 Budget
28	33160	Donations	$ 160.00	$ 180.00	$ 180.00	$ 1,687.33	$ -	$ -
28	34900	Building Services Billings	947,847.02	981,570.40	1,206,524.38	733,795.32	1,116,000.00	1,183,700.00
28	37110	Insurance Claims	-	-	-	-	-	-
28	37900	Miscellaneous Revenue	-	-	-	-	-	-
28	37905	Sale of Surplus Property	7,515.63	-	-	-	-	-
Building Services Fund Total			**$ 955,522.65**	**$ 981,750.40**	**$ 1,206,704.38**	**$ 735,482.65**	**$ 1,116,000.00**	**$ 1,183,700.00**

			FY 22/23 Actual	FY 23/24 Actual	FY 24/25 Actual	FY 25/26 Q2 YTD	FY 25/26 Budget	FY 26/27 Dept.	FY 26/27 Manager	FY 26/27 Budget
Personnel										
28900000	41103	IMRF	$ 27,812.29	$ 29,373.19	$ 34,186.52	$ 19,717.05	$ 40,000.00	$ 45,000.00	$ 45,000.00	$ -
28900000	41104	FICA	23,380.99	26,879.05	31,172.07	16,459.16	34,000.00	35,000.00	36,200.00	-
28900000	41105	Unemployment Tax	576.61	713.48	800.14	-	1,000.00	1,000.00	1,000.00	-
28900000	41106	Health Insurance	58,504.16	68,700.07	63,497.38	28,784.97	65,000.00	70,000.00	72,000.00	-
28900000	41110	Salaries	303,704.44	348,925.21	402,049.45	211,774.46	425,000.00	440,000.00	455,600.00	-
28900000	41140	Overtime	12,303.40	13,449.89	13,882.00	7,624.10	14,000.00	14,000.00	14,000.00	-
Subtotal			$ 426,281.89	$ 488,040.89	$ 545,587.56	$ 284,359.74	$ 579,000.00	$ 605,000.00	$ 623,800.00	$ -
Contractual Services										
28900000	42210	Telephone	$ 4,990.47	$ 4,360.12	$ 4,534.61	$ 1,975.58	$ 7,100.00	$ 7,276.00	$ 7,300.00	$ -
28900000	42215	Radio Communications	10,279.85	6,795.06	2,360.29	1,578.01	3,700.00	4,020.00	4,100.00	-
28900000	42234	Professional Services	6,138.89	1,002.79	840.00	92.00	1,500.00	300.00	300.00	-
28900000	42242	Publications	-	-	-	-	300.00	300.00	300.00	-
28900000	42243	Printing & Advertising	-	50.00	-	-	550.00	550.00	550.00	-
28900000	42260	Physical Exams	50.00	-	94.93	-	150.00	150.00	150.00	-
28900000	42270	Equipment Rental	120.00	-	-	350.00	500.00	500.00	500.00	-
28900000	42272	Principal Lease Payments	15,084.78	16,898.08	13,858.93	8,506.60	22,800.00	26,050.00	26,100.00	-
Subtotal			$ 36,663.99	$ 29,106.05	$ 21,688.76	$ 12,502.19	$ 36,600.00	$ 39,146.00	$ 39,300.00	$ -
Supplies & Materials										
28900000	43308	Office Supplies	$ 566.39	$ -	$ -	$ -	$ 250.00	$ 250.00	$ 300.00	$ -
28900000	43317	Postage	26.19	-	114.72	-	500.00	500.00	500.00	-
28900000	43319	Building Supplies	188,451.27	187,707.22	182,996.99	109,406.82	$ 178,500.00	185,500.00	185,500.00	-
28900000	43320	Tools, Equipment & Supplies	2,248.64	3,194.39	7,922.53	378.48	3,800.00	3,800.00	3,800.00	-
28900000	43332	Office Furniture & Equipment	2,375.01	-	-	-	-	-	-	-
28900000	43333	IT Equipment	3,632.75	3,975.65	2,199.60	4,338.44	5,750.00	880.00	900.00	-
28900000	43340	Fuel (S)	3,604.47	2,666.44	1,526.49	473.36	3,300.00	3,300.00	3,000.00	-
Subtotal			$ 200,904.72	$ 197,543.70	$ 194,760.33	$ 114,597.10	$ 192,100.00	$ 194,230.00	$ 194,000.00	$ -
Maintenance										
28900000	44420	Vehicle Maintenance (S)	$ 2,360.04	$ 2,664.70	$ 3,925.29	$ 1,420.58	$ 2,500.00	$ 2,500.00	$ 3,000.00	$ -
28900000	44421	Equipment Maintenance (S)	4,144.91	818.10	9,171.40	1,647.60	3,000.00	3,000.00	4,000.00	-
28900000	44426	Office Equipment Maintenance	600.73	590.39	413.50	154.42	700.00	1,020.00	1,100.00	-
28900000	44445	Outsourced Building Maint. (S)	296,676.51	291,002.29	358,438.45	339,797.93	282,100.00	1,074,835.00	297,500.00	-
Subtotal			$ 303,782.19	$ 295,075.48	$ 371,948.64	$ 343,020.53	$ 288,300.00	$ 1,081,355.00	$ 305,600.00	$ -
Capital Expenditures										
28900000	43335	Vehicles & Equipment	$ -	$ -	$ 71,957.39	$ -	$ -	$ -	$ -	$ -
Subtotal			$ -	$ -	$ 71,957.39	$ -	$ -	$ -	$ -	$ -
Other Charges										
28900000	47740	Travel, Training & Dues	$ 1,702.42	$ 803.41	$ 6,805.00	$ 221.52	$ 5,500.00	$ 5,500.00	$ 5,500.00	$ -
28900000	47760	Uniforms & Safety Items	3,163.11	4,725.62	4,455.06	1,966.50	6,700.00	6,675.00	6,700.00	-
28900000	47790	Interest Lease Expense	3,646.96	5,752.87	5,883.20	3,629.30	7,800.00	8,750.00	8,800.00	-
Subtotal			$ 8,512.49	$ 11,281.90	$ 17,143.26	$ 5,817.32	$ 20,000.00	$ 20,925.00	$ 21,000.00	$ -
Building Services Fund Total			**$ 976,145.28**	**$ 1,021,048.02**	**$ 1,223,085.94**	**$ 760,296.88**	**$ 1,116,000.00**	**$ 1,940,656.00**	**$ 1,183,700.00**	**$ -**
Non Budgeted Expense										
28900000	42272	GASB 87 Principal Lease Payments	$ (14,339.11)	$ (16,417.78)	$ (12,456.38)	$ -	$ -	$ -	$ -	$ -
28900000	47776	Parts Cost of Sales Variance	(39,156.95)	(38,119.07)	(18,470.53)	(24,814.23)	-	-	-	-
28900000	47780	Depreciation Expense	-	-	-	-	-	-	-	-
28900000	47795	Lease Amoritization Expense	13,979.83	15,239.23	12,049.28	-	-	-	-	-
Total (Audited)			**$ 936,629.05**	**$ 981,750.40**	**$ 1,204,208.31**	**$ 735,482.65**	**$ 1,116,000.00**	**$ 1,940,656.00**	**$ 1,183,700.00**	**$ -**
(S) indicates those line items that reimburse Internal Service Funds.										

VILLAGE OF ALGONQUIN

GENERAL SERVICES ADMINISTRATION

– M E M O R A N D U M –

DATE: February 10, 2026

TO: Committee of the Whole

FROM: Tim Schloneger, Village Manager

SUBJECT: Proposed Budget – 2026/2027 – Vehicle Maintenance Service Fund

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The Vehicle Maintenance Service Fund is established to account for all the vehicle and equipment maintenance necessary across all departments of the Village. Fuel, parts, and labor expenses incurred in the Village's annual vehicle maintenance are estimated and then allocated to each department based on the service needed to maintain vehicles and equipment. In addition, this service fund incurs similar overhead expenditures for "contractual services," "supplies," "maintenance," and "training" as other department budgets. The Vehicle Maintenance Fund coordinates the daily maintenance of approximately 330 vehicles and various other equipment (i.e., mowers and other maintenance equipment) that comprise the Village's fleet and equipment. The number of vehicles and equipment includes the fleet maintenance service to the Algonquin/Lake in the Hills Fire Protection District.

ANTICIPATED REVENUE - $1,380,200

There are four sources of revenue for this fund. They include payments from (1) all Village departments for maintenance of their vehicles and equipment ($1,001,200); (2) the purchase of fuel by each department of the Village ($224,500); (3) the purchase of fuel by the Algonquin/Lake in the Hills Fire Protection District ($74,500); and (4) outsourced fleet maintenance billings to the Algonquin/Lake in the Hills Fire Protection District ($80,000).

PROPOSED EXPENDITURES - $1,380,200

PERSONNEL - $562,800

The line items under this category cover the statutory rates for IMRF, FICA, and unemployment tax, and the appropriate distributions of health insurance costs for employees within the Vehicle Maintenance Service Fund. Salaries and overtime are based on the division of Public Works' existing staffing levels.

Responsibilities include the following:

A. Operations: maintenance of vehicles, equipment, and fixed equipment, parts, facilities management, fuel and lubricants management, and repair policies and strategies.

B. Asset Management: needs determination, research acquisition, utilization, replacement, and disposal of the vehicle, equipment, fixed equipment, and parts.
C. Financial Management: budgeting, cost recovery, fleet operating and purchasing, vehicle replacement funding, and record keeping.
D. Risk Management: workplace safety management, vehicle damage, contract compliance, regulatory compliance, and security.
E. Environmental Management: Shop best practices and regulatory compliance.

CONTRACTUAL SERVICES – $41,300

The line items under contractual services include services contracted with outside vendors. These line items cover the Vehicle Maintenance Division's portion of utility expenses, cleaning services, publications (such as shop-repair manuals), and printing.

SUPPLIES AND MATERIALS - $635,100

These line items cover the purchase of fuel, parts, supplies, lubricants, batteries, and other items needed to maintain all vehicles and equipment the Village uses. These products are purchased within the service fund as inventory. When the products are used for any of the Village's fleet vehicles, the parts and labor are charged to the particular department (via a shop ticket) as a vehicle maintenance expense. Each department will contribute its share of the cost of these parts and materials, which are recorded on the revenue side of the Vehicle Maintenance Service Fund.

MAINTENANCE $128,100

These line items (except item 44440) cover maintenance expenses for vehicles and equipment used within the Vehicle Maintenance Division. Line item 44440 (outsourced vehicle and equipment maintenance) covers the costs of sending fleet vehicles or equipment to an outside vendor for repairs. As with in-house repairs, the specific department will be charged for outsourcing the repair of their vehicles.

CAPITAL EXPENDITURES - $0

No funds are budgeted.

OTHER CHARGES - $12,900

Other charges include the Division's share of travel, training, and dues for professional organizations, as well as uniforms and safety equipment needed by the mechanics.

SUMMARY - VEHICLE MAINTENANCE SERVICE FUND

The Vehicle Maintenance Service Fund is a self-balancing fund, with expenditures offset by revenues (reimbursements) from each village department. Charges to each department are based on that department's fleet vehicle and equipment maintenance needs. The costs of fuel, automotive parts, and supplies are likewise difficult to predict, but savings from more efficient cars are helping to offset rising fuel costs. Quality vehicle maintenance for an aging fleet can sustain vehicle and equipment reliability. The solid reliability of the Village's vehicles and equipment has resulted in reduced "downtime" and has provided more efficient use of the Village's personnel and equipment. This will translate into improved public services for the village's citizens.

Vehicle Maintenance Service Fund

Revenues

			FY 22/23 Actual	FY 23/24 Actual	FY 24/25 Actual	FY 25/26 Q2	FY 25/26 Budget	FY 26/27 Budget
29	33160	Donations	$ 100.00	$ 162.50	$ 137.50	$ 60.00	$ -	$ -
29	34900	Maintenance Billings	755,936.74	816,868.57	808,933.86	437,962.45	921,400.00	1,001,200.00
29	34920	Fuel Billings	271,559.30	236,760.40	196,786.26	86,623.59	240,000.00	224,500.00
29	34921	Fire District Fuel Billings	84,701.99	69,141.06	75,074.41	23,767.79	76,000.00	74,500.00
29	34922	IGA - Fleet Maintenance	104,404.93	105,104.60	86,928.22	33,590.80	100,000.00	80,000.00
29	37710	Insurance Claims	421.72	-	-	-	-	-
29	37905	Sale of Surplus Property	6,925.63	-	-	-	-	-
Vehicle Maintenance Service Fund Total			**$ 1,224,050.31**	**$ 1,228,037.13**	**$ 1,167,860.25**	**$ 582,004.63**	**$ 1,337,400.00**	**$ 1,380,200.00**

			FY 22/23 Actual	FY 23/24 Actual	FY 24/25 Actual	FY 25/26 Q2 YTD	FY 25/26 Budget	FY 26/27 Dept.	FY 26/27 Manager	FY 26/27 Budget
Personnel										
29900000	41103	IMRF	$ 28,932.20	$ 28,359.47	$ 29,842.72	$ 16,969.11	$ 35,000.00	$ 43,000.00	$ 41,000.00	$ -
29900000	41104	FICA	23,986.68	25,795.43	26,946.16	14,085.29	30,000.00	33,000.00	32,000.00	-
29900000	41105	Unemployment Tax	544.35	570.82	640.13	-	800.00	800.00	800.00	-
29900000	41106	Health Insurance	58,181.36	60,106.65	61,704.10	32,259.09	73,000.00	82,000.00	83,000.00	-
29900000	41110	Salaries	324,402.39	344,255.50	361,974.83	187,483.74	380,000.00	400,000.00	398,000.00	-
29900000	41140	Overtime	4,382.88	7,697.39	5,381.89	3,952.25	8,000.00	8,000.00	8,000.00	-
Subtotal			$ 440,429.86	$ 466,785.26	$ 486,489.83	$ 254,749.48	$ 526,800.00	$ 566,800.00	$ 562,800.00	$ -
Contractual Services										
29900000	42210	Telephone	$ 5,675.34	$ 4,042.79	$ 4,324.76	$ 2,304.31	$ 5,300.00	$ 5,586.00	$ 5,600.00	$ -
29900000	42211	Natural Gas	-	-	-	-	-	-	-	-
29900000	42215	Radio Communications	10,279.84	6,795.06	2,359.95	1,578.01	3,700.00	4,020.00	4,100.00	-
29900000	42234	Professional Services	5,839.79	7,755.01	6,687.78	5,375.99	12,300.00	18,300.00	18,300.00	-
29900000	42242	Publications	3,094.09	2,960.00	2,960.00	3,083.00	6,200.00	6,200.00	6,200.00	-
29900000	42243	Printing & Advertising	-	50.00	-	-	600.00	600.00	600.00	-
29900000	42260	Physical Exams	295.00	-	94.93	-	200.00	200.00	200.00	-
29900000	42270	Equipment Rental	1,555.40	1,205.30	1,268.36	1,767.52	3,000.00	3,000.00	3,000.00	-
29900000	42272	Principal Lease Payments	2,735.03	3,057.51	3,115.22	1,560.84	3,100.00	3,250.00	3,300.00	-
Subtotal			$ 29,474.49	$ 25,865.67	$ 20,811.00	$ 15,669.67	$ 34,400.00	$ 41,156.00	$ 41,300.00	$ -
Supplies & Materials										
29900000	43308	Office Supplies	$ 99.00	$ -	$ -	$ -	$ 300.00	$ 225.00	$ 300.00	$ -
29900000	43317	Postage	83.19	87.18	108.74	$ 35.60	400.00	400.00	400.00	-
29900000	43320	Tools, Equipment & Supplies	10,805.69	20,100.91	16,958.75	1,441.16	10,400.00	36,900.00	36,900.00	-
29900000	43332	Office Furniture & Equipment	2,216.63	-	-	-	-	-	-	-
29900000	43333	IT Equipment	2,935.75	7,900.00	-	1,446.15	1,600.00	-	-	-
29900000	43340	Fuel (S)	2,558.78	1,935.64	1,859.33	860.47	3,000.00	3,000.00	3,000.00	-
29900000	43350	Fleet Parts/Fluids (S)	251,147.54	310,834.55	278,448.64	116,128.50	303,500.00	295,500.00	295,500.00	-
29900000	43351	Fuel - Cost of Sales (S)	355,062.05	310,101.73	259,873.54	115,565.03	316,000.00	299,000.00	299,000.00	-
Subtotal			$ 624,908.63	$ 650,960.01	$ 557,249.00	$ 235,476.91	$ 635,200.00	$ 635,025.00	$ 635,100.00	$ -
Maintenance										
29900000	44420	Vehicle Maintenance (S)	$ 6,077.51	$ 4,648.68	$ 4,455.44	$ 2,693.38	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ -
29900000	44421	Equipment Maintenance (S)	2,275.13	1,411.02	1,262.06	998.45	2,000.00	2,000.00	2,000.00	-
29900000	44423	Building Services (S)	54,686.63	50,815.57	62,525.26	26,968.41	60,000.00	60,000.00	60,000.00	-
29900000	44426	Office Equipment Maint.	600.72	590.40	402.56	150.10	700.00	1,020.00	1,100.00	-
29900000	44440	Outsourced Maintenance (S)	49,756.74	41,338.37	48,665.70	32,793.72	60,000.00	60,000.00	60,000.00	-
Subtotal			$ 113,396.73	$ 98,804.04	$ 117,311.02	$ 63,604.06	$ 127,700.00	$ 128,020.00	$ 128,100.00	$ -
Capital Expenditures										
29900000	43335	Vehicles & Equipment	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
29900000	45590	Capital Purchase	-	-	-	-	-	-	-	-
Subtotal			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Charges										
29900000	47740	Travel, Training & Dues	$ 6,629.95	$ 1,491.53	$ 3,226.00	$ 5,051.52	$ 6,200.00	$ 6,200.00	$ 6,200.00	$ -
29900000	47760	Uniforms & Safety Items	2,803.85	2,364.67	1,943.59	1,592.00	5,900.00	5,925.00	5,900.00	-
29900000	47790	Interest Lease Expense	1,054.08	1,275.00	1,020.56	424.98	1,200.00	750.00	800.00	-
Subtotal			$ 10,487.88	$ 5,131.20	$ 6,190.15	$ 7,068.50	$ 13,300.00	$ 12,875.00	$ 12,900.00	$ -
Vehicle Maintenance Service Fund Total			**$ 1,218,697.59**	**$ 1,247,546.18**	**$ 1,188,051.00**	**$ 576,568.62**	**$ 1,337,400.00**	**$ 1,383,876.00**	**$ 1,380,200.00**	**$ -**
Non Budgeted Expense										
29900000	42272	GASB 87 Principal Lease Payments	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
29900000	47775	Fuel Inventory Variance	14,390.54	(2,316.96)	12,166.87	-	-	-	-	-
29900000	47776	Parts/Fluid Inventory Variance	23,537.62	(21,439.09)	(10,249.22)	5,436.01	-	-	-	-
29900000	47780	Depreciation Expense	16,047.00	4,247.00	4,247.00	-	-	-	-	-
Total (Audited)			**$ 1,272,672.75**	**$ 1,228,037.13**	**$ 1,194,215.65**	**$ 582,004.63**	**$ 1,337,400.00**	**$ 1,383,876.00**	**$ 1,380,200.00**	**$ -**
(S) indicates those line items that reimburse the Internal Service Funds.										

VILLAGE OF ALGONQUIN
GENERAL SERVICES ADMINISTRATION

– M E M O R A N D U M –

DATE: February 11, 2026

TO: Tim Schloneger, Village Manager

FROM: Matthew Bajor, Assistant to the Village Manager

SUBJECT: Website Vendor Evaluation and Recommendation

Background
The Village's current website provider, CoreBT, will stop offering municipal website hosting services on December 31, 2026. As a result, the Village must transition to a new website provider to avoid disruption to online services. The Village website is the primary way residents, businesses, and visitors access information and services, generating more than 400,000 page views each year. This transition is also necessary to meet updated WCAG and ADA accessibility requirements.

Project Considerations
A full municipal website transition can take up to nine (9) months to complete based on industry standards. This timeline includes content review, migration, accessibility compliance, staff training, testing, and final launch. Beginning the process early helps prevent service interruptions and allows time to improve organization, readability, cybersecurity protections, and accessibility. It also ensures continued public access to information and online services without disruption.

Alternative website builders, such as Wix or Weebly, offer lower hosting costs; however, these platforms become less effective due to the significant staff time required to rebuild content, migrate information, and manage ongoing cybersecurity and accessibility compliance requirements.

Website Provider Evaluation
Staff evaluated four municipal-focused website providers in addition to the Village's current provider. The table below outlines the associated costs.

Vendor	Implementation Cost	Recurring Annual Fees	Annual Escalator	5-Year Cost of Ownership
Granicus	$38,340	$11,340	7.0%	$98,216
CivicPlus	$23,050	$9,385	3.0%	$71,101
Revize	$23,900	$7,900	0.0%	$63,400
ProudCity	$9,783	$3,669	0.0%	$28,128

ProudCity was reviewed as part of the evaluation process. However, it did not fully meet the Village's minimum requirements. For this reason, staff did not recommend moving forward with the proposal despite its lower cost.

Recommendation
Based on the evaluation, staff recommends approval of a resolution to select Revize as the Village's next municipal website hosting provider. The resolution authorizes the acquisition of Revize services in an amount not to exceed $31,800 for the first year, which includes implementation and hosting costs.

Billing will occur in the following fiscal year, and approval at this time allows the project to begin sooner with the design and planning process. Project completion is anticipated in the fourth quarter of 2026.

Attachment (1):

- Recommended Vendor Proposal

C: Michael Kumbera, Deputy Village Manager/Chief Financial Officer
Kevin Crook, Chief Innovation Officer

revize.

The Government Website Experts

A Website Proposal for

The Village of Algonquin, Illinois

Proposal Prepared by:
Thomas J. Jean
Thomas.Jean@revize.com
Ph: 248-269-9263 x 8035
www.revize.com

February 11, 2025
Proposal valid for 90 days

revize.
The Government Website Experts

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Revize Illinois Clients!

- Arlington Heights, IL — www.vah.com
- Cherry Valley, IL — www.cherryvalley.org
- DuPage County, IL — www.dupagecounty.gov
- Elmhurst, IL — www.elmhurst.org
- Fox River Grove, IL — www.foxrivergrove.org
- Frankfort, IL — www.frankfortil.org
- Glencoe, IL — www.villageofglencoe.org
- Hinsdale, IL — www.villageofhinsdale.org
- Jerseyville, IL — www.jerseyville-il.us
- Lake Forest, IL — www.cityoflakeforest.com
- Lindenhurst, IL — www.lindenhurstil.org
- Park Ridge, IL — www.parkridge.us
- South Elgin, IL — www.southelgin.org
- South Holland, IL — www.southholland.org
- Tinley Park, IL — www.tinleypark.org
- Wauconda, IL — www.wauconda-il.gov
- And Many More!

Revize Clients!

- Des Moines, IA
- Eagle County, CO
- Glencoe, IL
- Golden, CO
- Hamilton County, OH
- Largo, FL
- Myrtle Beach, SC
- Olympia, WA
- Pasco County, FL
- St. Petersburg, FL
- Troy, MI
- And Many More!

- www.dsm.city
- www.eaglecounty.us
- www.villageofglencoe.org
- www.cityofgolden.gov
- www.hamiltoncountyohio.gov
- www.largo.com
- www.cityofmyrtlebeach.com
- www.olympiawa.gov
- www.pascocountyfl.net
- www.stpete.org
- www.troymi.gov

revize.
The Government Website Experts

Dear Village of Algonquin Website Selection Committee,

Thank you for considering Revize as your web development partner. For nearly two decades, Revize has been a leader in providing high quality, government-compliant web solutions. Located in Troy, Michigan we have launched hundreds of government websites nationwide, including nearly 200 right here in Michigan, a myriad of industry awards and hundreds of satisfied clients stand as testament to the quality and value of our work.

Visitors are drawn to websites that are appealing yet functional, user friendly with a plethora of services, and accessible on a wide range of devices. A Revize website will allow your residents and businesses to easily fill out and submit documents, review and pay bills and taxes, perform searches to answer frequently asked questions and perform a suite of other tasks that would otherwise require staff assistance. What's more, a Revize website will enable you to increase staff productivity and decrease costs by reducing off-line departmental operations.

Some of our great clients in include:

- City of Largo, FL largo.com - Award Winner
- Eagle County, CO eaglecounty.us - Award Winner
- City of St. Petersburg, FL stpete.org
- City of Des Moines, IA dsm.city - Award Winner
- City of San Carlos, CA cityofsancarlos.org - Award Winner

"Revize Websites build engagement with your constituents."

"revize websites build engagement with your residents"

We will work closely with you to design and develop a dynamic, functional and easy to navigate website that will perfectly fit your community.

Then we empower you to control your digital presence with the industry's best administrative management applications. Revize training ensures that your team has the skills needed to expertly update and manage website content and delivery.

Thomas J. Jean
Program Manager

With over a decade experience building government websites

Government clients select Revize because we can help them

- Effectively engage residents.
- Enhance their web presence and build an online communications center.
- Empower non-technical web content editors and administrators to easily execute changes.
- Implement a scalable solution that allows them to affordably grow their web presence for the long term.

We have worked hard to establish a reputation for creating online community websites that engage, inform, and increase participation of your community. With our help, your community's website can serve your residents better, inspire them more, and get them actively involved in your government. Please contact me if you have any questions at all.

Sincerely,

Thomas J. Jean
Program Manager
Phone: **248-269-9263 x8035**
Email: **Thomas.Jean@revize.com**

3000+

CLIENTS

50M+

PAGES CREATED

1

POWERFUL & EASY TO USE CMS

Executive Summary

Thank you for considering Revize Software Systems for your new website project. We understand the importance of this undertaking and know how motivated your government/community is to selecting the right vendor; one who will work with you through all the steps required to build the perfect website featuring a plethora of high quality online services that your constituents will want to use regularly.
In more than two decades of working with government leaders, as well as through nationwide surveys, we have learned that the key to choosing a website vendor is finding the right balance between the total cost of the solution and the quality of the design, online apps and user functionality. In simpler terms, you need a solution that works for you and serves your constituents.

About Us
With approximately 3,000 government websites launched nationwide, Revize Software Systems is one of the industry's leading providers. We credit our rapid growth to our 20-year track record of building award-winning government websites and content management systems. When you work with Revize, you're not just a client, you become part of the Revize family anwhd will receive the service and support you need and expect! We are among the most highly respected government website experts in the United States and we proudly stand by our work.

Our Innovative Responsive Web Design (RWD) and Web Apps
Revize has been a pioneer in implementing the latest trends in design by using Responsive Web Design (RWD). This technology ensures that site visitors have an optimal viewing experience — easy reading and navigation with a minimum of resizing, panning, and scrolling — across a wide range of devices, from desktop monitors to mobile phones. RWD provides flexible and fluid website layouts that adapt to almost any screen. When you implement a dynamic new website powered by Revize, you will not only get an outstanding look, layout and navigation, but you also receive 24/7 access to our Government Communication Center for residents, business and visitors.

Here you will find the communication tools you need such as:

- Public Service Request App
- Calendar of Events
- E-Notification Modules
- On-Line Payment Portal
- Facilities Reservations
- News Center with Facebook/Twitter Integration
- Emergency Alerts
- Online Forms / Survey Tools
- E-Newsletter Applications
- Job Posting and Tracking Module
- Public Records Request Tracker

Our Award-Winning Government CMS

Revize is renowned as a leader in providing practical, high-value, easy to use content management software Government CMS. This simple-to-use yet powerful solution enables clients to manage their online presence with high functionality and style. With applications such as an online document center, public service request app, public records request tracker, agendas and minutes, frequently asked questions and more, Revize ensures that our clients have the tools they need to make information and services available for website users at the click of a mouse.

Quick Deployment, Personalized Training and Support

Revize addresses time concerns by completing websites in considerably less time than our competitors. And because our software is so easy to use, we are also able to effectively train our clients in less than half the time it takes our competitors. Our training program is customized based on each client's needs, and we provide hands on training the way you want it - either onsite or off site through web conferencing tools. We pride ourselves on the skills of our support staff, who are responsive, knowledgeable and helpful. Our online support portal is available 24/7/365 for issue tracking and management. We also provide phone and email support during regular business hours.

Did you know?

Our technical support staff are trained developers. When you call for tech support, you'll be speaking to staff with direct knowledge of development!

Company Overview

Founded	Headquarters	Phone	Website
1995	150 Kirts Blvd. Troy, MI 48084	248-269-9263	revize.com

Revize Software Systems was founded in June, 1995 as a "new media" development company specializing in the creation of interactive web design, multimedia content delivered on CD-ROM, and video production. Since then, Revize has made an unsurpassed name for itself in government website design, which remains our specialty. We now boast more than 3,000 websites launched in North America and have created acclaimed website designs for hundreds of municipalities and counties, as well as government departments and agencies. In September, 1996 as the Internet was becoming a world-wide reality, Revize began developing a Web Content Management System (CMS) for the government market to enable non-technical contributors to quickly and easily update content on their websites. The result was the creation of our state-of-the-art Revize Government CMS. Our mission has always been to enhance the communications of government organizations nationwide with their varied and valued audiences. This is based on our vision statement, which reads:

> "The empowerment of people through simplified information management technologies."

Focused exclusively on creative web design, government web apps and content management technologies, Revize continues to invest in its technology, continually adding new capabilities and features that manifest our vision. While many municipalities choose Revize to develop and cost-effectively manage their website content, clients also use Revize as an information-sharing platform. Our suite of Revize Government web-based solutions has proven valuable as a powerful technology that empowers clients to build and maintain sophisticated web sites, all while using the Internet and internal Intranets/Extranets to acquire, analyze, process, summarize and share information

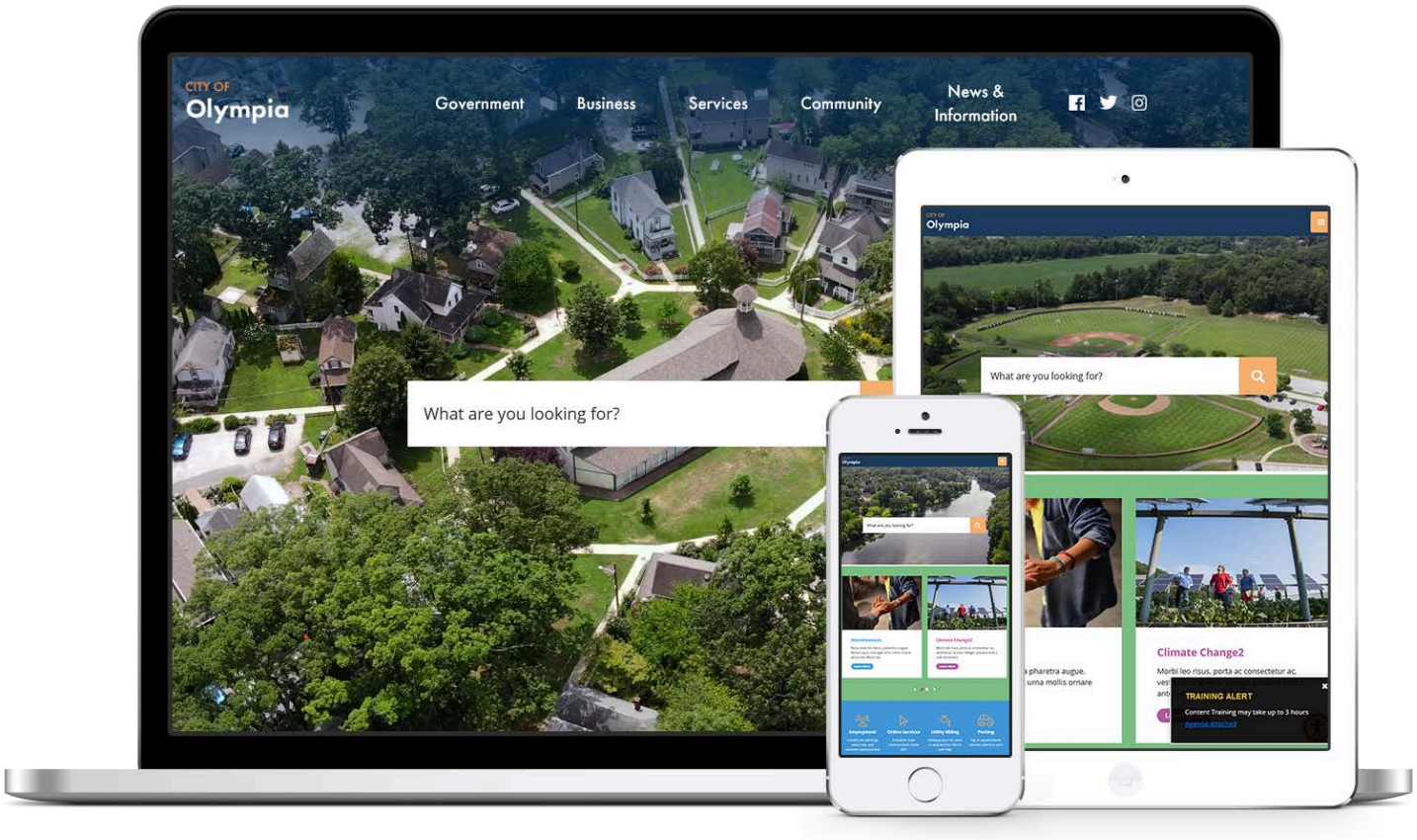
Did you know?
Revize has won national awards for our websites!

Government Project Experience

The City of Olympia, Washington

Olympiawa.gov

3CMA Savvy Award Winner

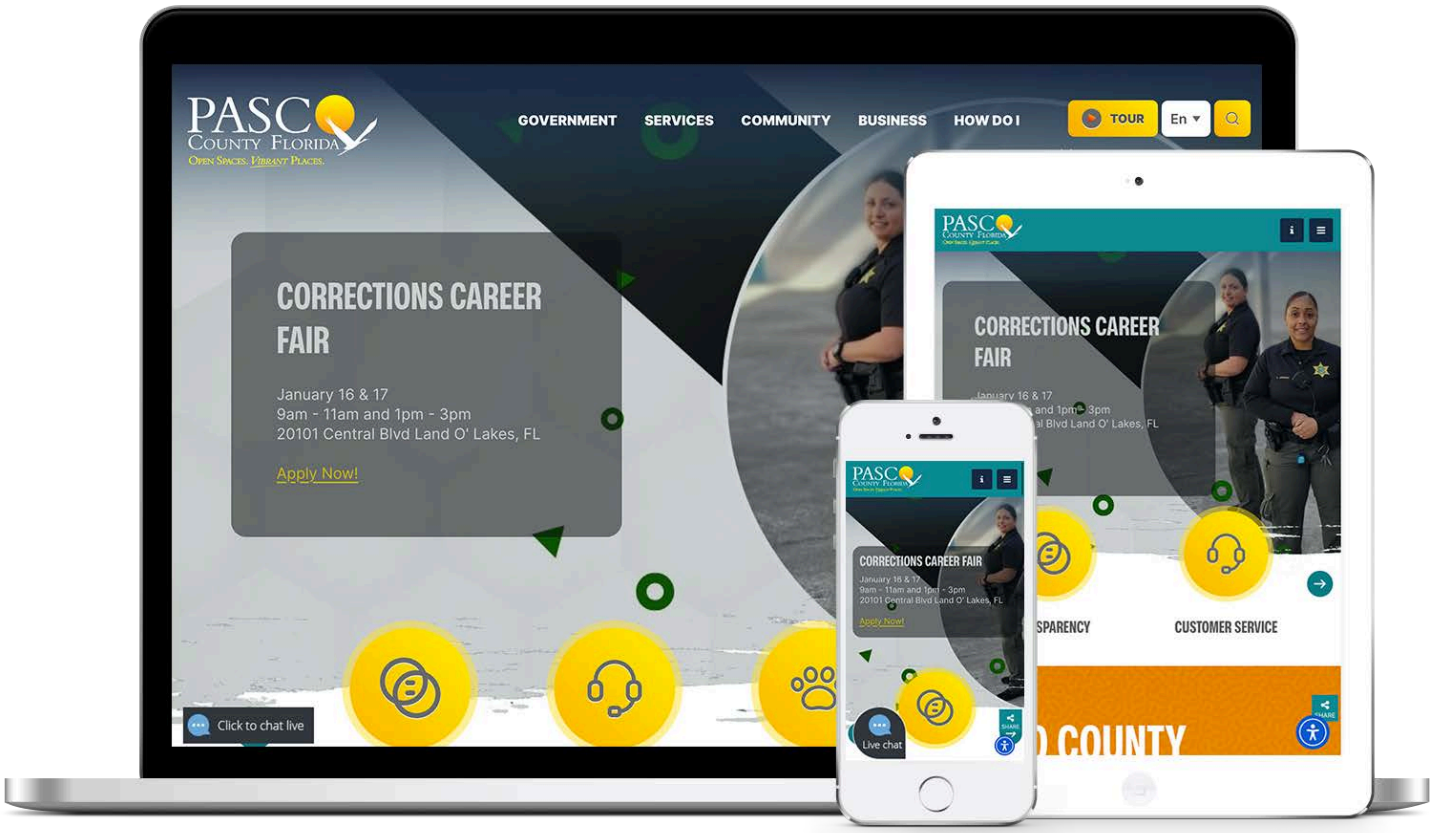


Details:

The City of Olympia, Washington's capital, provided an exceptional opportunity for Revize and the city's web team. Their website showcases an innovative homepage where users can seamlessly navigate through various trending topics, services, news, events, and more in a modern layout. We aimed to create not just visually stunning, but highly functional, site—one that stands out as among the most inspiring and practical in the United States. With distinctive design elements, including a curated "smart search" feature and interactive online forms, this website makes a compelling case for its title!

Pasco County, Florida

www.pascocountyfl.net

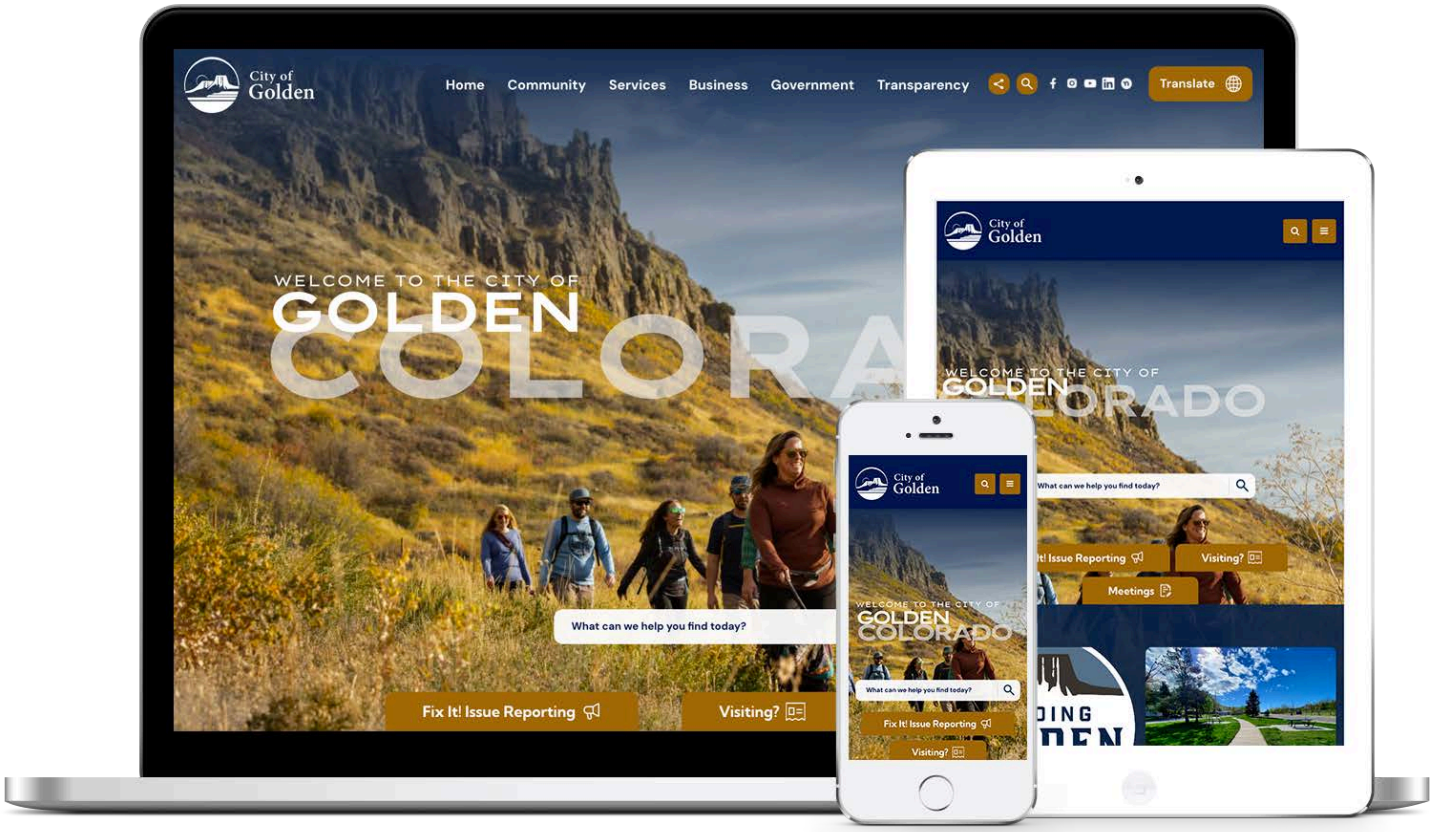


Details:

Pasco County, a Florida County of nearly 600,000 residents, came to Revize wanting the best website possible for their constituents and a true partnership with their website vendor. Having previously experience less than stellar service from another vendor, the county was ready for a quick change. Together, Revize and Pasco County launched this website, and an employee intranet in less than four months. This is a fantastic representation of the things Revize is able to accomplish with a motivated County like Pasco!

City of Golden, Colorado

www.cityofgolden.gov



Details:

The City of Golden, CO came to Revize for a website that was completely different. Coming from an outdated website, they wanted to work with a vendor that could turn their website into a site iconic in Colorado. Page layouts were created to allow unique interaction with the City. This included board listings, Q&As, interactive park directories, and a resident focused navigation. This site improves the online experience for residents, business owners, and visitors!

HORIZON INTERACTIVE AWARDS
GOLD WINNER

La Plata County, Colorado

www.co.laplata.co.us

Details:

La Plata County CO wanted a design unlike any County out there. With this design we pushed the limit of what people think when they see a County website. They also needed the website to be accessible according to a new Colorado accessibility standard. In addition, this site features additional unique subsites and healthy level of scrolling. We use images, icons, and interactive features to create an experience for the user. This type of design also allows us to extend the County's brand in a way that is unmatched in the industry!

City of St. Petersburg, FL

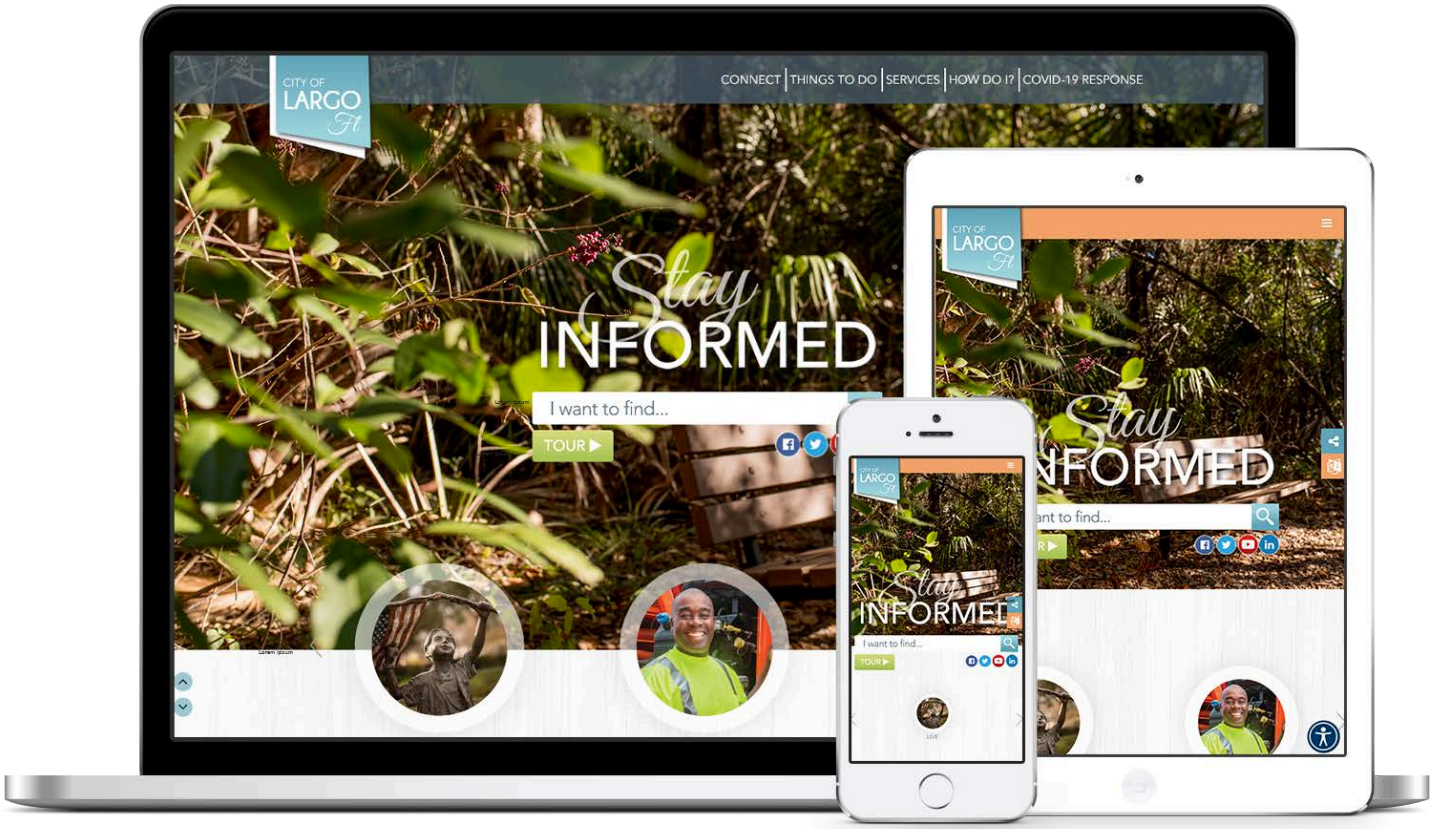
www.stpete.org

Details:

As Florida's 5th largest, St. Petersburg is an iconic City with something to offer everyone. Because St. Pete is a longtime Revize client, their team worked very closely with ours and actually provided their own design concepts. We did the integration/pre-launch work and their staff was with us every step of the way. Inner pages are flexible to allow departments to have dedicated pages with a cohesive feel across all pages. Social media feeds from Instagram, Flickr, Facebook, Twitter, and YouTube all on the homepage! St. Petersburg also users the Revize API to develop their own templates. This website is an elite representation of the power and beauty of the Revize process.

City of Largo, FL

www.largo.com



Details:

Largo, Florida wanted a website like no other. Through a collaboration between the city marketing team and Revize, we were able to create this award winning website. Each page in this website was designed to uniquely fit the needs of the community. We also built unique designs for the city parks, library, and theater. The navigation within this site is built based on services rather than department silos. Overall this website brings together an amazing mix of design expertise and functional clarity to create a great user experience!

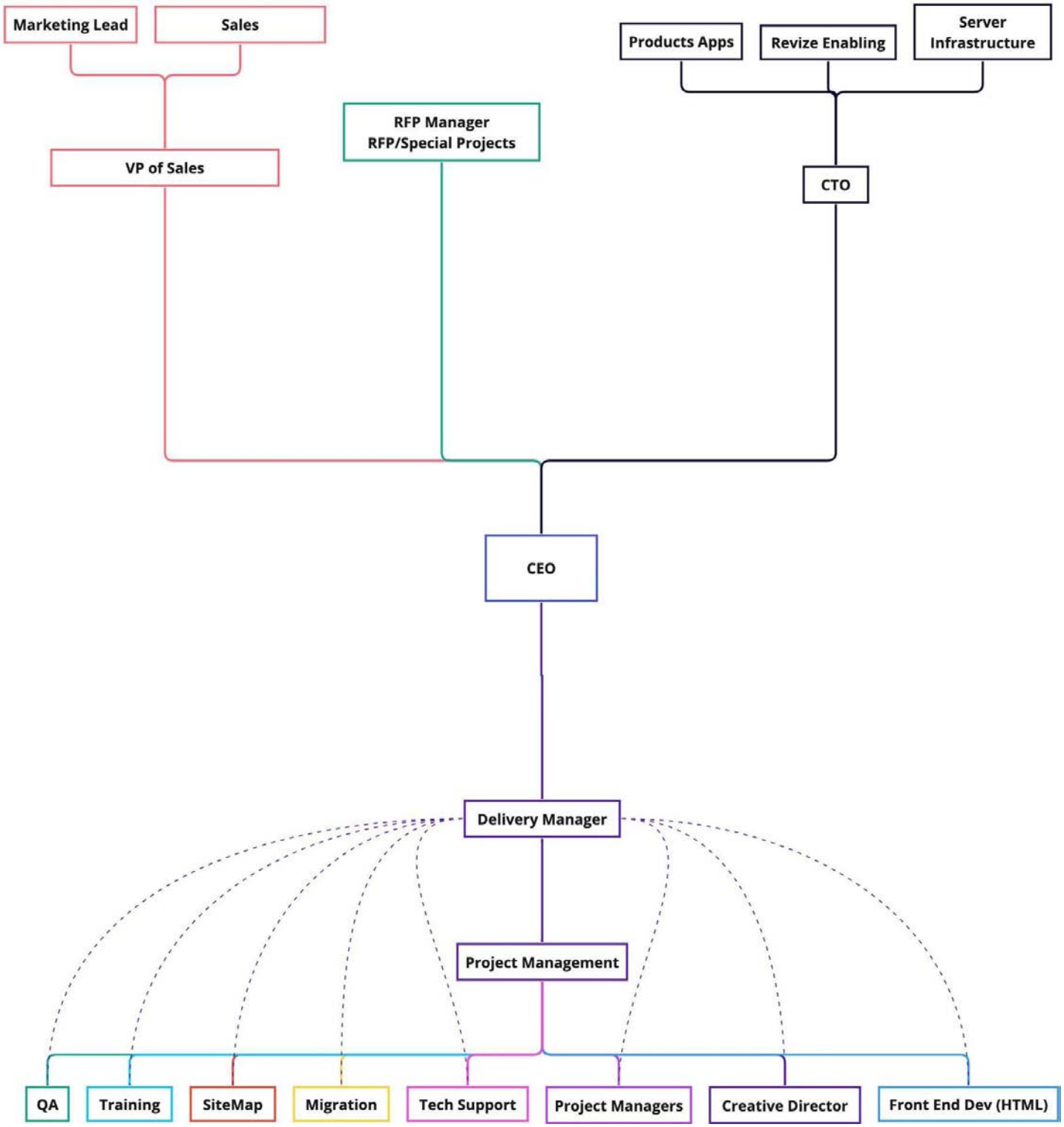
Government Account References

Client: City of Wylie, TX
Craig Kelly, Public Information Officer
Phone: (972) 516-6016
Email: craig.kelly@wylietexas.gov
Website: ci.wylie.tx.us

Client: City of Olympia, WA
Joshua Linn, Website Administrator
Office: (360) 570-3782
Email: JLinn@ci.olympia.wa.us
Website: olympiawa.gov

Client: Tipton County, TN
Shawn Anderson, GISP Director
Phone: (901) 476-0234
Email: sanderson@tiptonco.com
Website: tiptonco.com

Revize Organization Chart



Why Choose Revize?

We Have Government Specific Experience and Outstanding Client Testimonials
You can rely on Revize and our 20 years of experience building and maintaining websites for municipal, county and government agencies of all sizes throughout North America, to deliver a customized site design that improves layout, navigation, usability and content. Using Revize ensures that your website will be reliable, W3C and ADA compliant, and allow for easy integration with existing or future web applications and third-party software. But there's no need to take our word for it -- we encourage you to peruse our massive file of testimonials from our many satisfied clients.

We Will Build a Government Communication Center that Works for Your Community!
The Revize website design, Government CMS and interactive tool sets have been developed exclusively for our government clients to help them effectively communicate with their key target audiences such as residents, businesses and visitors. Some of our most popular website and Government applications and modules include: a new and improved Online Calendar, the comprehensive Forms Center, our News Center with real-time social media connectivity, Emergency Alerts, E-Notifications, Citizen Request Tracker, Parks & Shelter Reservations System, Document Center, and Online Payment Portal.

What sets Revize apart from other companies?
Revize's superior technical architecture, unsurpassed staff expertise and highly effective publishing engine provide our government clients with the most reliable website solutions in the industry today. By ensuring our client's data security and providing redundant server architecture and back-up data centers, Revize has a nearly 100% up-time rate. Plus, our clients never have to worry about data loss or data corruption because of our instantaneous back-up process and our data center's cloud back-up processes. Revize believes that investing a higher percentage of our profits into our technology and security makes us the best choice for the short and long term for governments seeking the best value for their community's website.

"We Always Provide Knowledgeable, Friendly and Responsive Service!"

All this, and a reliable IT partner too! Our website development is superior, and our Government CMS and suite of online apps is easy to learn and administer, but our 24/7 technical support will also be there for you to help you get over the hurdles! Our technical support team is widely considered to be among the industry's best. We also provide a sophisticated backup infrastructure which allows us to guarantee 99.99 percent uptime. Plus regular updates and improvements to ensure that your site will remain current with industry standards and keep running smoothly for years to come. The Client Owns the CMS License and the Code!

We often hear the question: "What happens if we want to move the website to another vendor? Do we lose all access or any of our website data?" The answer is 100% NO! As our client, you own the template source code, the CMS, and any data that you put onto the website. We understand that clients may come and they go, but we always make sure they know they are just as important to us at the end of our tenure as they were at the beginning. If you decide to run the CMS in your own server, we can transfer the CMS license and software to your server as you own the license and you can run it from your server as long as you want.

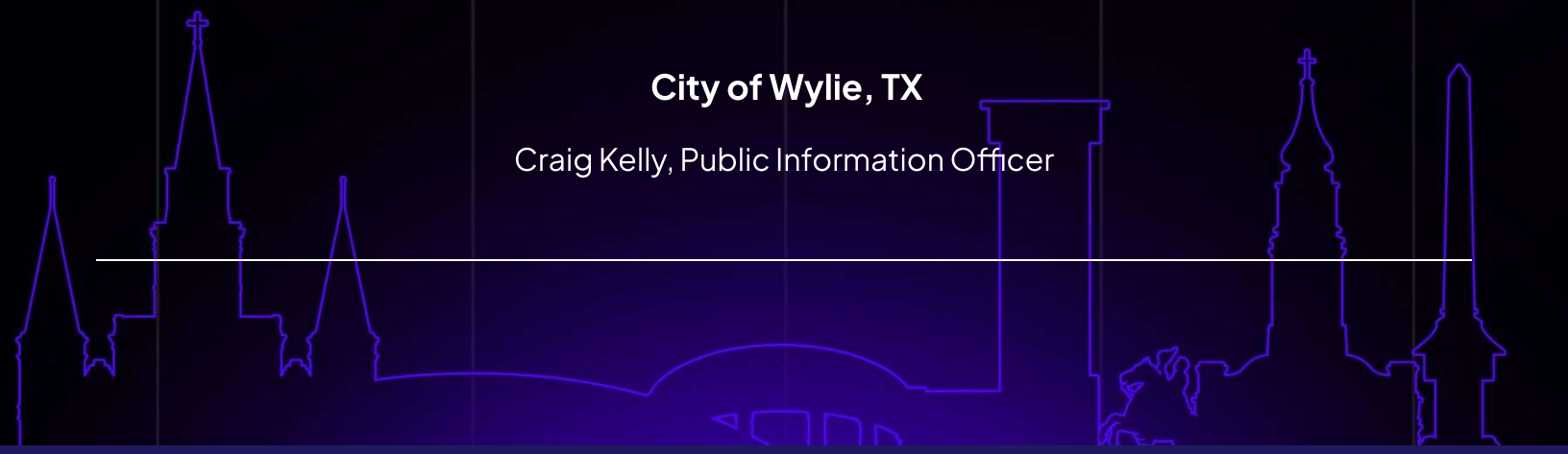
Top Reasons Why Revize gives you the Greatest Value!

- Modern, timeless and unique website design integrated with online Government apps
- On-time delivery
- Competitive pricing
- Responsible stewardship of the organization's stakeholders
- Full functionality to update and manage your website
- All the tools/apps needed to increase communications with citizens
- An easy CMS to train employees quickly
- Extended phone and email support
- Unlimited Upgrades: Revize provides unlimited upgrades to new and existing modules at no additional cost to you. Once you invest in Revize, you will receive free upgrades and feature enhancements for life.

"The Revize responsive website design is second to none for us providing an excellent experience for the growing number of residents, visitors and businesses accessing WylieTexas.gov on mobile devices. Our website's progressive look captures the vibrant culture of our community.

City of Wylie, TX

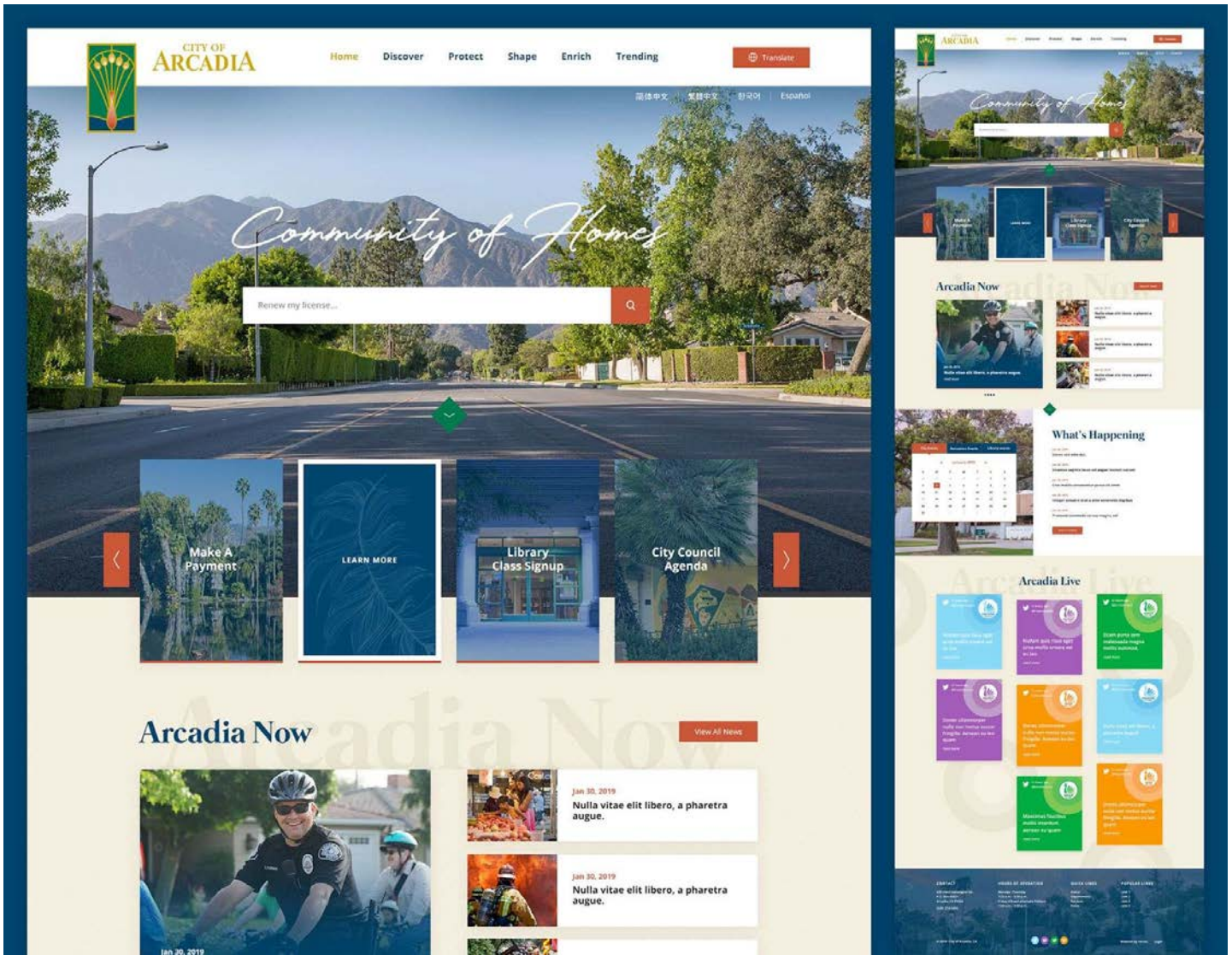
Craig Kelly, Public Information Officer



Awards & Accolades

"The project was a collaboration between Revize, who understood our vision and had the technical expertise to make it happen" - MaryLee Woods, Deputy Chief Information Officer for the City

- MaryLee Woods, Deputy Chief Information Officer for the City



Project Management

Project Planning and Setup

What makes Revize unique in its project approach and experience is our thorough preparation for each individual community combined with the range of website deployments and creative, customized fit we implement for each client. From small to large, rural to urban, the Revize project management process guarantees a perfect fit between the concept of the deployment and the expectations of the client's level of engagement preferences.

> We don't use a "one size fits all" approach because it doesn't make sense.

However we do use a standard, proven effective process methodology. Each client is unique and we tailor our process to fit their unique needs. For as long as you are our client you will have staff dedicated to your account and access to an on-line portal for communication, design process and on-going support.

Dedicated Accounts Manager: Your dedicated Account Manager will handle all issues related to your contract, pricing, future product add-ons, and general account satisfaction. During the initial kick-off meeting, your Account Manager will introduce you to the team, explain roles and responsibilities, and place you in the very capable hands of your Dedicated Project Manager and Designer.

Dedicated Project Manager: Your dedicated Project Manager will handle all issues related to the website design, development, navigation, content, training, timelines and deliverables, as well as ensuring that feedback and communication occurs promptly in order to keep the project on-track. Also, the dedicated project manager will be the point of contact for any future technical support or issues that need to be addressed during the deployment and post deployment of the site.

24/7/365 Project Portal Access: From day one, your project and on-going support is tracked in the Revize On-line Project Portal. The main point of contact you select for the project will receive an invitation to register, including setting up a secure user name and password. The Project Portal serves as a communication tool for any matter pertaining to your website design, development and on-going support even after your website is launched.

“We guarantee the best support in the industry that’s 24/7 365 by the trained developers & technicians”

Timeline

Phase	Duration
Phase 1: Initial Meeting, Communication Strategy, SOW	1 Week
Phase 2: Discovery & Design	6 Weeks
Phase 3: HTML Template Development	2–4 Weeks
Phase 4: CMS Integration & Module Setup	5–6 Weeks
Phase 5: Custom Development & Quality Assurance Testing (Ongoing)	3 Weeks (Overlaps with Remaining Phases)
Phase 6: Sitemap Development / Content Migration	5–6 Weeks
Phase 7: Content Editor and Web Administrator Training on your new website, final content changes and Go Live preparation	1–3 Weeks
Phase 8: Go Live	1 Week
Go-Live (Average)	21–27 Weeks

Did you know?
The project planning process is designed to fit your needs. We will adapt our timeline if your schedule requires.

Revize Project Life Cycle

Phase 1: Initial Meeting, Communication Strategy, SOW

Your Revize Account Manager will set up the initial internal project planning meeting where we will talk about the overall management of your project, establish a timeline, and devise a Revize-Client Communication Strategy that will keep everyone engaged and up-to-date on the progress of the project. We will also discuss specific technical requirements of the project and determine the phases through which those requirements will be addressed. In addition, Revize will address the content strategy of the new site, any new content that needs to be written and how to fit the existing content into the new site, Additionally, as an optional item, Revize will discuss the process of conducting online surveys to gather feedback from your constituents for the new website layout and requirements. After this meeting, Revize will develop a Statement of Work and provide it to the client for review and approval.

Prior to the design kick-off meeting, you will receive our questionnaire to complete with various answers that will help our designers gather information regarding your needs and preferences. Our team will also brainstorm ideas and suggestions with you during the meeting.

The questionnaire addresses various issues such as:

- As a result of a new website design and navigation, what are the main improvements you hope to achieve?
- What are some key points and areas you may want featured on the Home Page?
- Do you need help with logo design? Image? Marketing & branding?
- What key modules do you want featured in your web site, like Document Center, Report a Request, News & Events, Events Calendar etc.
- Do you need social media features need to be highlighted in the new site? etc..

Phase 2: Discovery & Design

If there is client approval, we will collect feedback from the residents on the new design layout by setting up an online survey with a set of standard questions. The survey questions need to be approved by the client prior to our adding a link from your current website. This link can also be distributed through other channels like email, newsletter or any other form of communications you might be using to stay in touch with your residents. Usually there is a 1– to 2–week survey period.

Once survey results have been tabulated and your needs have been determined, you and your Revize team will participate in a Design Kick-Off Meeting. A senior designer and team will conduct an in-depth interview, and brainstorm ideas with you about your vision for the look and feel of your custom website. Our efforts on this project will extend far beyond placement of provided information within a stunning design. It's about uncovering how your audience wants to be informed, and applying our 20+ years of web design and development expertise to create the most effective ways of displaying that information and getting users to access and use your website. We always strive for nothing less than an award winning design!

Revize Design Principles

The Revize Web Application Developers are not only responsible for the look, functionality, and performance of your website. They are also responsible for the security of the web content and web-based applications they create. They ensure that the code supports secure authentication and authorization, and provides access control mechanisms as required.

Good design principles are always based on readability, taking into consideration appropriate font type and size for headlines and text area, as well as line height – ensuring all page elements are balanced. Our designers also pay meticulous attention to their use of shadows and gradients. To the layman's eye there may not appear to be a shadow, however on the website the font will appear sharper (or maybe softer depending on the amount of shadow used).

Of course color cannot be overlooked. Our designers first take the client's preferences, official logo colors, and pictures into consideration to create a color scheme consisting of no more than three colors. We then use variants and hues to create visual appeal, contrast, eye-catching allure and invoke the overall feeling that the client desires.

Last but not least is effective use of page elements such as call to action buttons, social sharing icons, email newsletter sign-up, and promotion areas. The ultimate goal is to provide an easy to navigate webpage that is informative without being overwhelming. Therefore, it is the designer's job to guide the client in making appropriate placement choices for needed items.

Phase 3: Template Development, CMS Integration

There are some exciting new design trends, and Revize is always on the cutting edge, implementing the best of these innovations in our websites. We are especially pleased at how effectively they are proving to be in increasing engagement in government websites.

#1 Responsive Web Design – The most important development in website design in years, Responsive Web Design (RWD) automatically conforms and optimizes websites for any screen size. With the substantial increase in smartphone and tablet users today, people are going online using a vast number of devices with wildly different screen sizes. Our websites offer this very important feature of easily and cleanly conforming to computer, tablet and mobile device screens.

#2 Liquified Content – This is another important trend that address the fact that information is no longer static or concrete. Instead, content is specifically customized for each unique user. Liquidity of content enhances the immediacy and flexibility of content. The more liquid your community's content, the easier it is for residents and businesses to access this information in ways and via the channels of their choice: fixed or mobile, interactive and live. Revize is able to effectively make your content liquid. This will make it adaptable to various situations and, therefore, easy to reuse in different contexts distributed for a variety of display formats and communication channels.

#3 Image Tiles – This is a trend that enables developers to display content in a pin board style of display. Revize now offers this feature, which creates a very visually appealing display of content, such as pictures or social streams. Image tiles also help promote engagement by encouraging site visitors to comment or reply to items from directly within the image tile. This is an especially useful option for web pages promoting tourism.

#4 Parallax Scrolling – This is a highly advanced, innovative design technique for sophisticated websites. Parallax Scrolling allows Revize to build websites in multiple layers, with content that moves across the screen at different speeds as visitors scroll. This unique design technique is very visually engaging and can help improve time-on-site metrics.

#5 Innovative Typography – This plays a very important role in website design, image and branding, and is especially important for maximizing the look and feel of the website when accessing it from mobile devices. Our designers are experts in effective typography and take many factors into consideration when selecting the type of fonts, font sizes, and colors to be used for a website.

#6 Social Feeds – With the proven ability to strengthen and deepen interpersonal connections, social networks present a wonderful opportunity for government organizations to increase community engagement and make governments more accessible to the people they serve. One method already mentioned for improving social activity is using pin boards; another is creating a social area or social wall that combines activity from multiple social networks, like Facebook, LinkedIn, YouTube and Pinterest. Revize offers a comprehensive line of popular social media applications and networking.

Over the past 20 years, revize has mastered the art of designing government websites.

Key Phase Objectives & Deliverables:

The following steps are followed while designing new sites

- **Establish Needs and Creative Direction: Understand your objectives and requirements, and provide recommendations for effective online branding pertinent to your** requirements, existing branding and your web audience's needs. The Revize designer will also conduct his own research in order to capture the character and "feel" of your area, which will inspire ideas for the overall design direction of the website.

- **Main Menu Navigation & Home Page Wireframes**: Work with you to establish a main-level navigational architecture and identify key items accessible from your home page. This establishes a baseline for the navigational structure, as well as the preferred content structure (wireframe*) for the home page.

Please Note:
The home page "wireframe" will simply serve as a realistic guideline in terms of content placement, but will not include the final text nor final imagery for this phase. Please see a sample wireframe to concept development snapshot in the next page.

Did you know?
Revize will provide a 100% from scratch design with a satisfaction guarantee!

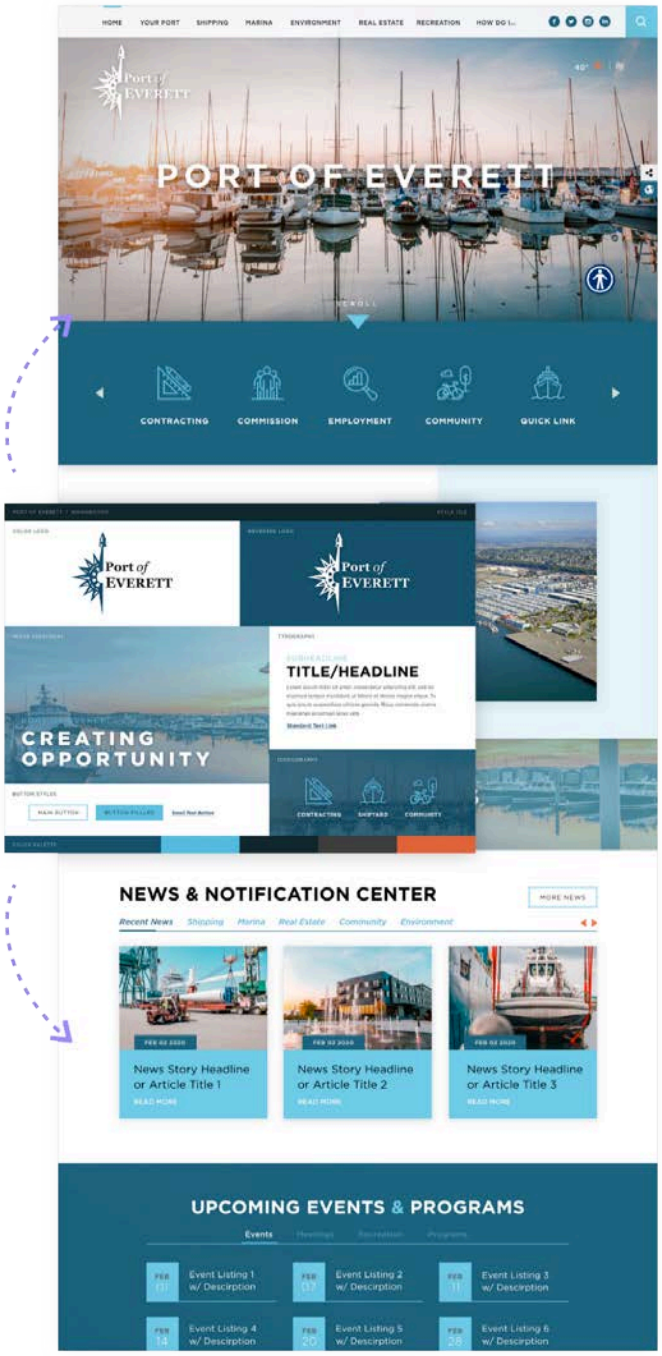
- **Page Layout and module placement**: We will follow all the best practices to layout the different features and modules so that they can be easily accessed by your residents. For example, on the home page there will be sliding picture gallery and quick link buttons for Notify Me, Report a Concern, Document Center, FAQs etc. Also the news and announcements module and events calendar would be integrated into the website, along with the Social Media Center.

Wire Frame to Concept

- **Design Deliverable:** The design concepts for this phase will be based on one or possibly two home page layouts. The client will review and provide design feedback to the designer for changes. Revize asks that clients have no more than three iterations of changes up to the point that the final concept is approved.

- **Final Home Page Sign Off:** When all changes have been made, Revize will present your final home page design and layout for approval. Customer approval is required to proceed to the next phase, the inner pages of the website, and the process repeats itself before the actual HTML & CSS is written.

- **Final Inner Page Sign Off:** When all changes have been made, Revize will present your final inner page designs and layouts for approval. Customer approval is required to proceed to the next phase, when the actual HTML & CSS is written.



Phase 3: Template Development, CMS Integration

First, the Revize development team will transform the approved designs from mere pictures into fully-functioning HTML/CSS and Revize Smart Tag enabled web page templates using the Revize Dreamweaver Extension. The Revize Smart Tags are fully customizable and allow customers to expand functionality as needed. To maximize this extensibility, the full Revize Java API is provided to clients with our Advanced Training Program.

Phase 4: CMS Modules Setup

In this phase, all of the features and modules the client has requested will be set up, e.g. calendar, document center, picture galleries, alert center, e-Notify, etc. are all brought to life and made functional while also being tested in the Revize CMS. Revize enhances current modules and adds new modules continuously, and you will receive all future updates to modules at no additional cost.

Phase 5: Custom Functionality Development & QA Testing

In this phase and according to your specifications, custom functionality of existing CMS modules, database scripting and programming, as well as any custom application development will be executed. The Revize development team will be interfacing directly with your technical staff to obtain information and test information exchange and application functionality.

This phase may overlap phases 2 – 4.

In our testing phase, we ensure that your website meets functionality, performance and security standards. Our QA team uses mock data to test navigation and interfaces of the templates, along with any custom developed applications or modules. Additionally, through a series of tests, we perform input validation to ensure that security mechanisms cannot be bypassed if anybody tampers with data he or she sends to the application, including HTTP requests, headers, query strings, cookies, and form fields. We also ensure that when errors do occur, they are processed in a secure manner to reduce or eliminate exposure of sensitive implementation information.

Phase 6: Content Development / Content Migration

Revize will develop all of the pages for your site to make the initial content available upon site deployment. Our content development and migration experts use the latest standard formatting practices to develop the navigation and create the most effective content possible for your website. This includes spelling and style corrections into the new website.

There are no limits to the number of pages you can create after you have gone through training.

Revize will implement an effective website architecture with the latest technology and usability trends so your website visitors can find information in an instant. We will also assess your current website content and incorporate what you currently have with additional content to maximize interest and excitement for your readers. Our content experts are educated in proper writing and terminology, and will use correct grammar, spelling and punctuation.

Our web designers use creative typography which makes the website more visually appealing and also plays a role in defining the hierarchy of content to be placed on the web page. Variations in size and color are used, as well as strategic placement on the page to highlight certain site areas so the visitors can easily navigate the site. Effective typography also ensures that your website will look good on desktop, laptop, mobile and tablet devices.

Phase 7: Training Your Staff (in-person or web based training)

Once your website is ready for you to begin editing, you will be able to easily revise your content as often as needed. Revize will train you on how to operate the Administrative and Content Editor functions so you can manage your website. We typically provide this training on-site; however, we can also provide on-line training for your staff if you prefer. For your convenience, training materials can be downloaded from the Revize website. After training, our friendly and responsive support staff is always here to answer questions and provide training refreshers as needed.

Standard Training Agendas

Basic Administrator Training (How to)

- Sign-in
- Create users
- Assign roles
- Set page level permissions
- Set section level permissions
- Configure and set up workflow approval process

Content Editor Training (How to)

- Sign-in
- Edit page content
- Copy/paste content or add new
- Create a file link
- Create a link to another web page or external web site
- Create a new page and link to it
- Insert/update a picture
- Insert/update a table
- Spell check
- Save and Save as Draft
- History of the page content (content archive)
- Create a survey form or any other type of online web form
- Create navigation pages (top/left menus)
- Create new calendar and create/edit calendar events
- Edit metadata

Advanced Administrator Training (How to)

- Run back-end reports
- Run Google Analytics reports

Training on use of specific Modules included, such as

- Emergency Notification Center
- Public Service Request App
- Web Calendar
- E-Notify
- Quick Links
- Document Center
- Form Center
- News Center
- Frequently Asked Questions
- Bid Posting Center
- Job Posting Application
- RSS
- And more….

Revize Maintenance Covers

- 4 CMS upgrades per year
- Software and modules upgrades (Automatic Install)
- Server Hardware & OS upgrades
- Immediate bug fixes/patches
- Round the clock server monitoring
- Data Center network upgrades
- Security and antivirus software upgrades
- Firewall and router upgrades
- Bandwidth and network infrastructure upgrades
- Remote backup of all website assets
- Cloud backup of all website assets
- Quarterly newsletters on major feature updates
- Regular Webinars on CMS features and usage

Phase 8: Final Phase: You Go Live!

At last, your website content is complete and your staff is sufficiently trained! The final phase in the process is to redirect your website domain name from your old site to your beautiful new one. Once this is completed, Revize will closely monitor the transfer for the first 24 hours to ensure that everything is working properly. Any issues that arise will be immediately resolved.

Marketing & Ongoing Consultation

Revize seizes on every effort to make our clients' sites highly visible. We draft press releases for posting on our website and for distribution locally, and will continuously monitor your site after it goes live so that you can take advantage of all marketing opportunities. We also look to submit your site for different awards and recognition competitions to further maximize your site's exposure.

Search Engine Registration and Marketing

Revize will input all the targeted keywords to make your web pages search engine friendly, thus enabling users to find targeted information when they do a Google, Yahoo or any other search on your site.

Revize Project Team

Revize understands the importance of having a talented and experienced staff. We are proud of our well-respected team of top notch experts in the field of government website design, development, analysis, content management, training and support. From the first creative concepts through to the design phases, and from site launch to training of personnel and continued support of your website project, we have the right group of seasoned professionals to work with you through the website process and beyond. We are pleased to introduce them:

- **Thomas Jean:** Program Manager
- **Alison Bieber:** Project Manager
- **Alex Parent:** Creative Arts Director/Web Designer
- **Samir Alley:** Project Delivery Manager
- **Denise Brazier:** Revize CMS Trainer
- **Jamie Phy:** Revize CMS Integrator/Backend Developer
- **Richard Opiniano:** HTML Developer
- **Joseph Nagrant:** VP Sales/Marketing
- **Derek Ortiz:** Chief Technology Officer
- **Akshaya Ray:** Chief Cloud Architect
- **Many More!**

Thomas Jean – Program Manager

As a program manager, Thomas has managed many award-winning website projects for our clients, including Des Moines, IA – Arcadia, CA – Largo, FL – Golden, CO – Pasco County, FL – Oswego County, NY – Dupage County, IL - Eagle County, CO - Kentwood, MI! Thomas has brought to Revize a very special skill set. Not only does he manage some of our highest priority projects, he is also a genuine subject matter expert when it comes to the inner workings of government. As a former Township Trustee in a Michigan Township, he knows the advantages that come with modernizing the way government does business. With his unique background and education from one of the nation's top universities, Thomas is uniquely experienced to give an honest and accurate assessment of your community's website needs.

- **Philosophy:** Learn as much as possible about our clients and use that knowledge to help build an amazing website.
- **Education:** BA degree in Political Science from University of Michigan;
- **Expertise:** Government procedure, special projects, public affairs, community development.
- **Role on your website project:** Project Manager

Alison Bieber – Project Manager

Alison possesses an innate passion for innovation. Following a decade immersed in the Opera world, she shifted her focus towards entrepreneurship and technology. Playing a pivotal role in establishing the foundations of various initiatives within the non-profit and small business sectors, Alison brings a diverse and proven track record to the table.

- **Philosophy:** "Quality is not an act, it is a habit." - Aristotle
- **Education:** M.A. in Applied Linguistics with a concentration in Foreign Language Pedagogy, University of Massachusetts; B.M. in Vocal Performance, Boston Conservatory at Berklee.
- **Expertise:** Pedagogy, management, communication
- **Role on your website project:** Project Manager

Ray Akshaya – Chief Cloud Architect

Ray has 20+ years of extensive technical experience with internet and website solutions. He has worked on hundreds of government, non-profit and educational websites and has a keen eye for web visitor requirements, information architecture, and usability. He is also a long-time veteran of Revize Software Systems and our clients enjoy working with him. In his career, he has deployed and/or assisted with technical solutions for more than 500 websites. When working on a project, Ray always visualizes himself in the client's chair at the closing stages of the project and makes sure that all decisions made on a project are in alignment with the client's vision and best practices for developing the system.

- **Philosophy:** "Work Hard, Help People and Live Honest."
- **Education:** MS in Engineering Science, Louisiana State University, Baton Rouge
- **Expertise:** Client Management, Project Management, Technology Development for CMS & Web Apps
- **Role on your website project:** Chief Cloud Architect

Denise Brazier – Lead Trainer

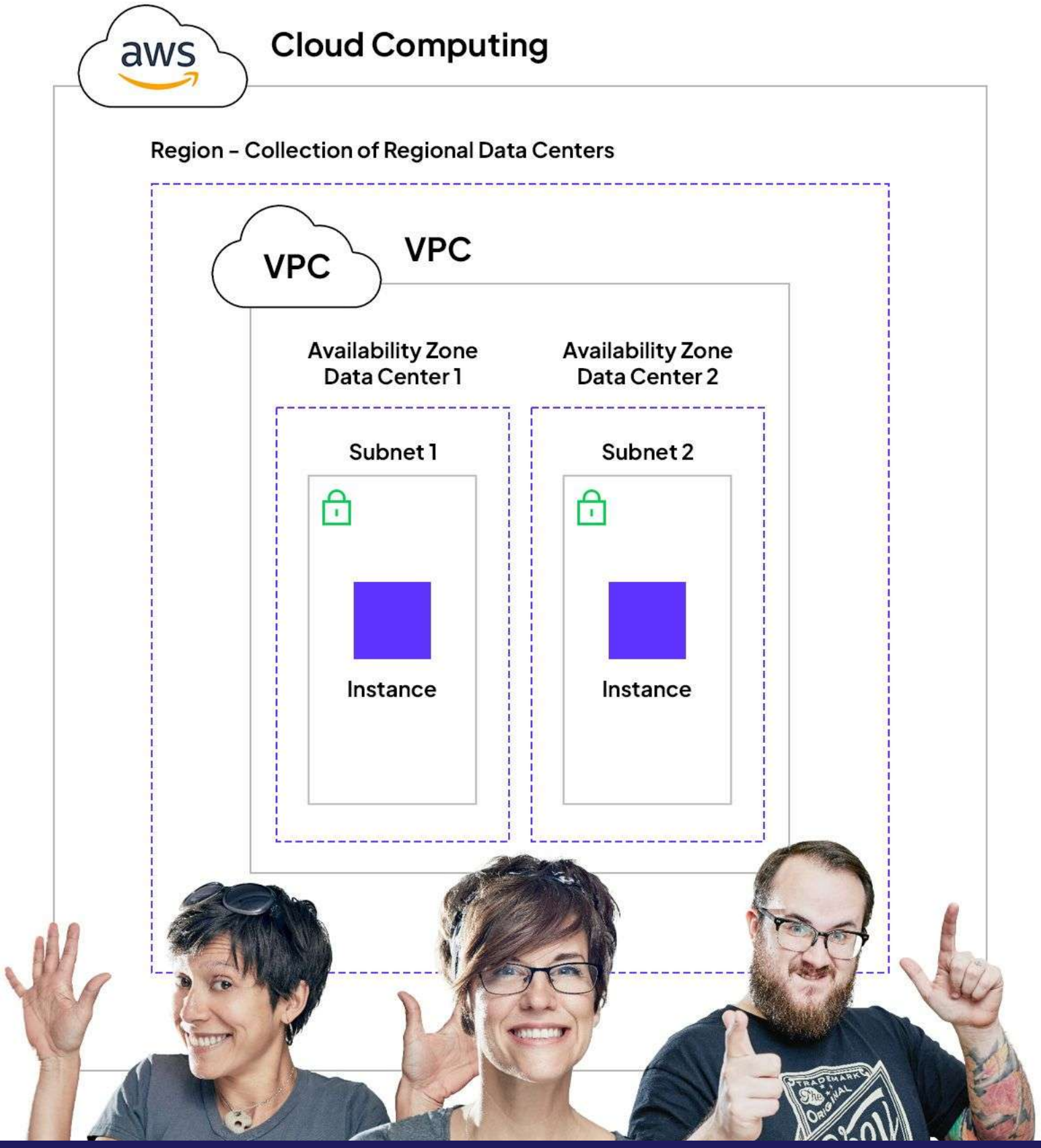
Denise is an educator by nature. Her 20 years of experience in the public school system has made her a master of engaging participants during training. She effortlessly builds effective relationships with all clients. Denise has served as Advisory Counselor, Coordinator, Publicity Director, and Project Manager for several organizations in the education, non-profit and public sectors. She has been appointed to the state's quality committee evaluating organizational policies and procedures for recognition.

- **Philosophy:** "Always explain things in the terms of your audience to ensure their understanding"
- **Education & Training:** MS in the Art of Education from Marygrove College. Certification in Secondary Education
- **Expertise:** Training, education, teaching, public affairs and project management.
- **Role on your website project:** Trainer for the Content Management toolset

Samir Alley – Creative Director

Samir has more than a decade of experience in managing web site design projects. He has deployed 360+ municipal websites and has a solid background in web design and the latest web technologies. Formerly with Google, Samir is a leader equipped to handle any kind of sophisticated web project. He is an exceptional communicator with an innate listening skill that gives him the ability to understand and deploy a client's unspoken needs. Samir's blend of creativity, proficiency, and technical knowledge is unsurpassed in the industry.

Cloud Hosting, Disaster Recovery, & Security



Resilient Hosting:

Revize uses Amazon Web Services (AWS) Hosting Infrastructure that is offered in multiple Regions in the United States and around the World. Each Region is a separate geographic area completely isolated one from another. AWS Regions are connected to multiple Internet Service Providers (ISPs) and to a private global network backbone to offer lower cost and more consistent cross-region network latency when compared with the public internet.

A region has multiple, isolated locations known as Availability Zones (AZ). Availability Zones are inter-connected through low-latency links. A Virtual Private Center (VPC) spans across multiple availability zones.

Revize Web Sites are hosted on a Virtual Machine running Windows Server operating system with Internet Information Service (IIS) as a Web Server. Virtual Machine is an EC2 instance in AWS terms is hosted inside a VPC in an availability zone of a pre-selected region. A number of EC2 are provisioned in multiple locations across the United States inside a Virtual Private Center isolated from the Internet and the rest of Amazon Web Services infrastructure to offer faster access to the end-users and to minimize the impact of an outage, whether of a specific EC2 instance, an availability zone or an entire AWS region.

Disaster Recovery:

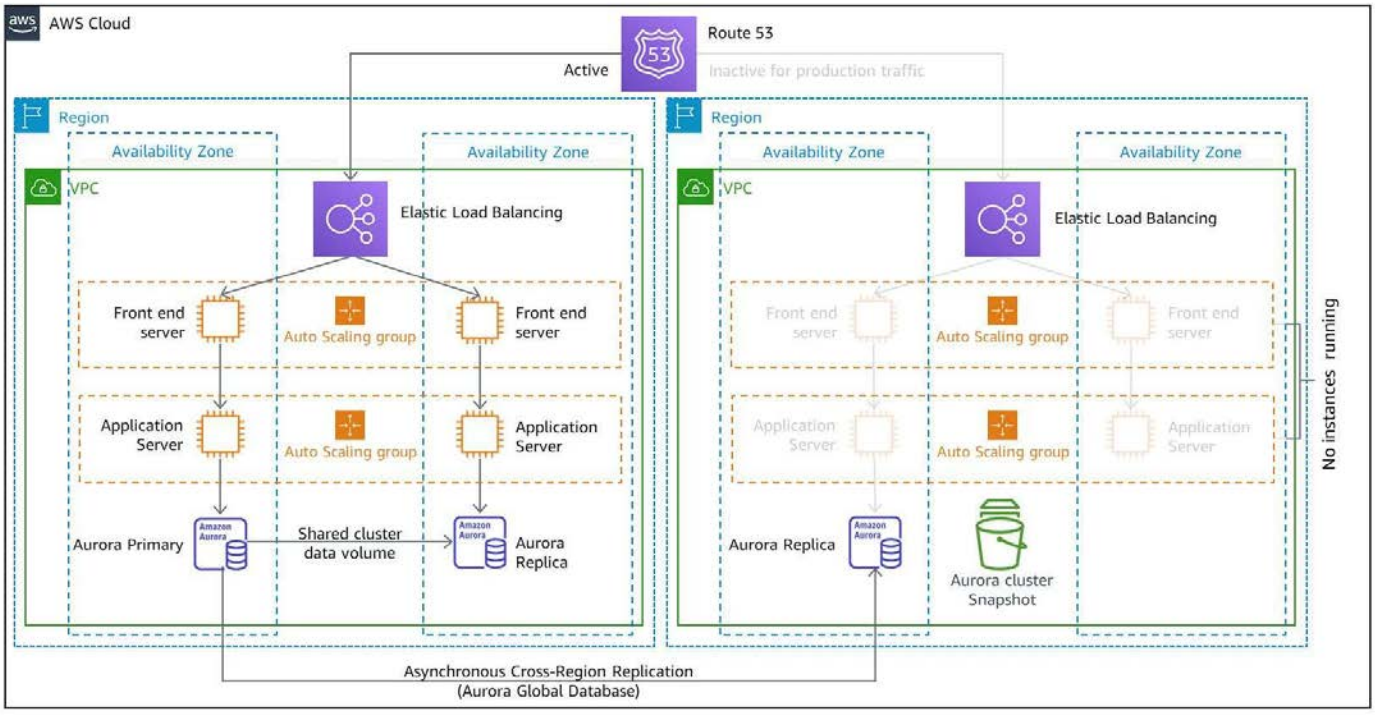
Windows Web Server virtual disk or EC2 Elastic Block Storage (EBS) is backed up on evry night at 10 PM EST. Additionally, the snapshots or virtual disk backups are subsequently automatically copied between regions to enable cross-region recovery capabilities.

Should a Web Site hosted by Revize and monitored in automated fashion become unavailable, another EC2 instance can be restarted. When that proves insufficient EC2 instance will be reprovisioned in the same availability zone, a different availability zone, or, in a different region using the latest snapshot in the matter of a couple of minutes.

The incoming request, from the Internet traffic, is bound to a static IP address or Elastic IP in AWS terms that leverages NAT to forward traffic to a running EC2 instance private IP address. In the case of an EC2 instance re-provisioned in the same region, whether in the same or a different availability zone, Elastic IP is re-assigned to the new EC2 instance.

Elastic IP is represented to the public internet using CName or A-Host domain name services entry. In case of an EC2 instance or an availability zone failure, no adjustment to domain name service is required. In the case of a regional, wide-spread AWS outage, an EC2 instance is reprovisioned in a different region, re-using the latest snapshot preserving the content as of the last automated backup. However, an Elastic IP is specific to the region and, therefore a change to CName or A-Host configuration is required to point to the disaster recovery regional Elastic IP.

Revize Disaster Recovery Infrastructure Diagram



Security

Revize takes website security very seriously and we provide our clients with the very best website protection protocols. Our data centers are located on secure premises equipped with card-reader access, security cameras and guards on duty 24/7 to ensure the physical protection from unauthorized entry.

Revize/AWS complies with SOC 1/ISAE 3402, SOC 2, SOC 3, FISMA, DIACAP, and FedRAMP, PCI DSS Level 1, ISO 9001, ISO 27001, ISO 27017, ISO 27018 and other programs. Revize is responsible for securing the content, access to the content on the web server, to snapshots, configurations and infrastructure as a whole.

Our web and network administrators monitor network activity 24–hours-a-day to ensure system integrity and protection against threats such as Denial of Service (DoS) attacks that could corrupt your website or block user access. Maintaining the secure configuration of our web servers is managed through application of appropriate patches and upgrades, security testing, vulnerability scans, monitoring of logs, and backups of data and OS.

Security Controls, SSL, and Active Directory (LDAP)

- Anti-malware software such as antivirus software, anti-spyware software, and rootkit detectors
- Shield Plus Security Bundle to prevent DDoS attacks
- Intrusion detection and prevention software (such as file integrity checking software)
- Host-based firewalls to protect CMS servers from unauthorized access
- Patch management software
- Security and Authentication Gateways
- Content filters, which can monitor traffic to and from the web server for potentially sensitive or inappropriate data and take action as necessary
- HTTPS (Hypertext Transfer Protocol over SSL), which provides encryption and decryption for user page requests that require more secure online transactions
- SSL (Secure Socket Layer) provides an encrypted end-to-end data path between a client and a server regardless of platform or OS
- If you have an existing SSL Certificate we can transfer it to the new website. Otherwise, if included, we will install a new SSL Certificate upon go live.
- Active Directory (LDAP) is compatable with the Revize CMS. It can be set up in a variety of configurations. As part of the process we will work with you to determine which configuration will best meet your needs.

Application Security Authentication

- Role-Based Security: Role-based authentication to add individual user accounts and assign them system roles like Editor, Developer, Administrator, Workflow Approvers, etc., or department roles and empower the department to assign specific roles to users.
- Permission-Based Security: Ability to set up Content Owners/Editors and restrict which site pages they are authorized to update
- Global & Department Workflow Management: Create workflow management and approval processes where authorized department personnel become approvers

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Did you know?
Revize will host your website and CMS in at least two completely separate geographic locations!

Maximum Response Times

- 1 hour for crisis issues
- 4–6 hours for critical issues
- 24 hours for normal issues

Revize Support

- 8 a.m. – 8 p.m. EST Phone Support (Monday thru Friday)
- 24/7/365 Portal & Email Support
- Dedicated support staff to provide assistance and answer all questions
- New and existing user training
- Training refreshers
- Video tutorials and online training manual
- Automatic integration of enhancements
- E-Newsletter module support
- Automatic upgrades of CMS Modules such as Calendar, Document Center, etc…

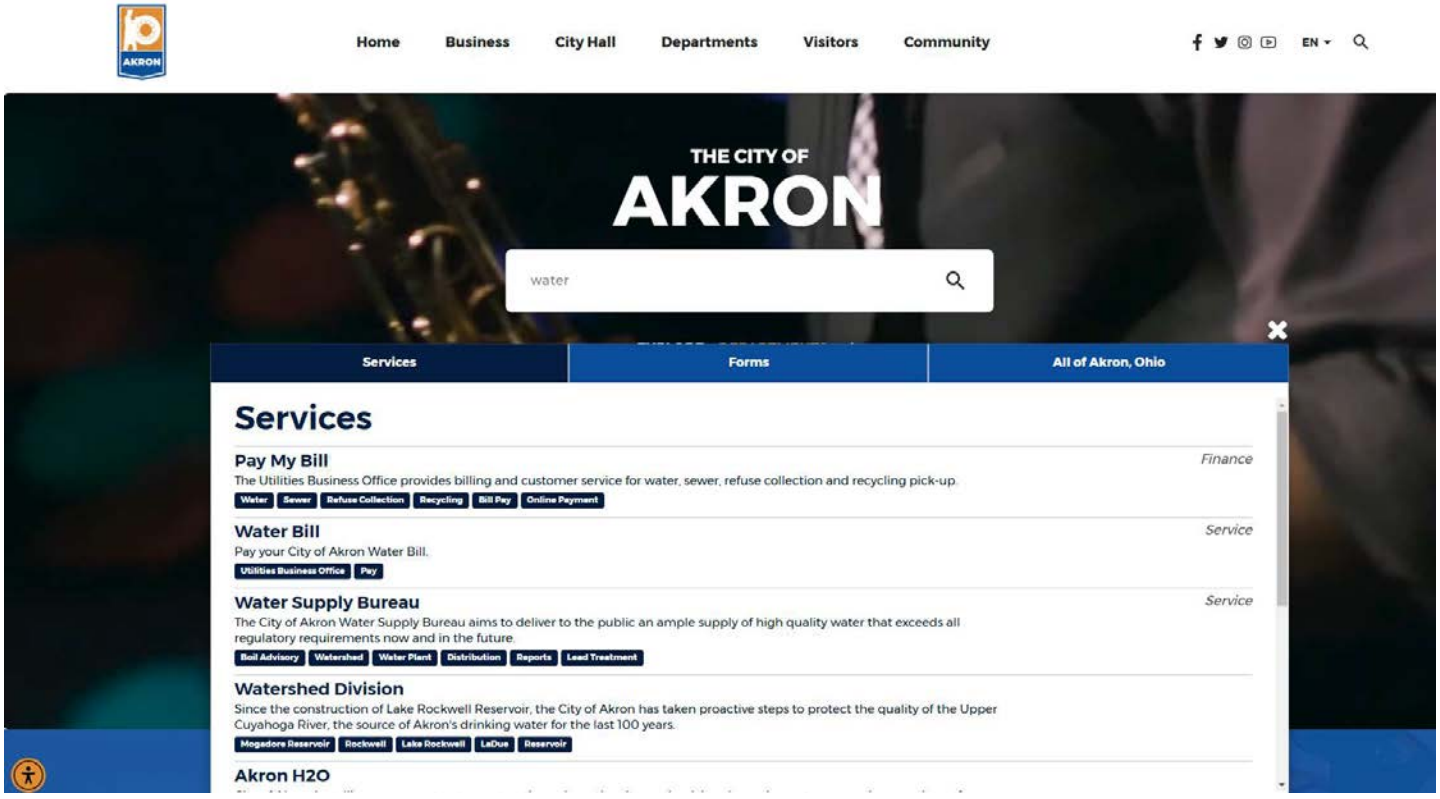
Software Maintenance

Revize rolls out two new versions of the Revize CMS, and six to eight product updates every year. The Revize CMS is continuously enhanced to keep pace with cutting edge technologies and industry trends. When a software update or new version is rolled out, Revize will automatically update all servers used by our subscription service clients.

“As a Revize client, you will receive full access to all enhancements to the core components and modules in the Revize CMS at no additional charge.”

Curated "Smart" Search

Your new Revize website will include our curated “Smart” search feature that you see on this site www.akronohio.gov. This search gives you full and instant control over your site search results. Your website editors can to decide the exact search results based on what’s typed in. This control allows you to direct traffic to specific pages on the site (or outside of the site if you want). Rather than being subject to the whims of Google/Bing. It also allows search terms to still come up based on synonyms and misspellings. For example, start typing something like “Water” into the search and you’ll notice the functionality brings up results for “Water and Sewer.” But, you can also type in “H2O” (a synonym) and the same result will come up. Perhaps even more helpful, if you type in “wtr” (a bad misspelling), the relevant result still comes up. So this is a great feature that will allow you to have total control over the search.



Revize AI ChatBot

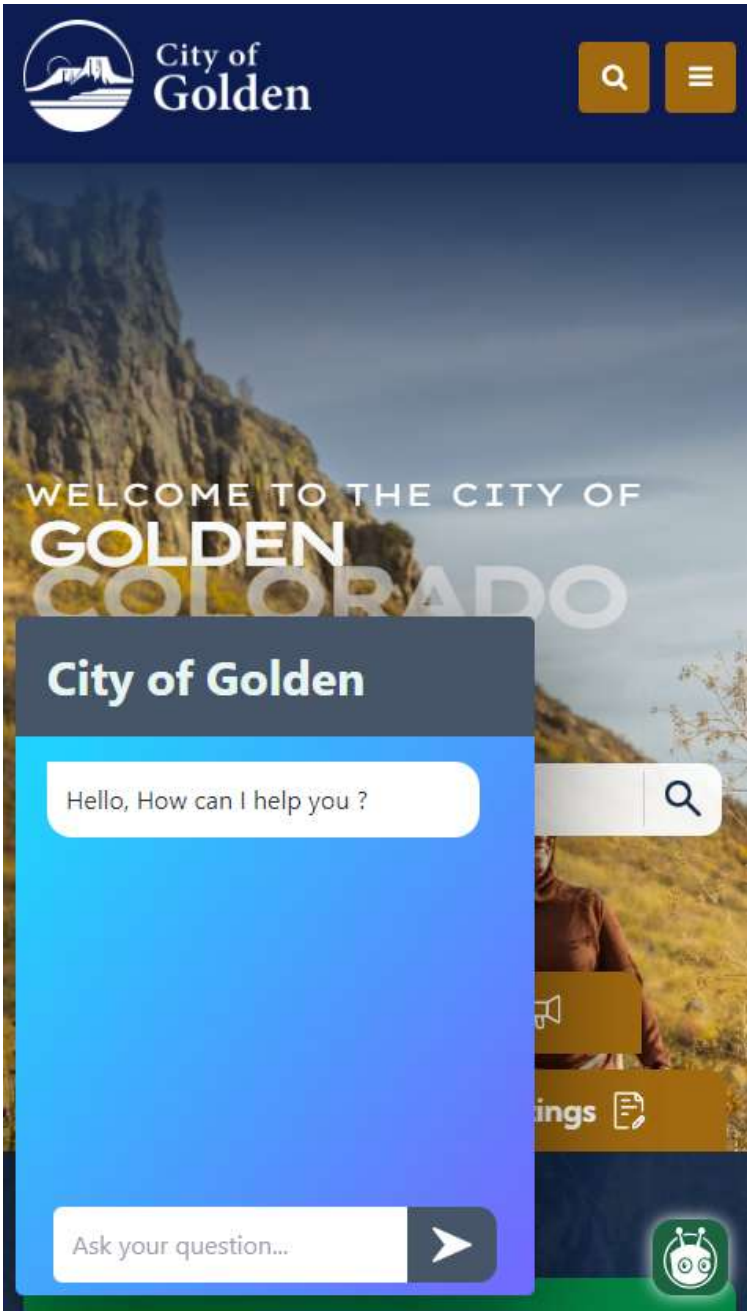
As part of Revize's fully integrated lineup of features, we are excited to introduce the latest in AI Chat technology.

The Revize ChatBot allows your visitors to instantly find answers to their questions – without the need to search, find, and read an entire webpage.

Users simply type in their question, and the Revize ChatBot provides a detailed response in seconds!

Unlike some third party live chats that force admins to pre-populate content, the Revize ChatBot is quite different. It learns the content of your website and provides answers based on that content.

Admins can even configure the ChatBot to ignore certain content of your website and learn content of other websites.

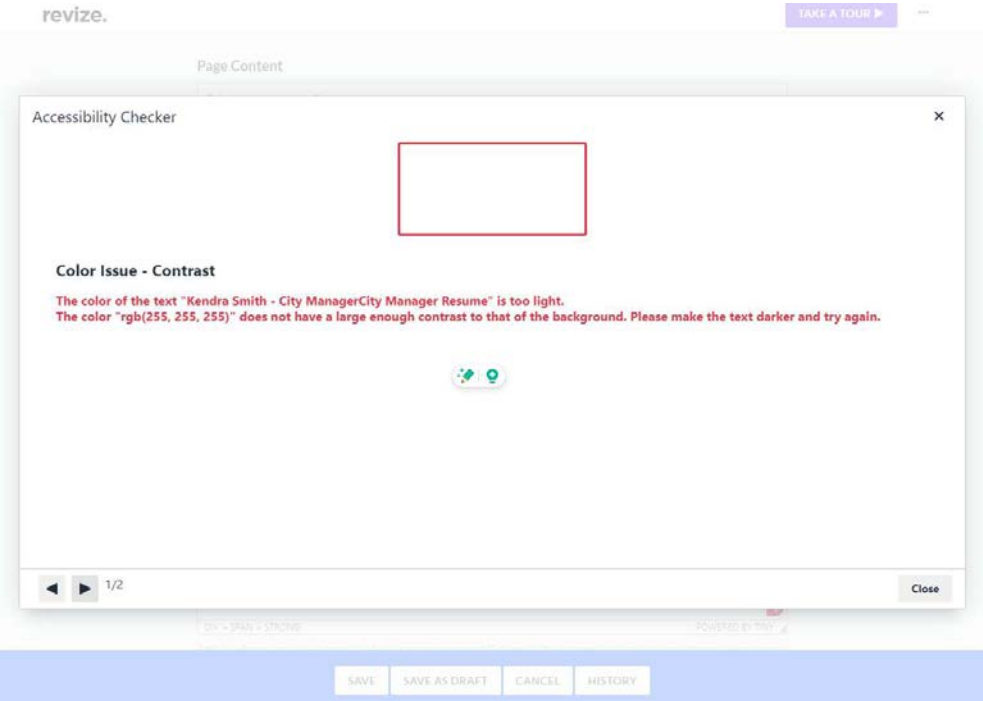


Keep in mind, Revize developed this feature ourselves. Which means the maintenance, updates, tech support are all handled directly by Revize. No need to deal with another vendor.

Accessibility and Compliance

WCAG Scan and Remediation Service

Revize has launched nearly 3,000 websites nationwide, with ADA Accessibility being a top concern of nearly all of our recently launched client websites. Revize will build a highly compliant website to meet WCAG 2.1AA guidelines for accessibility compliance. Revize also includes an accessibility checker within the Revize CMS editor. This utility will alert uses of a suspected accessibility issue. CLIENT is responsible for ensuring posted content is ADA compliant (Docs, PDFs, images, etc).



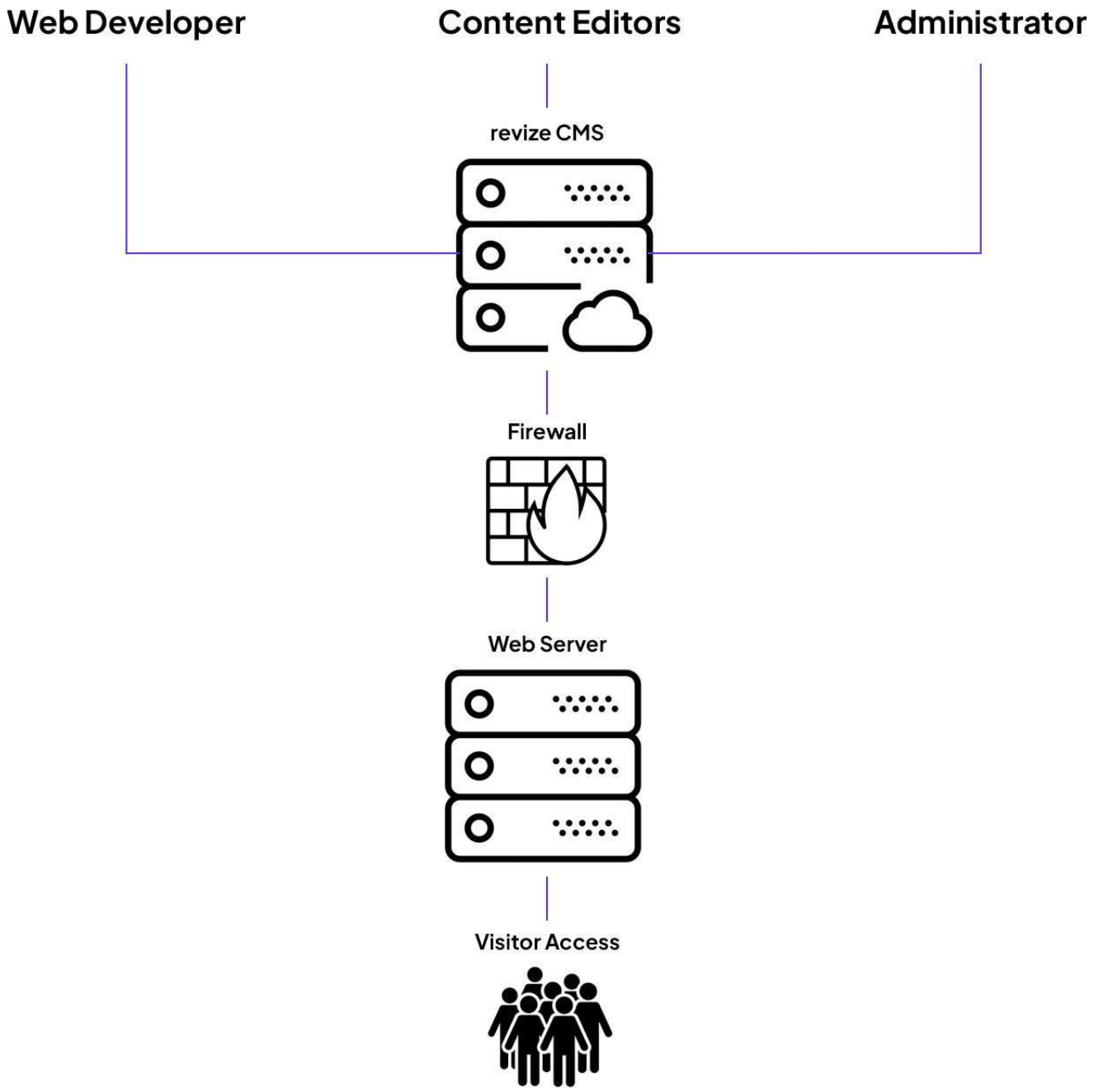
One of the elephants in the room when it comes to WCAG compliance as it relates to government websites – “Who will be fixing any future compliance issues with our website after go live?”

Good news, Revize can take on that task for you. As an optional service, Revize can include our WCAG remediation service. This will include a two or four annual scans and up to 20 custom development hours from one of our WCAG remediation specialists.

Revize Technology Architecture

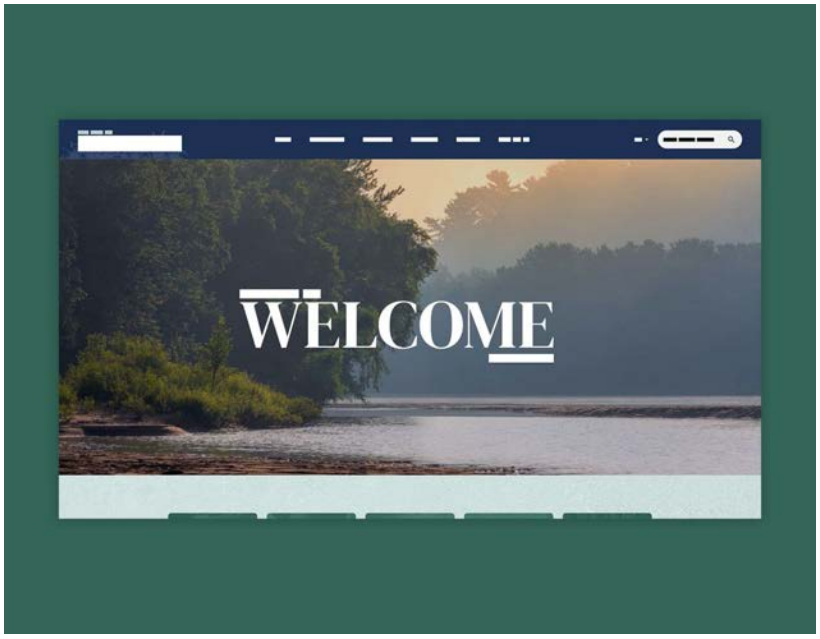
The Revize Government CMS is a standards-based, open architecture software product without any proprietary restrictions. Revize uses leading technologies to avoid integration problems with existing systems and comes complete with its own Integrated Publishing Engine, Embedded Relational DB, JSP/Servlet Engine, and Application Server.

Revize Intelligent Publishing WCM



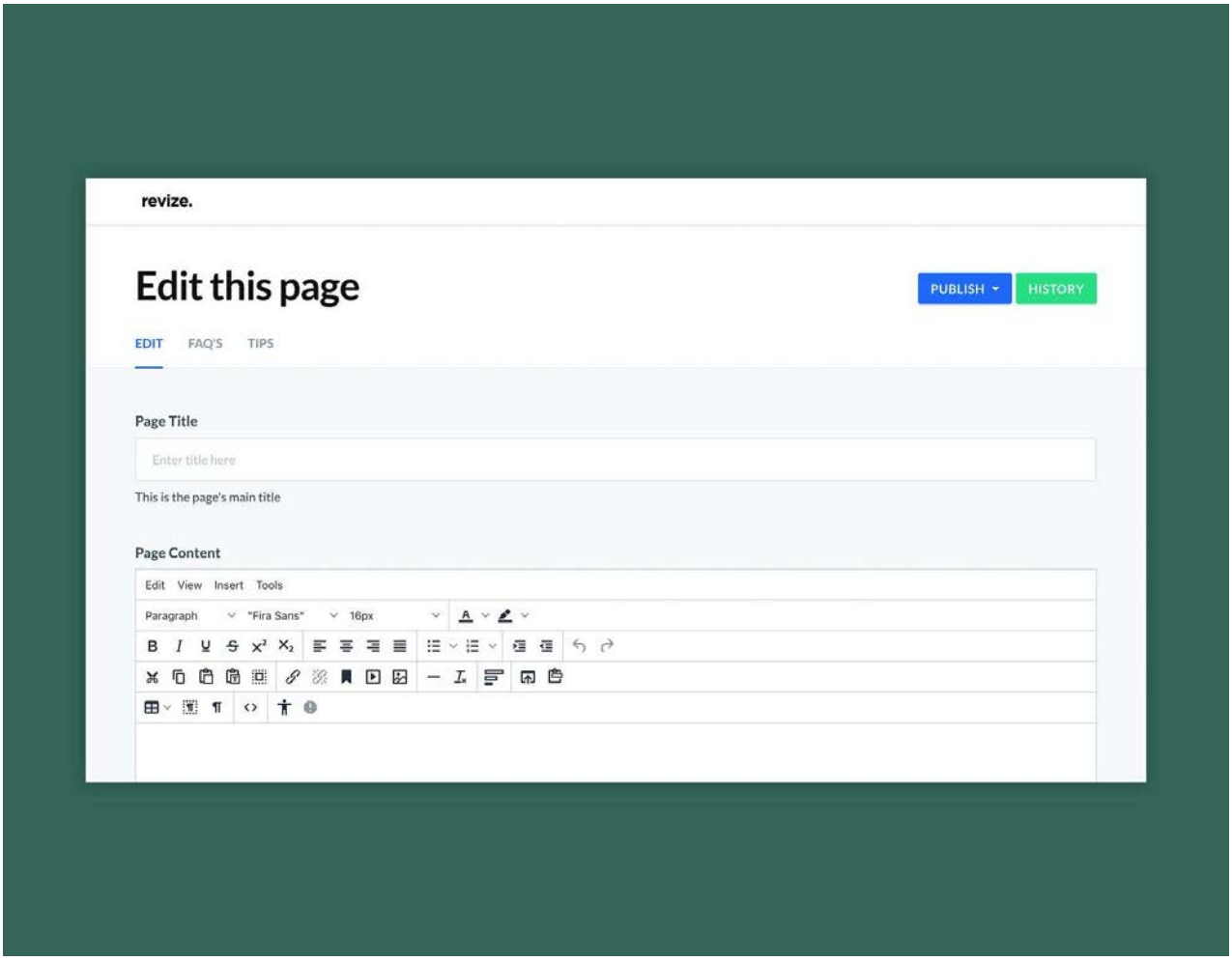
Revize Government CMS User Interface

1. Revize CMS User Interface Home Page



2. Users simply browse to a page that they want to edit, select the Login button, and login with their user credentials. Edit buttons appear on the page after the Login executes. Based on users roles/permissions, the appropriate buttons are displayed.

3.The input form appears as shown below. Content Editors can change banner, page heading and the content displayed in the center of the page. Notice the content is changed using a “Word Like” editor.



After the page is “saved”, the page can be sent to an approver for review or immediately published to the web site.

revize.
The Government Website Experts

Revize Quote

Project Cost

Phase 1: Kickoff Meeting and Discovery/Project Planning
Phase 2: Design Mockups/Wireframes One concept, unlimited rounds of changes for each of the following - Homepage, Inner Page, Department Landing Page
Phase 3 & 4: HTML Development & Revize CMS Integration Set-up all CMS modules listed on the following page with linking to any additional 3rd party web applications
Phase 5: QA Testing & Custom Development
Phase 6: Sitemap Development Content Migration Site map development and migration according to new sitemap including spell checking and style corrections – Up to 300 webpages and 1,000 documents
Phase 7 & 8: Revize CMS Content Editor Training & Go Live

Total Project Cost $23,900.00

Annual Fee

	Total
Annual Tech Support, Revize CMS License and Hosting Fee: Unlimited tech support, Unlimited CMS users, up to 30GB website storage, 100GB monthly bandwidth. This fee will increase 0% for the first five years. Free redesign provided in year 5	**$7,900.00**

Optional Add-Ons

Additional Features/Services

	Total
Annual WCAG Scan and Remediation Service (Annual Fee): Includes up to 2 scans per year with up to 10 remediation hours included	$2,400.00
Revize AI ChatBot (Annual Fee) With automatic retraining and backend admin access	$3,400.00
Revize Email Newsletter (Annual Fee) Up to 50,000 email sends per month	$2,900.00
Mobile App (Year 1 Cost) $3,400 Annual Fee Starting Year 2	$6,500.00
Logo Design Includes 3 concepts. Client picks one for up to 3 rounds of revisions	$5,500.00
Online Interactive Forms with Bookables (Year 1 Cost) $1,500 Annually Starting Year 2	$4,400.00

Optional Payment Plan – The Revize Client First Plan

The Revize Client First Plan offers local governments an alternative payment plan that makes it easier to purchase a new website on your budget and spreads the one-time project design and development costs over a longer period of time.

Through a minimum three-year contract, The Revize Client First Plan dramatically lowers the one-time project development and start-up costs of launching a new website. What Revize does is combine the one-time and recurring fees and spreading them over the life of the contract. And because we value our continuing relationships with our customers, those who extend their contract beyond the three-year minimum will receive a redesign at the end of their fourth year with Revize Free of Charge.

Optional Payment Plan – Three Year Payment Breakdown – Interest Free

Year 1	**1/3rd of project costs + Annual Hosting, Support, Maintenance**
Year 2	**1/3rd of project costs + Annual Hosting, Support, Maintenance**
Year 3	**1/3rd of project costs + Annual Hosting, Support, Maintenance**
Year 4	**Annual Hosting, Support, Maintenance (Optional) Includes Free Redesign**

Included Features

The Following Applications & Features will be integrated into Your Website:
In addition to the Government Content Management System that enables non-technical staff to easily and quickly create/update content in the new web site, Revize provides a suite of applications and features specifically designed for municipalities. All of those apps and features are fully described in the following section. The applications and features are grouped into five categories:

Citizen's Communication Center Apps

- Notification Center with Text/Email Alerts
- Bid Posting
- Document Center
- E-Notify with Text/Email Alert
- FAQs
- Job Posting
- Multi-use Business Directory
- News Center with Facebook/Twitter Integration
- Online Forms
- Photo Gallery
- Quick Link Buttons
- Revize Web Calendar
- "Share This" Social Media Flyout App
- Language Translator

Citizen's Engagement Center Apps

- Citizen Request Center with Captcha
- Curated "Smart" Search
- Online Bill Pay
- RSS Feed

Staff Productivity Apps

- Agenda Posting Center
- Job Posting App
- Image Manager
- iCal Integration
- Intranet
- Link Checker
- Menu Manager
- Online Form Builder
- Staff Directory
- Website Content Archiving
- Website Content Scheduling

Site Administration and Security Features

- Audit Trail
- Auto Site Map Generator
- History Log
- URL Redirect Setup
- Roles and Permission-based Security Mode
- Secure Site Gateway
- Unique Login/Password for each Content Editor
- Web Statistics and Analytics
- Workflows by Department

Mobile Device and Accessibility Features

- Font Size Adjustment
- Alt-Tags
- Responsive Website Design (RWD)

Revize Support Includes

- 8 AM – 8PM EST Phone Support (Monday thru Friday)
- 24/7/365 Portal and Email Support
- Staff provides assistance and answers all questions
- Dedicated support staff
- New/existing user training
- Free Training Refreshers
- Video tutorials and online training manual
- Automatic integration of enhancements
- E-Newsletter Module support
- Automatic upgrade of CMS modules, such as Calendar, Document Center, etc.
- Four major CMS upgrades per year
- Software and modules upgrades (automatic install)
- Server hardware and OS upgrades
- Immediate bug fixes/patches
- Round the clock server monitoring
- Data Center Network upgrades
- Security and antivirus software upgrades
- Firewall and router upgrades
- Bandwidth and network infrastructure upgrades
- Remote backup of all website assets
- Cloud backup of all website assets
- Quarterly Newsletters on major feature updates
- Regular webinars on CMS features and usage

Did you know?
Revize updates your Content Management System an average of 4 times per year!

Citizen's Communication Center Apps

Document Center App

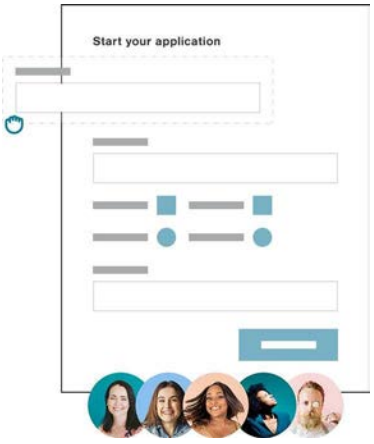
With the Document Center App, Revize helps clients save countless hours of employee time and resources. Using this module, you can create and archive the documents your site visitors require, like applications, brochures, manuals, policy and data sheets, research papers, meeting minutes, and more. By providing all of your documents online, your site visitors can access them 24/7 – usually within two clicks -- without incurring printing or postage costs. Skip the hassle and save money with the Revize Document Center.

FAQ's

FAQs make it easier than ever for site visitors to find quick answers to common questions, significantly decreasing the number of calls coming into your switchboard daily. Within six weeks of a Revize website launch, our clients typically experience a significant decrease in daily phone calls. Support your community and relieve your employees with the FAQ App.

Job Posting

Revize's Job Posting App enables site visitors to view and apply for open positions virtually. Postings are removed automatically based on the job expiration date entered by HR personnel. Provide as much detail as you need, and link or upload any number of files describing the position. With the form-fill interface, new job openings can be posted in minutes by non-technical staff. Connect employers and employees with the online Job Posting App.

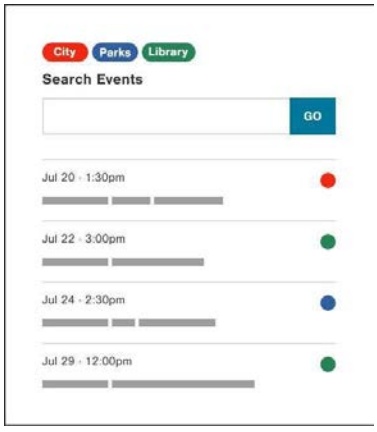


E-notify

The E-Notify App keeps site visitors informed. Web users can receive text and email notifications when a webpage changes. Many of our municipal clients include a notification option on their Meeting Minutes and Meeting Agendas pages so interested citizens can sign up for automatic updates on new postings.

Interactive Map

The user-friendly Revize CMS pairs perfectly with the Revize Interactive Map App, ensuring that the real world is as easily navigable as your website. Buildings, parks, bike paths, mass transit stations, nearby businesses, tourist attractions, parking lots, voter polling locations, and more are incredibly easy to identify with the familiar Google Maps interface highlighted with Pins.



Calendar App

The Master/Sub Calendar is a user-friendly tool that enhances usability and encourages the communication of events both internally and externally. It provides visibility and transparency for activities, meetings, and events with a visually appealing display and easy-to-find event contact information. The Calendar App is customizable to user preferences and boasts a Monthly, Daily, Weekly, or Listing View. Save time with the ability to insert recurring events; a perfect solution for repeating Board and Council meetings.

Notification Center

You can't control Mother Nature. However, you can protect your community from her wrath. By posting emergency notifications on your home page, another webpage, or throughout your site, this module allows your webmaster to accurately explain the situation and instruct members of your community on current protocol. In the wake of a natural disaster, the Notification Center is an essential tool to ensure safety and rehabilitation.

Bid Posting

Make sure your government agency is receiving the best possible vendor options for community projects with the Revize Bid Posting App. It provides a simple and convenient online method for vendors to see what your community is looking for and select the best bid choice for community projects. With options to specify the open and close dates for bid opportunities, our bid posting app makes it easy to automatically post and remove any bid from the website. Keep timelines, dates, and quotes open to the public and stay on top of projects and potential vendors.

Business Directory

Ideal for municipalities, chambers of commerce, or any membership organization, this module allows you to easily create and maintain a searchable directory for members and/or businesses within the website. Listings can easily be added, removed, and categorized by non-technical staff in a simple table interface.

News Center with Facebook Integration

The News Center is the news area on the homepage of your website. Many of our municipal clients include an email/text notification option on their Meeting Minutes and Meeting Agendas pages so interested citizens can sign up for automatic updates anytime there is a new posting. The News Center can integrate with Facebook so that news items are automatically posted to Facebook from the website, making life easier for your webmaster.

Online Interactive Forms

Using the Interactive Forms App, you can create -- from scratch -- an unlimited number of custom online forms on any page of your website. The beauty of the app lies in its simplicity. It enables site visitors to fill out and manage forms online in their browser without having to download or print documents. These forms can be used to have visitors contact you with questions, comments, and requests, give feedback, volunteer, sign up for various events, apply for permits, and so much more. Save your staff time and money by automating manual form processes with Revize Interactive Forms.

Quick Links

The Quick Links module empowers site visitors to navigate to their areas of interest, much like FAQs. Examples for users: “Where do I… Get Registered for Summer Camp.” “Where do I… Get a Marriage License.”

Sharing App

The Revize Sharing App provides a one-click drop-down to multiple social media and utility buttons. A common widget found on the web, it is intuitive and easy to use.

Sliding Feature Bar

This feature enhances the visual appeal of your website. It helps to break up pages with an interesting slide bar that can be populated with any subjects or areas to which you’d like to draw attention. For example, you may want to feature Parks & Rec; Landmarks and Tourist Attractions.

Translator

Revize integrates the Google Translator into your website template and translates from English to over 100 international languages. Provides users a large visual display at the top of the web page to choose any language to convert the text into and enables site visitors of all backgrounds to find the answers they seek. Promote inclusivity in your community with the Translator module.

Citizen's Engagement Center Apps

Public Service Request App

This app allows site visitors to submit requests online based on a map view. Each time an issue is submitted, a staff member will receive an email notification. From there they can respond directly to the requests and users can track their requests to completion. Photo submission, automatic escalation, mobile app integration, and archived reporting make this one of our most powerful features!

Citizen Request Center

The Citizen request Center allows customers, residents, participants, students, or any website visitor to post requests online. By the use of a drop-down menu, individuals can forward the request, idea, or comment to the party of interest. The item is then forwarded via email to the proper recipient. You can add or delete department names as well as individuals in the drop-down menu at any time. Captcha is integrated to ensure each request is genuine and not spam.

Public Records Request Tracker

The Public Records Request Tracker allows the public to order copies of the public records maintained by a municipality. The request is routed to the record custodian within a department and an automated response is generated with a unique tracking number. The system allows the full tracking, correspondence, and online handling of all public record requests. The record request form is flexible and customizable for every municipality.

Citizen Connect

The Citizen Connect App helps open the lines of communication between administrators and their constituency, increasing transparency and interaction. It is a blog that features the option for user feedback comments (comments can be moderated before being published to the website).

Facilities Reservation App

This app allows the display of conference rooms, parks, shelters, and their amenities to manage their availability. A website visitor can search for facilities by type available, review the amenities for each facility, and easily reserve the facility, including the option to pay for its use. Reduce the administrative workload and encourage community engagement with the Facilities Reservation App.

Online Bill Pay

Online Bill Pay enables clients to set up secure online payment processing for credit card transactions using Stripe. This integration can be used for utility and tax payments, purchasing items online, making donations to non-profit organizations, and more.

Rss Feed

The Revize CMS allows customers to generate RSS (Real Simple Syndication) feeds for any genre of news or events. RSS feeds are a trusted way to communicate important information to site visitors while ensuring that they remain engaged with your organization and regularly return to your site.

Staff Productivity Apps

Agenda Builder

With the cutting-edge Agenda Builder app, users can automate the assembly of meeting agendas and minutes, saving your webmasters time for more important tasks. The app allows you to easily create, edit, and manage agendas, adding notes to generate official meeting minutes with a single click. Track user access, assign unique roles for each board or commission, and monitor critical meeting data for future use. Controlled access and permissions ensure secure collaboration. Take control of your time by streamlining your meeting creation and management with the Agenda Builder.

Agenda Posting Center

Using this multifunctional app, you can upload agendas, meeting packets, meeting minutes, and more. All materials will be in one area on your website for easy access and review before, during, or after each meeting. Old meeting agendas and information are archived per meeting for quick access.

Image Manager

The Image Manager allows approved staff to upload images from their computer or network folders. The simple interface helps users upload new pictures and stores the uploaded pictures for reuse. Each department can create unique image folders and organize image libraries by department. Obsolete images can be deleted from the image library.

Intranet

Provides a Dynamic CMS-enabled area with secure login to build out an Intranet for employee-specific information only. It benefits your employees to have an internal organization landing page that can be updated with news, events, alerts, and many of the same modules used on the extranet. Support your employees and ensure their success with the Revize Intranet capabilities.

Link Checker

When a new link is created, the Revize system checks whether the URL (link) is valid. If not, an error message will be displayed. The useful Link Checker benefits the webmaster by double-checking bad links before they are saved and displayed on your website. It provides a second line of defense for your staff.

Menu Manager

The Menu Manager allows approved content editors to add or edit site-wide top navigation, and department or section-specific links (e.g. left or right navigation). This feature gives you control to change and update the Navigation menus of your website for continuous improvement.

Newsletter App

The system empowers non-technical staff to create attractive, informative newsletters and disseminate them with one click to everyone on your distribution list. Activity metrics include displaying bounced and successful emails to help validate email addresses. The application offers the ability to import contact lists, upload images, add groups, assign contact lists to those groups, and export lists.

Online Form Builder

The Online Form Builder provides a quick and easy alternative for users to communicate with you, offer valuable feedback, and complete tasks online. The forms can be used to have site visitors contact you with questions, comments, and requests, give feedback, volunteer, or sign up for various events, activities, and programs.

Web Content Archive

Your website history will never be a mystery, because all content edits for your site are archived on the Revize CMS database for reference and future use. Your webmasters can click the History button to view previous versions of a particular page or content blocked from your site.

Web Content Schedule

The Web Content Schedule feature eliminates the possibility of promoting dated or past events on your site after the event has passed. The guarantee that accurate information is displayed on your website ensures you will never undermine the perceived accuracy and currency of the site's content with your audience.

Audit Trail

This is a crucial administrative tracking tool that provides reports on the content change activities of any webpage within the system. The administrator can gauge how often the site is updated, which departments are most active, and use the audit trail for data recovery, if necessary.

Auto Sitemap Tool

The Revize CMS provides this tool to generate a sitemap automatically. Whenever a new page is added or deleted from the system, the sitemap will republish to adapt the change. An up-to-date sitemap is critical to boost the ranking of your website on different search engines.

History Log

With the History Log, administrators can view all the archived versions of any web page and restore any old or archived page. It is a useful feature for referring to any archived legal documents or press releases.

Roles/Permission Setup

Our CMS uses a role-based authentication system in which you can add individual user accounts. Then, assign system roles like Editor, Developer, Administrator, Workflow Approvers, etc. Or, you can add roles for each department and assign department-specific roles to each user.

Secure Site Gateway

Provides a secure login area for either users of an intranet or users to access information unavailable to the general public. Once users are set-up with a secure login ID, they can manage their password changes as needed.

Website Statistics

Revize integrates Google's Web Analytics tool to track the number of site visits, website traffic sources, and more. Your website administrator can run various reports to collect important data on the usage of your website.

Workflows By Department

Workflows offers a method for Supervisory Oversight of content updates. The process allows an authorized "approver" to compare the current page with the proposed new page content (side-by-side) for easy review and comparison.

Mobile Device and Accessibility Apps

Alt-Tags

Use of alt tags for images, a required part of the Revize CMS image manager feature, allows visually impaired individuals to understand the content of the image. Alt tags are imperative for website accessibility and ADA compliance.

Font size adjustment

Provides the ability for users to change font size by clicking a button to reach their desired size. Helps those with impaired vision to easily read information on your website.

Responsive Web Design

Revize uses pixel-rendering Responsive Web Design to accommodate better viewing of text and graphics for any size screen, i.e., smartphones, tablets, iPads, and iPhones. A must-have feature in a world of smartphones.

"Our innovative solutions are custom-tailored to meet the needs of each individual client."

revize.

Thank you

For Considering revize

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Disclaimer

Scope of Proposal: The information contained in this proposal is for general informational purposes only. The content of this proposal is subject to change without notice, and revize LLC reserves the right to modify, amend, or alter any part of the proposal at its sole discretion. The services, deliverables, timelines, and pricing outlined herein are estimates and are subject to further negotiation and final agreement.

VILLAGE OF ALGONQUIN

PUBLIC WORKS DEPARTMENT

– M E M O R A N D U M –

DATE: February 17, 2026

TO: Tim Schloneger, Village Manager
Committee of the Whole

FROM: Nadim Badran, Deputy Village Manager/Public Works Director
Cliff Ganek, Deputy Director of PW/Village Engineer

SUBJECT: Watershed Plans – Woods Creek & Jelkes

The Woods Creek Watershed-Based Plan (2025 Update) and the Jelkes Creek–Fox River Watershed-Based Plan (2025 Project Updates) provide the Village of Algonquin with an updated and coordinated framework for watershed protection, stormwater management, and water quality improvement. Both plans build upon IEPA-approved watershed plans adopted in 2013 and incorporate updated field inventories, implementation tracking, and refined project prioritization. Together, they document significant progress while identifying remaining needs related to erosion, aging stormwater infrastructure, and water quality impairments, and serve as key tools for guiding future capital investments, maintenance planning, and continued eligibility for state and federal funding.

Woods Creek Watershed-Based Plan (2025 Update)

Summary

The Woods Creek Watershed-Based Plan (2025 Update) is an Illinois EPA–approved update to the Village's original 2013 watershed plan and serves as the primary long-term framework for watershed protection and restoration within the Woods Creek system. Developed with regional partners, the update incorporates 10 years of implementation experience, updated field inventories, and current water-quality data. While the plan documents substantial progress in stream restoration, natural area enhancement, and green infrastructure implementation, it also identifies ongoing challenges related to streambank erosion, aging detention basin infrastructure, groundwater vulnerability, and phosphorus impairment in Woods Creek Lake. The plan emphasizes multi-benefit, nature-based stormwater solutions and policy alignment to guide future capital investments, protect prior improvements through maintenance, and maintain eligibility for state and federal watershed funding.

Key Findings

- Approximately 50% of assessed detention basins provide poor ecological and water quality benefits and represent significant retrofit opportunities.

- Roughly 40% of assessed stream reaches exhibit moderate to high channelization or erosion.
- Woods Creek Lake remains impaired for phosphorus, underscoring the need for upstream stormwater and nutrient management.
- Groundwater resources show long-term vulnerability, supporting increased emphasis on infiltration-based practices and reduced impervious cover.

Representative Priority Projects

- Detention basin retrofits and naturalization
- Streambank and riparian corridor restoration
- Expansion of the Green Infrastructure Network
- Green stormwater infrastructure (e.g., rain gardens, permeable pavement)
- Policy updates supporting native landscaping and reduced road salt use

Jelkes Creek–Fox River Watershed-Based Plan (2025 Project Updates)

Summary

The Jelkes Creek–Fox River Watershed-Based Plan (2025 Project Updates) provides a focused update to the original 2013 IEPA-approved plan for the Algonquin portion of the watershed. The update documents completed projects, reassesses current watershed conditions, and reprioritizes remaining actions based on a 2024 field inventory. It confirms significant implementation success since 2013 and identifies ongoing needs related to detention basin performance, streambank erosion, and the long-term maintenance of completed improvements. The update ensures that future watershed investments remain targeted, effective, and aligned with regional water quality goals and funding requirements. It is important to note while the Village assembles the Woods Creek Plan, the Jelkes Creek Plan is not assembled by the Village. Only the Village's portion of the project was updated and will be integrated to the overall plan when it is updated.

Key Findings

- 47 projects from the original plan have been completed, including detention basin retrofits and stream restorations.
- 88 detention basins were reassessed; more than half provide poor ecological or water quality benefits and remain candidates for retrofit or enhanced maintenance.
- Approximately 37% of assessed stream length exhibits high streambank erosion, particularly along Ratt Creek and Souwanas Creek.
- Riparian corridors are generally in fair condition, with targeted restoration needed in specific reaches.

Representative Priority Projects

- High-priority detention basin retrofits
- Streambank and riparian restoration in critical erosion areas
- Ongoing maintenance of completed projects
- Targeted green stormwater and other management measures
- Protection of Priority Green Infrastructure Areas

Attachments

Woods Creek Watershed-Based Plan (2025 Update)
Jelkes Creek–Fox River Watershed-Based Plan – Village Section only
Woods Creek Watershed Overview Video

Village of Algonquin

Woods Creek Watershed-Based Plan 2025 Update

Prepared by:

BAXTER & WOODMAN Consulting Engineers

www.baxterwoodman.com

5/19/2025

INTRODUCTION

The Woods Creek Watershed-based Plan was approved by IEPA in 2013 and served as a comprehensive guide to protecting and restoring the health of the watershed. In preparation for the update, a Watershed-Based Plan Joint Evaluation Form was completed on the original plan to serve as a roadmap for necessary updates that might be needed. According to that evaluation, the original plan still meets the United States Environmental Protection Agency's (USEPA's) requirements for an approved watershed-based plan, and it was determined in discussions with Illinois Environmental Protection Agency (IEPA) staff that the update be written as a stand-alone document that references the original plan and incorporates new and additional information and activities that have developed over the ensuing ten years as necessary.

The mission of the Woods Creek Watershed-Based Plan is to "*Improve water quality through refined stormwater management, flood reduction, enriched natural area management, groundwater recharge protection, utilization of green infrastructure, and control of invasive species. The goal is to enhance ecosystem benefits within Woods Creek watershed and ultimately the Fox River through education and stewardship.*" Since the original plan was approved, the members of the Woods Creek Watershed Committee (WCWC) have tirelessly worked to implement plan recommendations. The plan update will serve as a valuable roadmap to follow up on existing protection and restoration opportunities, identify and prioritize new opportunities, detail new information and accomplishments that have occurred since the plan was approved, inspire stakeholders to get or stay involved in the watershed, and help stakeholders secure grant funding for implementation of the plan and its recommendations.

In the ten years since the plan was originally approved, several major accomplishments have occurred that have affected the watershed. These include:

- The Village of Algonquin has used the plan to implement a Green Infrastructure Network to protect valuable natural resources.
- Between the Village of Algonquin, the Village of Lake in the Hills, and the Crystal Lake Park District over 20,880 linear feet of stream and 406 acres of riparian and natural areas have been restored.
- Water quality has generally improved according to water quality studies conducted by Fox River Study Group and IEPA.
- And overall Goal Report Card scores are generally high.

MEETINGS

In preparation for updating the watershed-based plan, the Woods Creek Watershed Committee (WCWC), under the leadership of the Village of Algonquin, met with numerous partners and held two stakeholder meetings dedicated to plan review, gathering additional information, and rejuvenating stakeholder engagement in the plan. An outline of meeting agendas, and a summary of what took place during each is included in **Table 1**.

TABLE 1. Woods Creek watershed-based plan update meeting schedule.

Date	Agenda	Summary
June 18, 2024 (virtual)	• Call for project/plan updates • Review inventory • Discussion and next steps: Report Cards, Project Lists	20+ stakeholders attended and participated. A lot of projects have been implemented in the last 10 years by multiple partners – discussed gathering full list of completed work plus any new additional projects that need to be added and process to submit them. Algonquin is concurrently trying to wrap up a comprehensive plan update – will adjust timeline accordingly. Discussed need to update the report cards.
Dec. 11, 2024 (virtual)	• Plan update review • Water quality updates • Project and implementation updates • Report Card results • What we're still working on	20+ stakeholders attended and participated. Updated water quality, groundwater, and designated use information was presented, followed by the results of the field inventory and the new project recommendations found in the update. A summary of completed projects by each community since the 2013 plan was finalized and shared as well as the results of the report card assessment. A list of the last few items left to fully update the plan was shared.

During the renewed planning process some comments and suggestions for the update arose. They were discussed in follow-up meetings, addressed in the updated plan as appropriate and are summarized here:

- The Village of Algonquin was working with an outside consulting firm to complete a Comprehensive Plan update, with the intent of including the updated information in this plan.

- The Village of Algonquin began conducting limited water quality sampling in 2023 across four sites and expects to continue monitoring three times per year.

- The Villages of Algonquin, Lake in the Hills, Crystal Lake, and the Crystal Lake Park District have all been actively implementing projects from the 2013 Woods Creek WBP within their jurisdictional boundaries.

This plan update is a product of these stakeholder meetings and many other meetings with municipalities, other stakeholder organizations, and individual stakeholders.

UPDATES TO THE 2013 WOODS CREEK WATERSHED-BASED PLAN

The following sections have been identified as needing to be updated to bring the original 2013 plan current to 2025. Updates have been organized by section. Each section references and corresponds to the original Woods Creek Watershed-Based Plan sections and then details any new, additional, or updated information as appropriate.

1.6 Prior Studies and Work (Update)

Various studies and research have been completed since the 2013 plan was written that provide additional insight into describing and analyzing conditions within Woods Creek watershed. A list of additional studies completed in the last 10 years and relevant to this effort is summarized below.

1. McHenry County's Groundwater Protection Action Plan (McHenry County 2009) addresses groundwater issues by presenting model policies that all local governments can consider and modify to address their individual needs.

2. The City of Crystal Lake updated their Comprehensive Plan in 2012.

3. The Illinois State Water Survey has completed several groundwater studies for the 11-county Northeastern Illinois Regional Water Supply Planning area, which includes the Woods Creek watershed (2012, 2013, 2015).

4. In February 2019, Illinois State Water Survey produced a report entitled "Water Quality Trend Analysis for the Fox River Watershed: Stratton Dam to the Illinois River" that was based on water quality data collected by Fox River Study Group.

5. McHenry County developed and adopted the McHenry County Water Resources Action Plan in 2011. The McHenry County WRAP Task Force completed an update that was adopted on November 17, 2020. The updated WRAP is a comprehensive guide designed to educate decision-makers from the county, municipalities, businesses and individuals about water resources, the potential threats to those resources, and Best Management Practices that can help protect or restore them. The County also updated their Stormwater Management Ordinance.

6. The Village of Algonquin kicked off a Comprehensive Plan update in 2023 which should conclude in 2025.

3.4 Jurisdictions, Roles & Protections (Update)

Jurisdictional Roles and Responsibilities

Natural resources throughout the United States are protected to some degree under federal, state, and/or local law. Watershed boundaries do not correlate with political boundaries and therefore, to

properly protect water and other natural resources, cooperation and coordination among all these entities is essential.

Other governments and private entities with watershed jurisdictional or technical advisory roles include the USFWS and IDNR, County Board Districts, and the McHenry Soil and Water Conservation Districts (SWCDs). The USFWS and IDNR play a critical role in natural resource protection, particularly for rare or high-quality habitat and threatened and endangered species. They protect and manage land that often contains wetlands, lakes, ponds, and streams. County Boards oversee decisions made by respective county governments and therefore have the power to override or alter policies and regulations. The SWCDs provide technical assistance to the public and other regulatory agencies. Although the SWCDs have no regulatory authority, they influence watershed protection through soil and sediment control and pre- and post-development site inspections.

Federal Government Roles and Protections

United States Army Corps of Engineers (USACE) - In the watershed area, the U.S. Army Corps of Engineers (USACE) regulate wetlands through Section 404 of the Clean Water Act. Land development affecting water resources (rivers, streams, lakes, wetlands, and floodplains) is regulated by the USACE when "Waters of the U.S." are involved. These types of waters include any wetland or stream/river that is hydrologically connected to navigable waters. The USACE primarily regulates filling activities and requires buffers or wetland mitigation for developments that impact jurisdictional wetlands. (USACE, 2020)

United States Department of Agriculture (USDA)- The United States Department of Agriculture, is the federal department responsible for developing and executing federal laws related to farming, forestry, rural economic development, and food. Agencies within the USDA include: Agricultural Marketing Service (AMS), Agricultural Research Service (ARS), Animal and Plant Health Inspection Service (APHIS), Center for Nutrition Policy and Promotion (CNPP), Economic Research Service (ERS), Farm Service Agency (FSA), Food and Nutrition Service (FNS), Food Safety and Inspection Service (FSIS), Foreign Agricultural Service (FAS), Forest Service (FS), National Agricultural Library (NAL), National Institute of Food and Agriculture (NIFA), Natural Resources Conservation Service (NRCS), Risk Management Agency (RMA), Rural Development (RD), Rural Utilities Service (RUS), Rural Housing Service (RHS), and Rural Business-Cooperative Service (RBS). The programs most relevant to the management of the watershed are discussed further in the following paragraphs. (USDA, 2020)

USDA Agricultural Research Service (ARS)- ARS is USDA's principal in-house research agency studying agricultural research and information. National Research Programs such as Nation Program 211: Water Availability and Watershed Management serve to manage water resources while protecting the environment and human and animal health effectively and safely. This goal is pursued by characterizing potential hazards, developing management practices, strategies and systems to alleviate problems, and providing practices, technologies, and decision support tools for the benefit of customers, stakeholders, partners, and product users. (USDA, 2020)

USDA Farm Service Agency (FSA)- The Farm Service Agency implements agricultural policy, administers credit and loan programs, and manages conservation, commodity, disaster and farm marketing programs through a national network of offices. The FSA's strives to support a market-oriented, economically and environmentally sound American agriculture that delivers an abundant, safe, and affordable food and fiber supply while sustaining quality agricultural communities. (USDA, 2020)

USDA Forest Service (FS)- The Forest Service works to sustain the health, diversity and productivity of America's forests and grasslands. The Forest Service seeks to support nature in sustaining life through their stewardship work. The Forest Service works in collaboration with communities and partners in providing access to resources and experiences that promote economic, ecological, and social vitality; and connecting people to the land and one another. (USDA, 2020)

USDA National Institute of Food and Agriculture (NIFA)- The National Institute of Food and Agriculture (NIFA) provides leadership and funding for programs that advance agriculture related sciences. NIFA's mission is to invest in and advance agricultural research, education, and extension to solve societal challenges. NIFA invests in and supports initiatives that ensure the long-term viability of agriculture. NIFA applies an integrated approach to ensure that discoveries in agriculture-related sciences and technologies reach the people who can put them into practice. (USDA, 2020)

USDA Natural Resources Conservation Service (NRCS)- NRCS is the primary federal agency that collaborates with private landowners to help them conserve, maintain and improve their natural resources to implement conservation practices that clean the air, conserve, and clean the water, prevent soil erosion and create and protect wildlife habitat. They provide technical assistance to the USDA Farm Service Agency for sodbuster, wetland and highly erodible land determinations and compliance issues. (USDA, 2020)

USDA Rural Utilities Service (RUS)- RUS provides much-needed infrastructure and infrastructure improvements to rural communities. This includes water and wastewater treatment, electric power and telecommunications services. These services help to expand economic opportunities and improve the quality of life for rural residents. The Water and Environmental Programs (WEP) provides loans, grants and loan guarantees for drinking water, sanitary sewer, solid waste and storm drainage facilities in rural areas and cities and towns of 10,000 or less. Public bodies, non-profit organizations and recognized Indian tribes may qualify for assistance. WEP also makes grants to nonprofit organizations to provide technical assistance and training to help rural communities with their water, wastewater and solid waste problems. (USDA, 2020)

United States Department of Transportation (USDOT)- USDOT's mission is to serve the United States by ensuring a fast, safe, efficient, accessible and convenient transportation system that meets our vital national interests and enhances the quality of life of the American people, today and into the future. (USDOT, 2020)

United States Environmental Protection Agency (USEPA)- The mission of the USEPA is to protect human health and the environment. The EPA works to ensure that Americans have clean air, land and water, and that National efforts to reduce environmental risks are based on the best available scientific information. They also work to ensure that Federal laws protecting human health and the environment are administered and enforced fairly and effectively.

As environmental stewardship is integral to U.S. policies concerning natural resources, human health, economic growth, energy, transportation, agriculture, industry, and international trade; these factors are similarly considered in establishing environmental policy. As well as ensuring that all parts of society have access to accurate information sufficient to effectively participate in managing human health and environmental risks. They also oversee that contaminated lands and toxic sites are cleaned up by potentially responsible parties and revitalized and chemicals in the marketplace are reviewed for safety. (USEPA, 2020)

United States EPA Office of Water (OW)- The Office of Water (OW) ensures drinking water is safe, and restores and maintains oceans, watersheds, and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants and wildlife. OW is responsible for implementing the Clean Water Act and Safe Drinking Water Act, and portions of the Coastal Zone Act Reauthorization Amendments of 1990, Resource Conservation and Recovery Act, Ocean Dumping Ban Act, Marine Protection, Research and Sanctuaries Act, Shore Protection Act, Marine Plastics Pollution Research and Control Act, London Dumping Convention, the International Convention for the Prevention of Pollution from Ships and several other statutes. (USEPA, 2020)

United States Fish and Wildlife Service (USFWS)- USFWS and Illinois Department of Natural Resources (IDNR), along with Illinois Nature Preserves Commission (INPC) and Forest Preserve Districts, are responsible for protecting federal and state threatened and endangered species in the watershed--which are often found on land that contains wetlands, lakes, ponds, and streams. The USFWS and IDNR play a critical role in natural resource protection, particularly for rare or high-quality habitat and threatened and endangered species. They protect and manage land that often contains wetlands, lakes, ponds, and streams. Their programs function to enforce federal wildlife laws, protect endangered species, manage migratory birds, restore nationally significant fisheries, conserve and restore wildlife habitat such as wetlands, help foreign governments with their international conservation efforts, and distribute hundreds of millions of dollars, through their Wildlife Sport Fish and Restoration program. (USFWS, 2020)

Federal Aviation Administration (FAA)- FAA's mission is to provide a safe, efficient aerospace system. The Federal Aviation Administration (FAA) plays a role in land use planning through advisory circulars such as AC 150/5200-33C "Hazardous Wildlife Attractants on or near Airports" which provides guidance on certain land uses that have the potential to attract hazardous wildlife on or near public use airports. It also discusses airport development projects (including airport construction, expansion, and renovation) affecting aircraft movement near hazardous wildlife attractants. In which they recommend land uses such as wetlands, landfills, or detention basins

should be outside of a 1-5-mile buffer zone, depending on the types of aircraft serviced by the airport. (FAA, 2020)

State Government Roles and Protections

Illinois Department of Agriculture (IDOA)- IDOA advocates for Illinois' agricultural industry and provides necessary regulatory functions to benefit consumers, agricultural industry, and Illinois' natural resources. The IDOA's vision is to promote and regulate agriculture in a manner which encourages farming and agribusiness while protecting Illinois' consumers and our natural resources. The IDOA regulates pesticides and pesticide applicators, as well as the siting and construction of livestock production facilities, reduction of soil erosion on agricultural land, and oversees the Illinois Groundwater Well Monitoring Network.

The Conservation Practices Program seeks to protect and enhance natural resources and outdoor recreation in Illinois, with the Illinois Department of Agriculture overseeing the agriculture-related components. The primary goals of the SSRP are to develop and demonstrate low-cost bio-engineering techniques for stabilizing streambanks and to encourage adoption of such practices by providing financial incentives, technical assistance, and educational information to landowners with critically eroding streambanks. The Well Decommissioning Program seeks to seal abandoned wells to protect groundwater from direct contamination.

Illinois Department of Natural Resources (IDNR)- IDNR works to manage, conserve, and protect Illinois' natural, recreational, and cultural resources, further the public's understanding and appreciation of those resources, and promote the education, science and public safety of Illinois' natural resources for present and future generations. Offices within IDNR include Architecture, Engineering and Grants; Compliance, Equal Employment Opportunity and Ethics; Grant Management & Assistance; Law Enforcement; Land Management (State Parks); Legal Affairs; Legislation; Mines & Minerals; Oil & Gas; Realty & Capital Planning; Resource Conservation; State Museums; Strategic Services; Water Resources; and World Shooting & Recreational Complex.

IDNR Office of Water Resources (OWR)- The Office of Water Resources is the lead state agency for water resources planning, navigation, floodplain management, the National Flood Insurance Program, water supply, drought, and interstate organizations on water resources. Interagency duties include the state water plan, drought response, flood emergency reports, and the comprehensive review of Illinois water use law. The Office of Water Resources consists of three Divisions: The Division of Capital Programs, the Division of Resource Management, and the Division of Regulatory Programs.

The Division of Capital Programs administers the Urban Flooding Mitigation program, water supply planning including water withdrawals from Federal reservoirs, stream gaging, and operation and maintenance of state facilities. The Division of Capital Programs is the Technical Liaison to the Illinois Emergency Management Agency and provides daily briefings on flood conditions of monitored streams throughout the state and its boundary waters during and following a flood or other disasters. The Division of Regulatory Programs administers regulatory programs over

construction in the floodways of rivers, lakes, and streams; construction in the shore waters of Lake Michigan; construction and operation of dams; construction in public bodies of water; and diversion of water from Lake Michigan. Resource Management inspects dams, gives permits, coordinates the National Flood Insurance Program and regulates floodplains.

IDNR Illinois Nature Preserves Commission (INPC)- The mission of the Illinois Nature Preserves Commission (INPC) is to assist private and public landowners in protecting high quality natural areas and habitats of endangered and threatened species, in perpetuity, through voluntary dedication or registration of such lands into the Illinois Nature Preserves System. The Commission promotes the preservation of these significant lands and provides leadership in their stewardship, management, and protection.

Illinois Environmental Protection Agency (IEPA)- IEPA works to safeguard the state's natural resources from pollution to provide a healthy environment for its citizens. Through partnership with businesses, local governments, and citizens, IEPA works to continue protection of the air we breathe and our water and land resources. IEPA Bureau of Air, Bureau of Land, Bureau of Water, and Office of Energy operate within their respective fields.

IEPA Bureau of Land (BOL)- The BOL protects human health and the environment by regulating the transfer, storage, and disposal of waste, and by overseeing the cleanup of contaminated properties. The BOL's permitting programs regulate a wide range of waste related activities, including those involving municipal waste, landscape waste, composted material, construction and demolition debris, potentially infectious medical waste, and hazardous waste.

IEPA Bureau of Water (BOW)- The BOW is committed to ensuring that Illinois' rivers, streams, and lakes will support all uses for which they are designated including protection of aquatic life, recreation, drinking water supply and fish consumption. The BOW works to ensure that every Illinois public water system provides water that is superior quality, meets all regulatory requirements, and that Illinois' groundwater resources are protected for designated drinking water and other beneficial uses. To accomplish this mission, the BOW monitors the quality of the state's surface and groundwater resources; runs a municipal, stormwater, and industrial effluent permitting program; administers a permit program for community water supplies; regularly inspects sources of water pollution and drinking water treatment facilities; responds to citizen complaints; ensures compliance with regulatory standards; and enforces applicable regulatory requirements. To assist, the BOW provides several loan and grant programs designed to upgrade or build new wastewater, stormwater treatment and public water supply infrastructure, reduce nonpoint source pollution, conduct green infrastructure projects, and protect and restore Illinois' inland lakes and streams.

IEPA is the designated state agency in Illinois to receive Clean Water Act Section 319 federal funds from U.S. EPA. The purpose of IEPA's 319 program is to collaborate with units of local government and other organizations toward the mutual goal of protecting the water quality in Illinois through the control of nonpoint source (NPS) pollution. The program includes providing funding to these

groups to implement projects that utilize cost-effective best management practices (BMPs) on a watershed scale. Projects may include structural BMPs such as detention basins and filter strips, non-structural BMPs such as construction erosion control ordinances and setback zones to protect community water supply wells. Technical assistance and information/education programs are also eligible.

NPDES Phase II Stormwater Permit Program

The IEPA BOW regulates wastewater and stormwater discharges to streams and lakes by setting effluent limits, and monitoring/reporting on results. The BOW oversees the National Pollutant Discharge Elimination System (NPDES) program. The NPDES program was initiated under the federal Clean Water Act to reduce pollutants to the nation's waters. This program requires permits for discharge of 1) treated municipal effluent; 2) treated industrial effluent; and 3) stormwater from municipal separate stormsewer systems (MS4's) and construction sites.

The IEPA's NPDES Phase I Stormwater Program began in 1990 and applies only to large and medium-sized municipal separate stormsewer systems (MS4s), several industrial categories, and construction sites hydrologically disturbing 5 acres of land or more. The NPDES Phase II program began in 2003 and differs from Phase I by including additional MS4 categories, additional industrial coverage, and construction sites hydrologically disturbing greater than 1 acre of land. More detailed descriptions can be viewed on the IEPA's web site.

Under NPDES Phase II, all municipalities with small, medium, and large MS4s are required to complete a series of Best Management Practices (BMPs) and measure goals for six minimum control measures:

1. Public education and outreach
2. Public participation and involvement
3. Illicit discharge detention and elimination
4. Construction site runoff control
5. Post-construction runoff control
6. Pollution prevention and good housekeeping

The Phase II Program also covers all construction sites over 1 acre in size. For these sites the developer or owner must comply with all requirements such as completing and submitting a Notice of Intent (NOI) before construction occurs, developing a Stormwater Pollution Prevention Plan (SWPPP) that shows how the site will be protected to control erosion and sedimentation, completing final stabilization of the site, and filing a Notice of Termination (NOT) after the construction site is stabilized.

IEPA BOW also manages the states Total Maximum Daily Load (TMDL) program. The TMDL program determines the greatest amount of a given pollutant that a water body can receive without violating water quality standards and designated uses and sets reduction goals necessary to improve impaired waters. Like a watershed-based plan, a TMDL takes a watershed approach in determining the pollutant loads that can be allowed in each lake or stream but considers both point and non-point sources. There are no TMDLs within the watershed.

IEPA administers a program to manage discharges from Combined Animal Feeding Operations (CAFOs) under their General NPDES permits. The rules target improvement of the CAFO regulations' effectiveness to help correct improper management practices. There are no permitted CAFOs within the watershed.

County and Local Government Roles and Protections

Kane & McHenry County Boards – McHenry County operates under the township form of county government. The governing body is the County Board. The primary function of the County Board is to establish the various budgets of the county funds and adopt ordinances and rules pertaining to the management and business of the county departments (McHenry County, 2020). Kane County is divided into 26 independently elected districts, with one board member elected to represent each district. The Mission of Kane County Government is to be accountable to its citizens in providing innovative and high-quality government services in an economical, fair, professional, and courteous manner to enhance and protect the health, welfare, and safety of those who live and work in Kane County (Kane County, 2024).

McHenry County Planning and Development - The primary function of the Planning and Development Department is to "facilitate orderly, safe, and resilient development, the preservation of natural and historic resources, and the creation of communities of opportunity." There is a Building Division, Community Development Division, Planning, Zoning, and Land Use Division, and a Water Resources Division; as well as several committees, commissions, and boards related to agriculture, community development and housing, historic preservation, gravel mining, regional planning, stormwater management, and zoning.

The Planning, Zoning, and Land Use Division is the point of contact for people seeking to rezone property, obtain conditional use permits, request variations, and subdivide property within unincorporated McHenry County. This division also is responsible for developing and implementing plans and studies such as the 2030 & Beyond Plan, the 2030 Comprehensive Plan, the Comprehensive Economic Development Strategy, the Fox Valley Corridor Plan, and the Green Infrastructure Plan, and the Historic Preservation Plan; as well as the Unified Development Ordinance for implementing many of the policies contained in the 2030 Comprehensive Plan which results land use, subdivisions, etc.

The Water Resources Division oversees stormwater management and planning as well as the sustainable use of the County's water supply. Public and private potable water supplies in McHenry County are 100% dependent on groundwater. This Division responds to concerns regarding site

grading, flooding, drainage, and wetland; assist property owners in obtaining stormwater management permits; and review building permits for compliance with stormwater regulations. The Division also serves as the liaison to the Stormwater Management Commission, the Stormwater Technical Advisory Committee and the Groundwater Taskforce.

McHenry County Health Department- The McHenry County Health Department participates in a broad spectrum of public health services. They oversee environmental health and permitting, animal control and records, administer a broad variety of clinical services, as well as overseeing and implementing a broad variety of public health planning and oversight. The Department's environmental health programs serve to foster safe and healthy interrelationships between residents and their environment including public beach water quality, solid and hazardous waste, drinking and surface water analysis, groundwater protection, septic system and private well oversight, and environmental health ordinances among other services.

Kane County Health Department - The Kane County Health Department offers a full array of public health programs and is certified by the Illinois Department of Public Health. Their vision is to see that every resident has the knowledge and access to opportunities to live their healthiest life possible. Their mission is to improve health outcomes by working in partnership with the community to understand the cultural, environmental, historical and social issues impacting our residents' health so we can effectively direct resources and services in an equitable and inclusive manner. They maintain a Septic System and Sewage Disposal Program that conducts inspections, educates residents, and oversees public complaint investigations. They also offer water well services for non-community water systems, including inspections, and educate residents on ground water protection and well maintenance (Kane County, 2024).

McHenry & Kane County Division of Transportation- McHenry County Division of Transportation oversees the Administration, Design, Construction, Maintenance, and Planning of transportation systems in McHenry. Some roles of the Division include defining the County's snow and ice removal policy and de-icing, roadside tree planting and replacement policy, storm sewer maintenance, street sweeping, design of transportation infrastructure, and long-term planning of transportation services. Similarly, Kane County Division of Transportation's (KDOT) mission is to provide and maintain a safe and efficient transportation system while maintaining the County's visions and values. KDOT is responsible for the maintenance, planning, design and construction of their roadways and provides technical assistance to its townships and coordinates with several different State, regional, and local agencies on transportation and land use issues.

Kane County Planning Cooperative- The Kane County Planning Cooperative is an integrated effort - between Kane County's Health, Transportation and Development planning staff to implement the County's array of long-range plans including the 2012-2016 Community Health Improvement Plan, the 2040 Long Range Transportation Plan and the 2040 Plan. The Planning Cooperative was created as the central core of the 2040 Plan's implementation strategies and has the focus of planning for the 2040 Plan's overarching theme, Healthy People, Healthy Living and Healthy Communities. The partnership is a tool to capture and distribute funding and technical assistance and an all-

encompassing planning entity that has Kane County in the best possible position to effectively sustain and plan for the future quality of Kane County (Kane County, 2024).

McHenry County Emergency Management- McHenry County Emergency Management department works to plan and train residents in disaster preparedness. This includes Natural Hazard Mitigation planning and flooding preparation.

McHenry-Lake County Soil and Water Conservation District (SWCD)- McHenry-Lake County SWCD provides technical assistance to the public and other regulatory agencies. They work to protect and maintain healthy soil and clean water for all generations. The Soil and Water Conservation District is a local resource for natural resource concerns for the residents of McHenry County. The Conservation District are actively involved with watershed planning in McHenry County, they serve as a resource for natural resources education for youth and adults and are advocates for preserving prime farmland in McHenry County. Although the SWCD has no regulatory authority, it influences watershed protection through soil and sediment control and pre- and post-development site inspections.

Kane-DuPage Soil & Water Conservation District- Kane-DuPage SWCD provides technical information to individuals and groups on methods of soil and water conservation in Kane and DuPage Counties. It is guided by a five-member board of directors elected by District residents. This board of directors, the District's staff, and the District Conservationist assigned by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) develop annual and long-range plans that direct the activities of the District.

McHenry County Conservation District- McHenry County Conservation District's mission is to preserve, restore and manage natural areas and open spaces for their intrinsic value and for the benefit of all generations. The mission and vision of the Conservation District serves to inspire respect for the land; promote sound environmental practices; promote the long-term viability of the county's biodiversity; provide opportunities for responsible use of the land in concert with natural resources; promote environmental stewardship; provide quality experiences that promote green, healthy and balanced lifestyles; connect children to nature and foster public and private partnerships.

Municipalities

Watershed Municipalities (Village of Algonquin, City of Crystal Lake, Village of Lake in the Hills) and Unincorporated Townships- Municipalities in the watershed may or may not provide additional watershed protection beyond existing watershed ordinances under local City or Village Codes. Municipal codes present opportunities for outlining and requiring recommendations in this plan such as conservation development, Special Service Area (SSA) or watershed protection fees, and natural landscaping.

For example, the Village of Algonquin currently provides additional protections within their Subdivision Regulations. Under Section 22.07 Stormwater Management, identifies:

> *B. Watershed Plans: Any watershed, wetland and floodplain protection plan approved by the Village Board shall also be followed when reviewing subdivision/planned development plans (i.e., Woods Creek Watershed-Based Plan and the Jelkes Creek-Fox River Watershed Action Plan and any future watershed plans).*

The Village plans to use the watershed plan to update its comprehensive plan. Other municipalities in the watershed are encouraged to do the same.

Water resources located on unincorporated land within McHenry County are ultimately regulated by the McHenry County Department of Planning and Development and Water Resources Division. Development affecting water resources in these townships must be reviewed by the respective agencies listed above. McHenry County passed the "Conservation Design Standards and Procedures" in 2008 which was consolidated into the Unified Development Ordinance in 2014.

Land development in McHenry County is regulated by the McHenry County Stormwater Management Ordinance (amended April 5, 2016) and by the Kane County Stormwater Management Ordinance (revised June 1, 2019) in Kane County. The ordinances are enforced by county agencies or by "Certified Communities". All the municipalities in the watershed are certified.

Ordinance Review

Protection of natural resources and green infrastructure during future growth will be important for the future health of the Woods Creek watershed. To assess how future growth might further impact the watershed, an assessment of local ordinances was performed to determine how development currently occurs in each local government. In this way, potential improvements to local ordinances can be identified. As part of the assessment, municipal governments were asked to compare their local ordinances against model policies outlined by the Center for Watershed Protection (CWP) in a publication entitled "Better Site Design: A Handbook for Changing Development Rules in Your Community" (CWP, 1998) and complete The Code & Ordinance Worksheet: A Tool for Evaluating Development Rules in Your Community (CWP, 2017).

CWP's recommended ordinance review process involves assessments of four general categories including Residential Streets & Parking Lots, Lot Development, Conservation of Natural Areas, and Runoff Reduction. Various questions with point totals are examined under each category. The maximum for the Suburban worksheet is 126 points and final scores are depicted as a percentage of the total. CWP also provides general guidance based on scores. Scores between 60 and 80 suggest that it may be advisable to reform local development ordinances. Scores less than 60 generally mean that local ordinances are not environmentally friendly and serious reform may be needed. McHenry County scored 59 points or 47%, the Village of Algonquin scored 63 points (50%), and the City of Crystal Lake scored 68 points or 54%. Although scores are relatively low, it should be noted that this assessment is meant to be a tool to local communities to help guide development of future ordinances and draw awareness to sections that might be easy to update to improve scores. Various

policy recommendations are included in the Action Plan section of the report to address general ordinance deficiencies.

3.6 Existing and Future Land Use/Land Cover (Update)

The Village of Algonquin kicked off a Comprehensive Plan update in 2023, which is still in the process of being completed at the date of this plan update. For the most recent Village of Algonquin Comprehensive Plan detailing both existing and future land use changes, please visit the Village of Algonquin's website at www.Algonquin.org.

3.11.1 Woods Creek & Tributaries (Update)

Baxter & Woodman reassessed the stream reaches within the Village of Algonquin during the field inventory for the watershed plan update. Streams and tributaries were assessed based on stream reaches, consistent with the original watershed-based plan. Methodology included walking accessible portions of streams, collecting measurements, taking photos, and noting stream conditions on Stream Inventory/BMP Data Forms as well as making map notations as appropriate. Note: stream reaches that were not reassessed are assumed to be consistent with the findings in the original plan.

Channelization (Update)

Each updated stream reach was characterized as either having little-to-no channelization (highly sinuous, no human disturbance), moderate channelization (some sinuosity but altered), or highly channelized (straightened by humans) (**Table 2; Figure 1**). Summarizing channelization on the reassessed streams, 51% (11,561 lf) of stream and tributary length is naturally meandering; approximately 40% (9,035 lf) is moderately channelized; 9% (2,110 lf) is highly channelized.

TABLE 2. Summary of updated stream and tributary channelization.

Stream or Tributary Name	Reach Code	Stream Length Assessed (ft)	None or Low Channelization		Moderate Channelization		High Channelization	
			feet	%	feet	%	feet	%
Woods Creek	WC	15,363.9	8,113.30	53	5,140.50	33	2,110.10	14
Woods Creek Tributary Reach 6/7	WCT	1,484.3	1,484.30	100				
Fairway View Drive Creek	FDC	2,228.0			2,228.0	100		
Quarry Creek	QC	1,666.8			1,666.8	100		
Winding Creek	WDC	1,963.8	1,963.8	100				
Totals		**22,706.9**	**11,561.4**	**51**	**9,035.3**	**40**	**2,110.1**	**9**

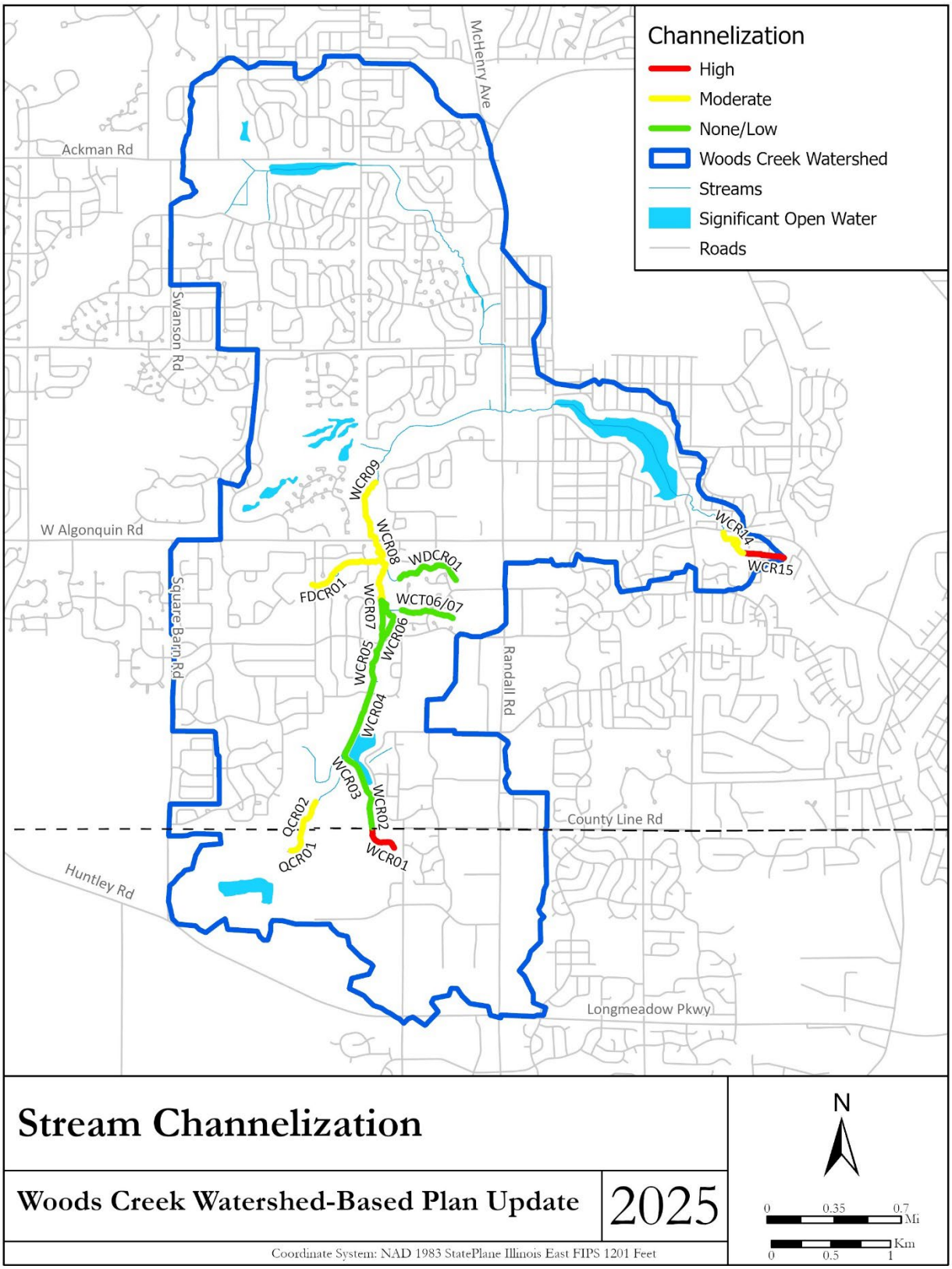


FIGURE 1. Stream Channelization.

Streambank and Streambed Erosion (Update)

The location and severity of streambank erosion is summarized for the updated stream reaches in **Table 3** and depicted on **Figure 2**. Approximately 51% (11,561 lf) of the total stream and tributary length exhibits no or low bank erosion while moderate erosion is occurring along 41% (9,258 lf) of streambanks. Highly eroded streambanks account for 8% (1,888 lf) of the total stream length. Streambed erosion was moderate on WCR01, WCR09, and FDCR01 and low on all other reaches.

TABLE 3. Summary of stream and tributary bank erosion.

Stream or Tributary Name	Reach Code	Stream Length Assessed (ft)	None or Low Erosion		Moderate Erosion		High Erosion	
			feet	%	feet	%	feet	%
Woods Creek	WC	15,363.9	8,113.3	53	5,362.9	34	1,887.7	12
Woods Creek Tributary Reach 6/7	WCT	1,484.3	1,484.3	100				
Fairway View Drive Creek	FDC	2,228.0			2,228.0	100		
Quarry Creek	QC	1,666.8			1,666.8	100		
Winding Creek	WDC	1,963.8	1,963.8	100				
Totals		**22,706.9**	**11,561.4**	**51**	**9,257.7**	**41**	**1,887.7**	**8**

Riparian Area Condition (Update)

The location and condition of updated riparian area reaches are summarized in **Table 4** and **Figure 3**. Approximately 49% (11,145 lf) of the riparian areas are Poor quality. Another 1,964 linear feet or 9% of riparian areas are in Average condition and 42% (9,598 lf) are in Good condition.

TABLE 4. Summary of stream and tributary riparian area condition.

Stream or Tributary Name	Reach Code	Stream Length Assessed (ft)	Good Condition		Average Condition		Poor Condition	
			feet	%	feet	%	feet	%
Woods Creek	WC	15,363.9	8,113.3	53			7,250.6	47
Woods Creek Tributary Reach 6/7	WCT	1,484.3	1,484.3	100				
Fairway View Drive Creek	FDC	2,228.0					2,228.0	100
Quarry Creek	QC	1,666.8					1,666.8	100
Winding Creek	WDC	1,963.8			1,963.8	100		
Totals		**22,706.9**	**9,597.6**	**42**	**1,963.8**	**9**	**11,145.4**	**49**

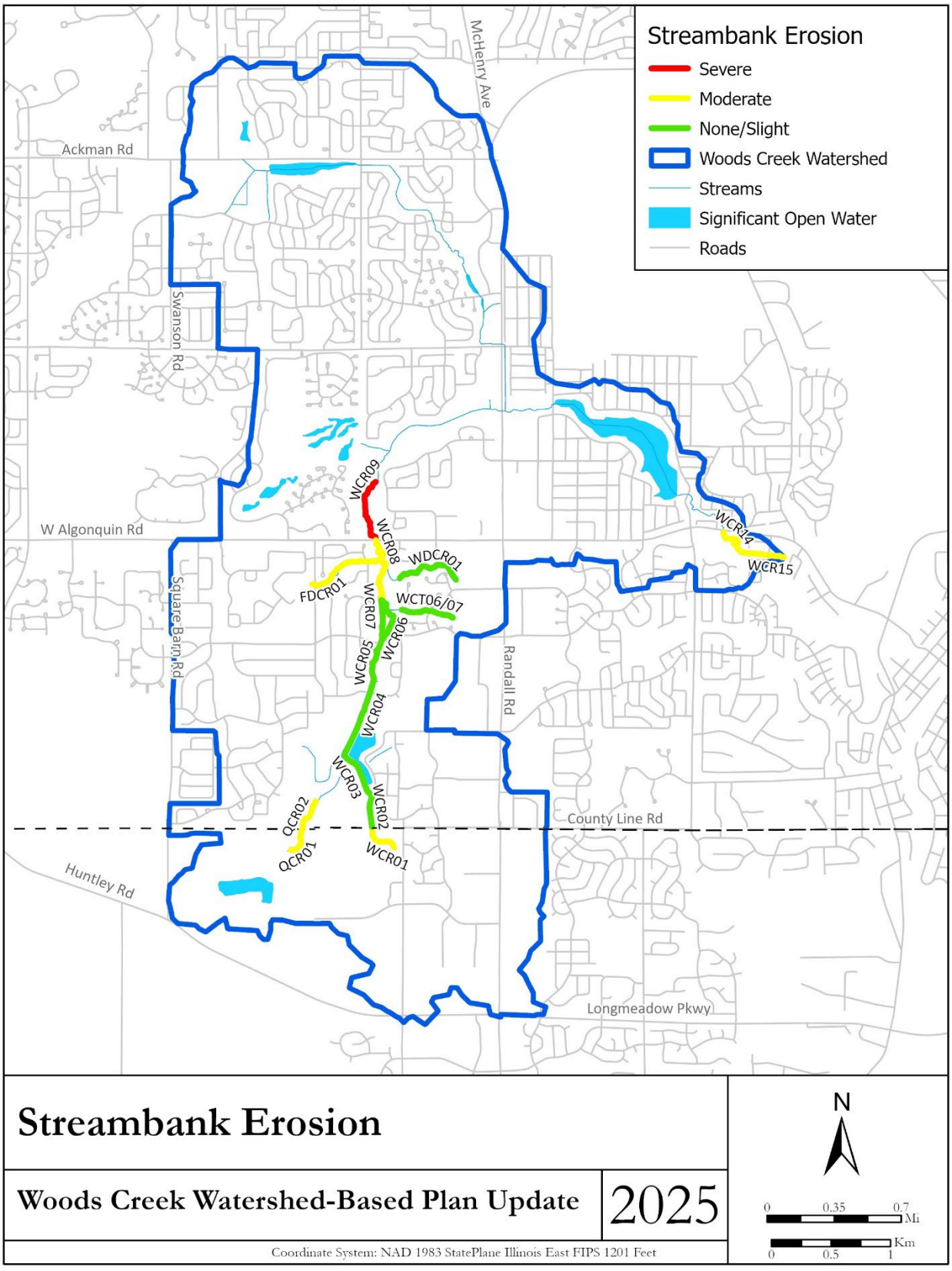


FIGURE 2. Streambank Erosion.

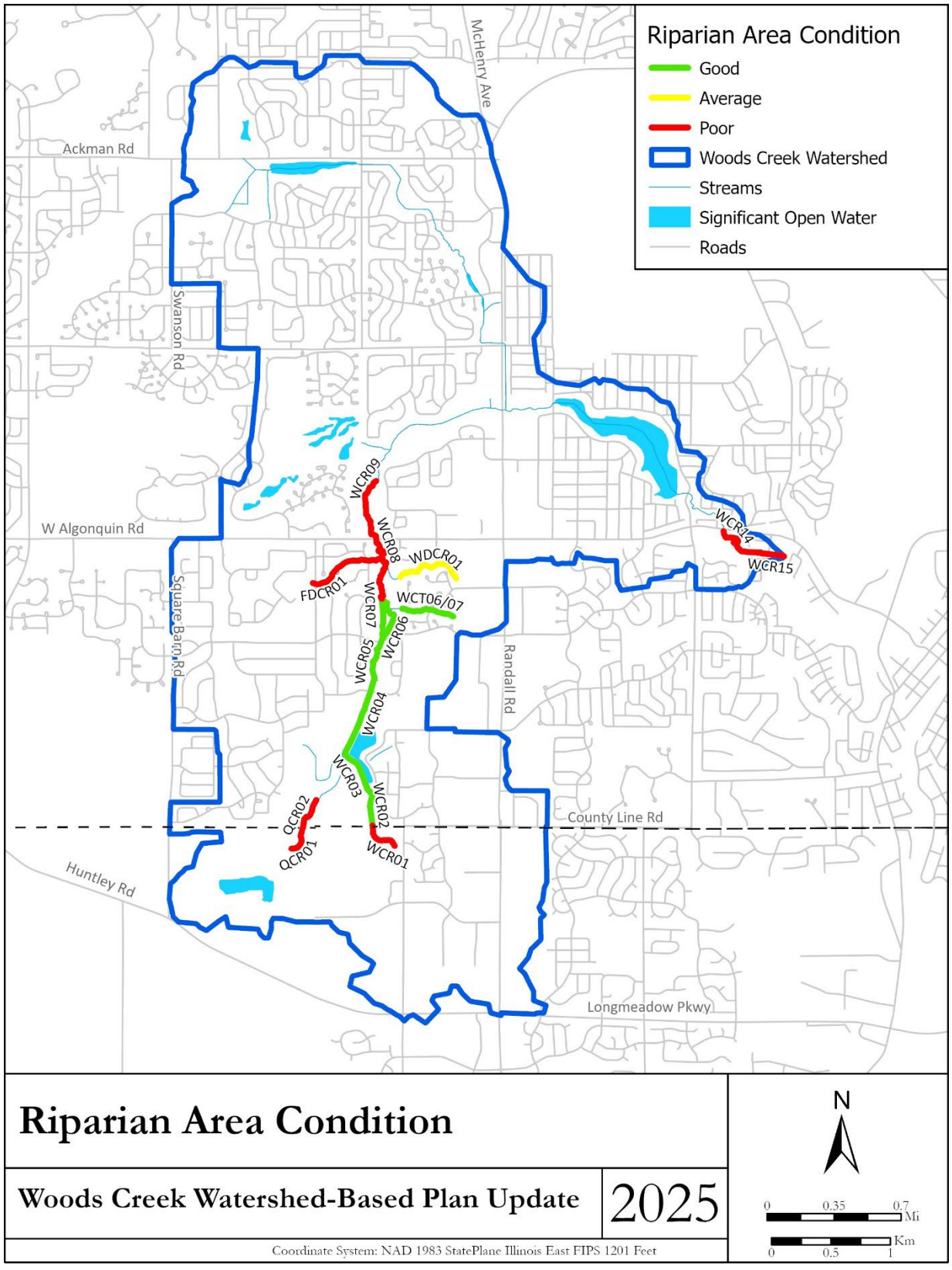


FIGURE 3. Riparian Area Condition.

3.11.2 Detention Basins (Update)

Baxter & Woodman reassessed 101 detention basins within the Village of Algonquin during the field inventory for the watershed plan update (**Table 5**, **Figure 4**). Assessment methodology included a visit to each site and collection of data relevant to existing conditions. Each basin was assigned a Site ID and detailed notes were recorded related to existing ecological condition and potential water quality improvement retrofit Management Measures for eventual inclusion into the Action Plan section of this report.

The reassessment resulted in 5 dry bottom basins, 71 wet bottom basins, and 25 wetland bottom basins (**Table 5**). 79 of the basins were naturalized and the remaining 22 had turf grass side slopes. Additionally, of the 101 basins, 27 (27%) provide *Good* ecological and water quality benefits, 24 basins (23%) likely provide *Average* benefits, while the remaining 50 basins (50%) likely provide *Poor* ecological and water quality benefits (**Table 5**, **Figure 4**) because most were designed simply to meet stormwater storage volume requirements. Designs that also improve water quality and wildlife habitat were not necessarily considered because they were not required to do so under local or federal regulations at the time of their construction.

TABLE 5. Summary of detention basin types, ecological condition, and acreage.

Site ID	Basin Type	Buffer Type	Ecological Condition	Size (Acres)
1	Wetland Bottom Detention	Natural	Average	2.8
2	Wetland Bottom Detention	Natural	Average	1.1
3	Wetland Bottom Detention	Natural	Average	1.9
4	Wet Bottom Detention	Natural	Average	2.1
5	Wetland Bottom Detention	Natural	Average	1.8
6	Wet Bottom Detention	Natural	Average	2.3
7	Wet Bottom Detention	Natural	Poor	2.5
8	Wet Bottom Detention	Natural	Average	2.3
9	Wet Bottom Detention	Natural	Good	1.4
10	Wet Bottom Detention	Natural	Average	0.4
11	Wet Bottom Detention	Natural	Average	1.5
12	Wet Bottom Detention	Natural	Poor	0.4
13	Wetland Bottom Detention	Natural	Poor	0.3
14	Wet Bottom Detention	Turf	Poor	0.4
15	Wet Bottom Detention	Natural	Average	1.1
16	Wet Bottom Detention	Natural	Poor	1.3
17	Wetland Bottom Detention	Natural	Average	3.0
18	Wetland Bottom Detention	Natural	Average	2.1
19	Wet Bottom Detention	Natural	Poor	0.9
20	Wet Bottom Detention	Natural	Poor	1.5
21	Wet Bottom Detention	Natural	Poor	3.4
22	Wet Bottom Detention	Natural	Poor	1.2

Site ID	Basin Type	Buffer Type	Ecological Condition	Size (Acres)
23	Wet Bottom Detention	Natural	Poor	1.6
24	Wet Bottom Detention	Turf	Poor	0.7
25	Wet Bottom Detention	Turf	Poor	1.2
26	Wet Bottom Detention	Natural	Poor	1.1
27	Wet Bottom Detention	Natural	Average	1.3
28	Wet Bottom Detention	Natural	Poor	1.5
29	Wet Bottom Detention	Natural	Average	4.5
30	Wetland Bottom Detention	Natural	Average	2.7
31	Wet Bottom Detention	Natural	Poor	1.6
32	Wet Bottom Detention	Natural	Poor	0.9
33	Wet Bottom Detention	Natural	Average	4.1
34	Wet Bottom Detention	Natural	Good	0.5
35	Dry Bottom Detention	Natural	Good	0.5
36	Wet Bottom Detention	Natural	Good	2.5
37	Wet Bottom Detention	Natural	Good	11.8
38	Wetland Bottom Detention	Natural	Good	2.1
39	Dry Bottom Detention	Turf	Poor	1.6
40	Dry Bottom Detention	Turf	Poor	1.5
41	Wetland Bottom Detention	Natural	Poor	2.9
42	Wetland Bottom Detention	Natural	Average	3.1
43	Wet Bottom Detention	Turf	Poor	0.9
44	Wet Bottom Detention	Turf	Poor	1.1
45	Wet Bottom Detention	Turf	Poor	1.6
46	Wetland Bottom Detention	Natural	Poor	1.0
47	Wetland Bottom Detention	Natural	Poor	2.5
48	Wetland Bottom Detention	Natural	Poor	0.5
49	Wetland Bottom Detention	Natural	Poor	2.7
50	Wet Bottom Detention	Natural	Poor	1.9
51	Wetland Bottom Detention	Natural	Poor	8.2
52	Wetland Bottom Detention	Natural	Poor	0.8
53	Wetland Bottom Detention	Turf	Poor	1.1
54	Wet Bottom Detention	Natural	Average	4.8
55	Wetland Bottom Detention	Natural	Average	14.3
56	Wet Bottom Detention	Natural	Good	2.4
57	Dry Bottom Detention	Turf	Poor	2.5
58	Wet Bottom Detention	Turf	Poor	2.8
59	Wet Bottom Detention	Natural	Good	1.1
60	Wet Bottom Detention	Natural	Good	2.0
61	Wet Bottom Detention	Natural	Good	11.7
62	Wet Bottom Detention	Natural	Good	7.7
63	Wet Bottom Detention	Turf	Poor	4.2

Site ID	Basin Type	Buffer Type	Ecological Condition	Size (Acres)
64	Wet Bottom Detention	Turf	Poor	3.8
65	Wet Bottom Detention	Turf	Poor	3.6
66	Wet Bottom Detention	Turf	Poor	1.3
67	Wet Bottom Detention	Turf	Poor	1.0
68	Wet Bottom Detention	Natural	Average	1.0
69	Wet Bottom Detention	Natural	Average	1.3
70	Wet Bottom Detention	Natural	Average	1.0
71	Wet Bottom Detention	Natural	Good	1.2
72	Wet Bottom Detention	Natural	Good	0.9
73	Wet Bottom Detention	Natural	Good	1.0
74	Wet Bottom Detention	Natural	Good	0.5
75	Wet Bottom Detention	Natural	Good	0.8
76	Wet Bottom Detention	Natural	Good	0.2
77	Wet Bottom Detention	Natural	Good	0.2
78	Wet Bottom Detention	Natural	Good	0.2
79	Wet Bottom Detention	Natural	Good	0.9
80	Wet Bottom Detention	Natural	Good	1.4
81	Wet Bottom Detention	Natural	Good	0.7
82	Wet Bottom Detention	Natural	Good	2.4
83	Wet Bottom Detention	Natural	Good	0.6
84	Wet Bottom Detention	Turf	Poor	0.7
85	Wet Bottom Detention	Turf	Poor	0.4
86	Wet Bottom Detention	Turf	Poor	1.3
87	Wet Bottom Detention	Turf	Poor	0.2
88	Wet Bottom Detention	Natural	Poor	1.0
89	Wetland Bottom Detention	Natural	Good	0.7
90	Wet Bottom Detention	Natural	Poor	3.8
91	Wet Bottom Detention	Natural	Poor	1.0
92	Wetland Bottom Detention	Natural	Poor	3.4
93	Wetland Bottom Detention	Natural	Poor	0.7
94	Wetland Bottom Detention	Natural	Average	0.9
95	Wetland Bottom Detention	Natural	Poor	2.2
96	Wet Bottom Detention	Turf	Average	1.4
97	Wet Bottom Detention	Natural	Poor	1.0
98	Dry Bottom Detention	Turf	Poor	0.3
99	Wet Bottom Detention	Natural	Good	2.8
100	Wetland Bottom Detention	Natural	Good	1.2
101	Wet Bottom Detention	Natural	Poor	1.1

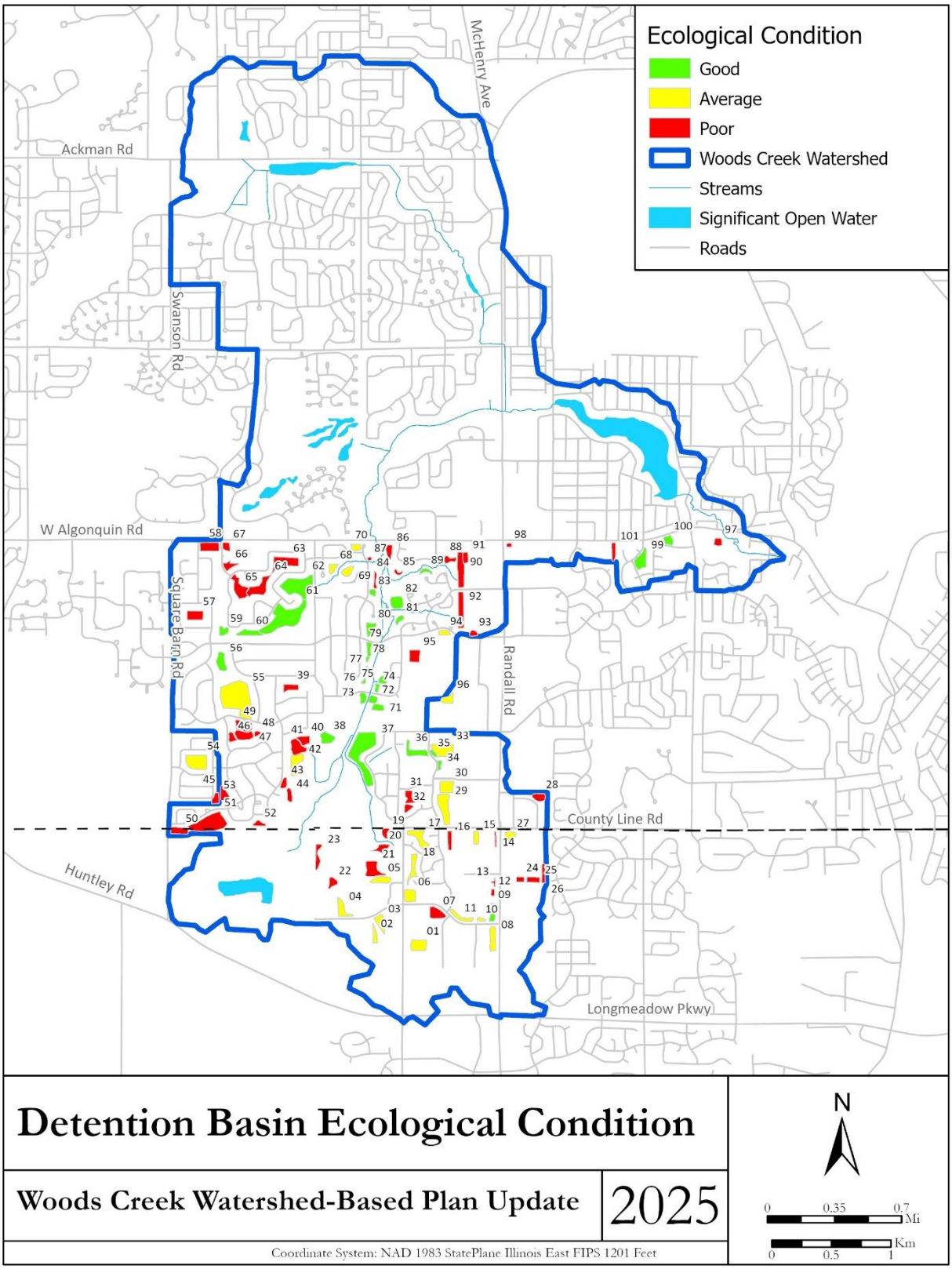


FIGURE 4. Detention Basin Ecological Condition.

3.13 Groundwater (Update)

Over the last decade, several studies and reports on groundwater resources within Woods Creek watershed have been completed. The Illinois State Water Survey published a report in 2015 entitled *Changing Groundwater Levels in the Sandstone Aquifers of NE Illinois*. This report shows that the sandstone aquifers below Woods Creek watershed have exhibited approximately 400 feet of drawdown as compared to predevelopment head levels (**Figure 5**). Additionally, McHenry County developed and adopted the McHenry County Water Resources Action Plan (WRAP) in 2011 followed by an update that was adopted on November 17, 2020. The updated WRAP is a comprehensive guide designed to educate decision-makers from the county, municipalities, businesses and individuals about water resources, the potential threats to those resources, and Best Management Practices that can help protect or restore them. The WRAP contains a more detailed mapping of the potential risk of declining well performance by 2050, as detailed by ISWS (**Figure 6**). These areas are experiencing desaturation and may face increasing challenges to pumping and water supplies in the future. Much more detailed information about groundwater resources in Woods Creek watershed can be found in both the ISWS 2015 report and the Updated McHenry County WRAP (2020), both available online from their respective websites.

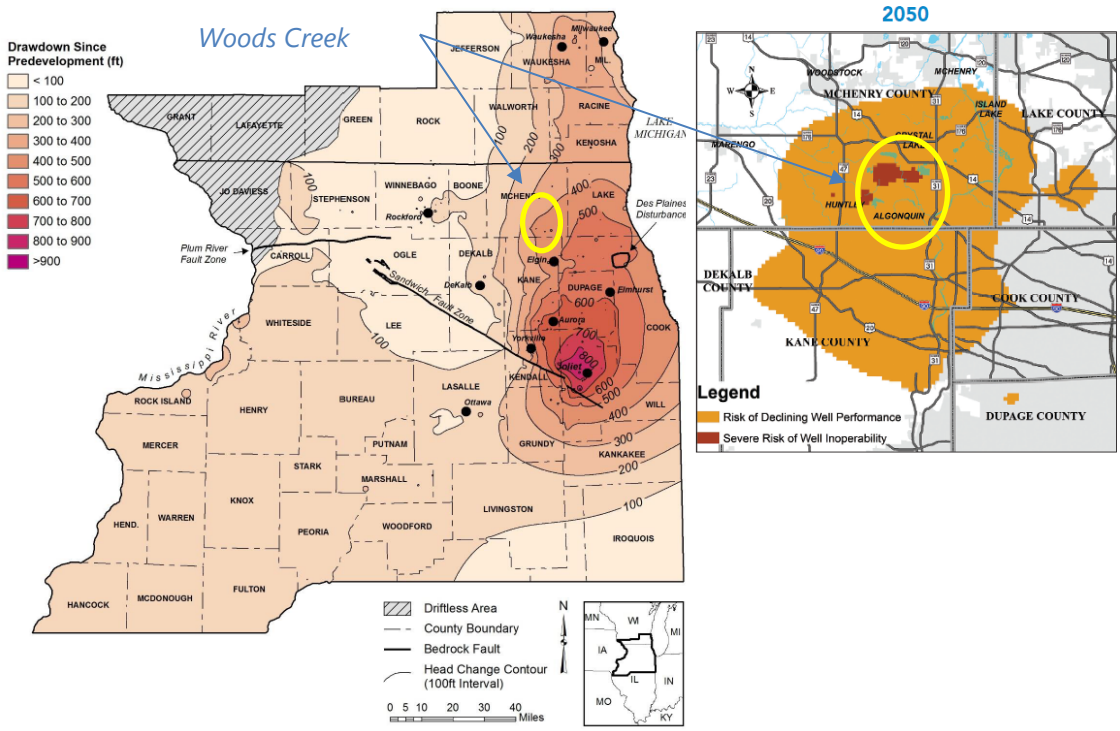


FIGURE 5 (left). Drawdown of heads in the Cambrian-Ordovician sandstone aquifers from predevelopment to 2014 (ISWS, 2015).

FIGURE 6 (right). ISWS maps illustrate approximate desaturation zones by 2050 within the Ironton-Galesville sandstone aquifer under McHenry County (McHenry County, 2020).

4.1 Causes & Sources of Impairment (Update)

According to the most recent Illinois Integrated Water Quality Report and Section 303 (d) list (2022), Woods Creek Lake (AUID IL_RTZZ) is the only impaired waterbody in the watershed. It is impaired for the Aesthetic Quality and Fish Consumption designated uses and the causes of impairment include phosphorus, total suspended solids, aldrin, dieldrin, endrin, heptachlor, mirex, and toxaphene. Previously, Woods Creek Lake was also impaired for aquatic plants and mercury, neither of which are currently listed. Sources of these impairments include hydromodification, dam or impoundment, waterfowl, urban runoff, failing septic systems, streambank erosion, agricultural runoff, legacy agricultural pollution, contaminated sediments, soil contamination, and runoff from existing or legacy industry.

Water Quality

Woods Creek

In February 2019, the Illinois State Water Survey produced a report entitled Water Quality Trend Analysis for the Fox River Watershed: Stratton Dam to the Illinois River that was based on water quality data collected by Fox River Study Group. Water quality data between 2003 and 2016 was analyzed for the Crystal Creek at Route 31 site, which includes Woods Creek and Crystal Creek watersheds combined. The report shows that **both total and dissolved phosphorus have been decreasing over time, by 26.6% and 25.5% per year, respectively, over the course of the study**. Nitrate nitrogen showed a slight (2.2%) increasing trend year over year. Dissolved oxygen and pH have also been decreasing slightly over time, consistent with most of the sampling sites included in the study. No other trends were identified at this site (ISWS, 2019).

As part of the planning process for the adjacent Crystal Creek Watershed-Based Plan, Applied Ecological Services (AES) sampled Woods Creek where it outlets to Crystal Creek in June of 2020 to establish base flow water quality and in May of 2020 after a storm event. Results of this sampling are shown in **Table 6**. The 2020 sampling results show that total phosphorus, total suspended solids, and *E. coli* are below the guidance criteria during base flows but exceeded the criteria after a storm event. Nitrogen data was incomplete, but from the available sampling only total Kjeldahl nitrogen exceeded the target. All other parameters were within guidance.

TABLE 6. AES water chemistry data at Woods Creek (2020).

ID Code/ Parameter	Statistical, Numerical, or General Use Guidelines	Woods Creek Base Flow	Woods Creek Storm Event
Dissolved Oxygen	> 5.0 mg/l*	7.2	10.3
pH	>6.5 or <9.0*	8.12	8.32
Total Phosphorus (TP)	< 0.075 mg/l**	0.055	0.08
Nitrate-Nitrite Nitrogen (NO2+NO3)	1.798 mg/l**	0.448	0.301
Ammonia Nitrogen (NH3)	<15 mg/l*	ND	ND
Total Kjeldahl Nitrogen (TKN)	<0.663 mg/l**	1.15	N/A
Total Nitrogen (TN) (calculated)	<2.461 mg/l**	1.6	N/A
Total Suspended Solids (TSS)	<19 mg/l***	1.8	24.2
E. coli (MPN/mL	<200 CFU/100ml*	185	325.5
Chloride	<500 mg/l*	111	156

-Cells highlighted in red exceed recommended statistical, numerical, or General Use guidelines, * Illinois EPA General Use Standard, ** Ambient Water Quality Criteria Recommendations: Rivers and Streams in Nutrient Ecoregion VI (USEPA 2000), *** Present and Reference Concentrations and Yields of Suspended Sediment in Streams in the Great Lakes Region and Adjacent Areas (USGS 2006)

Woods Creek Lake

Since the original watershed plan was completed, IEPA has collected additional chemical/physical data within Woods Creek Lake. B&W analyzed water quality data since 2013 for Woods Creek Lake available via EPA's WQX/Storet water quality database (through 2024). Average sample results at Woods Creek Lake for chloride, nitrate-nitrite nitrogen, total phosphorus, total suspended solids, conductivity, pH, Secchi disk depth, chlorophyll a, and dissolved oxygen are reported in **Table 7**. Monitoring results show that total phosphorus is the only parameter exceeding criteria guidelines.

TABLE 7. Illinois EPA water chemistry data (averages) at Woods Creek Lake (2013-2024).

ID Code/ Parameter	Statistical, Numerical, or General Use Guidelines	Woods Creek Lake
Chloride	< 500 mg/l*	204.9
Nitrate-Nitrite Nitrogen (N)	< 0.015 mg/l**	0.204
Total Phosphorus (TP)	< 0.05 mg/l*	0.27
Total Suspended Solids (TSS)	< 12 mg/l**	9.6
Conductivity	<1,667 µmhos/cm**	1182
pH	> 6.5 and < 9.0*	7.6
Secchi disk depth	> 18 in. (eutrophic status) **	34.7
Chlorophyll a	< 55 µg/l*	33
Dissolved Oxygen	> 5.0 mg/l*	6.0

Cells highlighted in red exceed recommended statistical, numerical, or General Use guidelines. * Illinois EPA General Use Standard; **other literature

According to the US Food and Drug Administration (US FDA), the highest allowable average mercury concentration in fish per serving when eating 3 servings per week is 0.15 µg/g. Any fish with an average mercury concentration less than or equal to 0.15 µg/g is categorized as "Best Choices" and eating 2 to 3 servings a week is considered safe (US FDA, 2024). Screening values for fish categories, as recommended by US FDA, are depicted in **Table 8**. Mercury in fish tissue at Woods Creek Lake was sampled by IEPA in 2017 and all values were below 0.15 µg/g, with an average sample result of 0.09 µg/g.

TABLE 8. Screening Values for Fish Categories (Source: US FDA, 2024).

Weekly fish servings	Screening value (µg/g)	Chart category
0	> 0.46	Choices to Avoid
1	≤ 0.46	Good Choices
2	≤ 0.23	Good Choices
3	≤ 0.15	Best Choices

5.1 Programmatic Management Measures Action Plan (Update)

In addition to the Programmatic Actions to address goal objectives outlined in the 2013 Plan, extensive policy and general, watershed-wide recommendations have been developed in the ensuing years in support of improving water quality in the Woods Creek watershed.

Various recommendations are made throughout this report related to how local governments can improve the condition of Woods Creek watershed through policy. Policy recommendations focus on improving watershed conditions by preserving green infrastructure, protecting groundwater, minimizing road salts, minimizing lawn fertilizer, sustainable management of stormwater, and allowances for native landscaping. To be successful, the Woods Creek Watershed-Based Plan would need to be adopted and/or supported by local communities. The process of creating and implementing policy changes can be complex and time consuming. And, although there are numerous possible policy recommendations for the watershed, the following policy recommendations are considered the most important and highest priority for implementation.

Plan Adoption & Implementation Policy Recommendations

- Watershed Partners adopt and/or support (via a resolution) the Woods Creek Watershed Improvement Plan and incorporate plan goals, objectives, and recommended actions into comprehensive plans and ordinances.

Green Infrastructure Network Policy Recommendations

- Each municipality considers incorporating the identified Green Infrastructure Network (GIN) into comprehensive plans and development review maps.

- Utilize tools such as protection overlay zones, setbacks, open space zoning, conservation easements, conservation and/or low impact development, etc. in municipal comprehensive plans and zoning ordinances to protect environmentally sensitive areas within identified Green Infrastructure Network parcels.

- Utilize tools such as Development Impact Fees, Stormwater Utility Taxes, Special Service Area (SSA) Taxes, etc. to help fund implementation of plan and future management of green infrastructure components where new and redevelopment occurs.

- Require developers to protect sensitive natural areas, restore degraded natural areas and streams, and then encourage donation of all natural areas and naturalized stormwater management systems to a public agency or conservation organization for long term management with dedicated funding such as Development Impact Fees, Stormwater Utility Taxes, Special Service Area (SSA) Taxes, etc. In general, it is not recommended that these features be turned over to HOA's to manage, as they lack the resources and experience to do so effectively.

- Establish incentives for developers who propose sustainable or innovative approaches to implement the watershed-based plan, including priority for preserving green infrastructure and using naturalized stormwater treatment trains.

- Require mitigation for all wetlands lost prior to allowing development within the watershed.

Groundwater Policy Recommendations

- Encourage extensive stormwater management practices that clean and infiltrate water in any development or redevelopment.

- Limit impervious cover within new and redevelopments occurring within Subwatershed Management Units 3, 6, and 11 which are ranked as highly vulnerable to future impervious cover.

Road Salt Policy Recommendations

- Each municipality/township supplements existing programs with deicing best management practices such as utilizing alternative deicing chemicals, anti-icing or pretreatment, controlling the amount and rate of spreading, controlling the timing of application, utilizing proper application equipment, equipment calibration, and educating/training deicing employees.

- Establish additional new best management practice recommendations based on the results of various ongoing studies and research being produced by Illinois Tollway to reduce, re-use, and offset the impacts of winter roadway operations. These include converting invasives to energy, harvesting cattails for the purpose of removing excess nutrients,

potentially quantifying chloride removal, re-using the plant mass for compost or compressed into an Energy product or potentially using the byproducts of the biomass as a replacement for beet juice on roadways (Illinois Tollway, 2019; Paap, 2019; and Wetlands Research, 2019).

Lawn Fertilizer and Paving Policy Recommendations

- Local governments extend phosphorus regulation to all non-commercial applicators, require soil testing pre-application, or ban out-right.
- Local governments ban coal tar sealants within their jurisdiction.
- Local governments permit the use of pavement alternatives such as permeable pavers in appropriate areas.

Stormwater Management Policy Recommendations

- Require new development and redevelopment to use stormwater management techniques/ facilities that serve multiple functions including storage, water quality benefits, infiltration, and wildlife habitat.
- Require reduced runoff volume from new and retrofitted detention basins.
- Local governments develop tree planting programs.

Native Landscaping/Natural Area Restoration

- Allow native landscaping within local ordinances.
- Ensure local "weed control" ordinances do not discourage or prohibit native landscaping.
- Include short- and long-term management with performance standards for restored natural areas and stormwater features within new and redevelopment.

5.1.2 Detention Basin Design/Retrofits, Establishment, & Maintenance (New)

Detention basins are best described as human made depressions for the temporary storage of stormwater runoff with controlled release following a rain event. Most of the detention basins in Woods Creek watershed are associated with residential and urban development. Most existing wet bottom basins are essentially ponds planted with turf grass along the slopes, and the majority of the dry bottom basins are similarly planted with turf grass. These attributes do not promote water quality improvement, water infiltration, or wildlife and pollinator habitat capabilities.

FIGURE 7. Example Naturalized dry bottom detention basin at Highland Avenue detention in Algonquin.

Studies reveal the benefits of detention basins that serve multiple functions. According to USEPA, well designed dry bottom infiltration basins reduce total suspended solids (sediment) by 58%, total phosphorus by 26%, and total nitrogen by 30%. Wet bottom basins designed to have wetland characteristics reduce total suspended solids (sediment) by 78%, total phosphorus by 44% and total nitrogen by 20% (MDEQ, 1999).

Detention Basin Recommendations

Future detention basin design within the watershed should consist of naturalized basins that serve multiple functions, including appropriate water storage, water quality improvement, infiltration, natural aesthetics, and wildlife and pollinator habitat. There are also many opportunities to retrofit existing dry or wet bottom detention basins by incorporating minor engineering changes to alter water depths and naturalizing with native vegetation. Site-specific retrofit opportunities are identified in the Site-Specific Action Plan. Location, design, establishment, and long-term maintenance recommendations for naturalized detention basins are included below. Note: requirements of local stormwater management ordinances, such as volume and release rates, will apply to the design recommendations included below.

Detention Basin Location Recommendations

- Naturalized detention basins should be restricted to natural depressions or previously drained hydric soil areas and adjacent to other existing green infrastructure to aesthetically fit and blend into the landscape and form green infrastructure corridors.
- Basins should not be constructed in any average to high quality ecological community.
- Outlets from detention should not enter sensitive ecological areas.

FIGURE 8. Example of a naturalized wet bottom detention basin at Trails of Woods Creek subdivision in Algonquin.

Detention Basin Design Recommendations

- One appropriately sized, large detention basin should be constructed across multiple development sites rather than constructing several smaller basins.
- Side slopes should be no steeper than 4H:1V, at least 25 feet wide, planted to native mesic prairie, and stabilized with biodegradable erosion control blanket. Native oak trees *(Quercus sp.*) and other fire-tolerant species should be the only tree species planted on the side slopes. Shrubs should not be planted as they will not tolerate prescribed burning.

- Dry bottom basins should be planted to mesic or wet-mesic prairie depending on site conditions.
- A minimum 10-foot-wide shelf planted with native emergent plugs should extend from the normal water level to 1 foot below normal water level in wet and wetland bottom basins.
- Open water areas in wet and wetland bottom basins should be at least 5 feet deep.
- Irregular islands and peninsulas should be constructed in wet and wetland bottom basins to slow the movement of water through the basin. They should be planted to native wet-mesic or wet prairie depending on elevation above normal water level.

Short Term (3 Years) Native Vegetation Establishment Recommendations

In most cases, the developer or owner should be responsible for implementing short term management of detention basins and other natural areas to meet a set of performance standards. A minimum of three years of management is needed to establish native plant communities within detention basins. Measures needed include mowing during the first two growing seasons following seeding to reduce annual and biennial weeds. Spot herbicide is also needed annually to eliminate problematic non-native/invasive perennial species such as thistle, reed canary grass, common reed, purple loosestrife, and emerging cottonwood, Callery pear, sandbar willow, buckthorn, and box elder saplings. In addition, the inlet and outlet structures should be checked for erosion and clogging during every site visit**. Table 9** includes a three-year schedule appropriate to establish native plantings around naturalized detention basins.

TABLE 9. Three-year vegetation establishment schedule for naturalized detention basins.

Year 1 Establishment Recommendations
Mow prairie areas to a height of 6-12 inches in late May and early September.
Spot herbicide non-native/invasive perennial species throughout the site as needed during the growing season.
Check for clogging and erosion control at inlet and outlet structures during site visits.
Year 2 Establishment Recommendations
Mow prairie areas to a height of 12 inches in June and spot mow thereafter as needed.
Spot herbicide non-native/invasive perennial species throughout the site as needed during the growing season.
Plant additional emergent plugs if needed prior to September 1 and reseed any failed areas as a dormant fall seeding.
Check for clogging and erosion control at inlet and outlet structures during site visits.
Year 3 Establishment Recommendations
Spot herbicide non-native/invasive perennial species throughout the site as needed during the growing season.
Check for clogging and erosion control at inlet and outlet structures during site visits.

Long Term (3 Years +) Native Vegetation Maintenance Recommendations

Long term management of detention basins associated with development should be the responsibility of the local municipality or conservation organization and the land should be donated to such organizations. These organizations often have better knowledge and financial resources to ensure long-term maintenance is performed. **Table 10** includes a cyclical long-term schedule appropriate to maintain native vegetation around detention basins; this schedule starts in year 4 and should be repeated every three years.

TABLE 10. Three-year cyclical schedule for long-term maintenance of naturalized detention basins.

Year 1 of 3 of Maintenance Cycle
Conduct controlled burn in early spring or late fall. Mow to 12 inches in November if burning is restricted.
Spot herbicide problematic perennial non-native/invasive species and spot mow annual and biennial non-native/invasive species throughout the site as needed during the growing season.
Check for clogging and erosion control at inlet and outlet structures during site visits.
Year 2 of 3 of Maintenance Cycle
Spot herbicide problematic perennial non-native/invasive species and spot mow annual and biennial non-native/invasive species throughout the site as needed during the growing season.
Check for clogging and erosion control at inlet and outlet structures during site visits.
Year 3 of 3 of Maintenance Cycle
Spot herbicide problematic perennial non-native/invasive species and spot mow annual and biennial non-native/invasive species throughout the site as needed during the growing season.
Check for clogging and erosion control at inlet and outlet structures during site visits.
Cycle begins again with Year 1 of Maintenance Cycle above

5.1.3 Rain Gardens (New)

Rain gardens have become a popular way of creating a perennial garden that cleans and infiltrates stormwater runoff from rooftops and sump pump discharges. A rain garden is a small shallow depression that is typically planted with deep rooted native wetland vegetation. These small gardens can be installed in a variety of locations but work best when located in existing depressional areas or near gutters and sump pump outlets. Not only do rain gardens clean and infiltrate water, but they also provide food and shelter for many birds, butterflies, and insects. Rain gardens are typically 100-300 square feet in size, should be installed outside of wetlands and floodplains, and planted with native plants to improve water quality and habitat benefits. They should be designed in conjunction with an engineer and an ecologist to assure their size meets the runoff they are collecting and that the plant selections will survive the stormwater inundation time and flow. Soil amendments are usually required to ensure support of native plants. After installation, rain gardens require ongoing maintenance to ensure they are performing properly. Rain gardens can "micro-manage" stormwater runoff as close to the source (like downspouts, driveways, sump pump discharges) as possible.

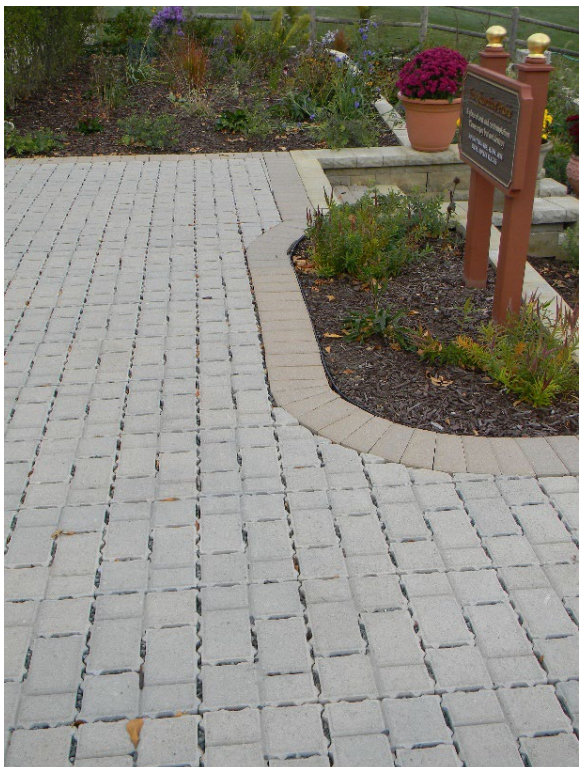
Rain Garden Recommendations

Information programs in the watershed should focus on teaching residents and businesses the beneficial uses of rain gardens and how to build and maintain them. Local governments and public agencies in the watershed should also install demonstration rain gardens as a way for the public to better understand their application. Local governments and the SWCDs could hold rain garden training seminars and potentially provide partial funding to residents and businesses that install rain gardens.

Rain garden adjacent to single family home

5.1.4 Pavement Alternatives (New)

Pervious concrete, permeable asphalt, and paver systems are potential alternatives to conventional asphalt or concrete parking lots and roadways. These alternatives allow for natural infiltration of the water by allowing water that falls on the surface to flow to a storage gallery through holes in the pavement. Areas that are paved with pervious pavement produce less stormwater runoff than conventionally paved areas.



Pervious pavers installed adjacent a park

Traditionally, the quantity and quality of water running off paved and other impermeable surfaces are the primary reason for the need for stormwater treatment. Pavement alternatives reduce runoff rates and volumes and can be used in almost every capacity in which traditional asphalt, concrete, or pavers are used.

Pavement alternatives capture first flush rainfall events and allow water to percolate into the ground. Pavement alternatives treat stormwater through soil biology and chemistry as the water slowly infiltrates. Groundwater and aquifers are recharged and water that might otherwise go directly to streams will slowly infiltrate, reducing flooding and peak flow rates entering drainage channels. Studies documented by USEPA show that

properly designed and maintained pervious pavements reduce total suspended solids (sediment) by 90%, total phosphorus by 65%, and total nitrogen by 85% (MDEQ, 1999).

In recent years, concerns have been raised about the environmental effects of the use of coal-tar sealants. Coal-tar sealant is a surface treatment typically applied to protect asphalt on driveways and parking lots which contains polycyclic aromatic hydrocarbons (PAHs). PAHs are a group of chemicals that have been linked to cancer in humans and have been shown to be toxic to aquatic life and damaging to the environment (Needleman, 2015). According to studies, "PAHs are significantly elevated in stormwater flowing from parking lots and other areas where coal-tar sealcoats were used as compared to stormwater flowing from areas not treated with the sealant (USEPA, 2016)." Pervious concrete, permeable asphalt, and paver systems are all potential alternatives to the need for coal-tar sealants. Additionally, several states and municipalities have banned the use and/or sale of coal-tar sealants to further protect their communities.

Pavement Alternatives Recommendations

Future development and redevelopment in the Woods Creek watershed should consider the use of pavement alternatives, particularly for parking lots that receive high levels of public use. Pavement alternatives can be used in a variety of settings including parking lots, private roads, residential driveways, and sidewalks. It is important to note that there are limitations to using pavement alternatives based on subsoil composition and they do require annual maintenance to remain effective over time.

5.1.5 Vegetated Filter Strips (New)

Vegetated filter strips are shallowly sloped vegetated surfaces that remove suspended sediment, and nutrients from sheet flow stormwater that runs across the surface. This Management Measure is often referred to as a buffer strip. The type of vegetation can dramatically affect the functionality of the filter strip. Filter strips can either be planted or can be comprised of existing vegetation. Turf grass should be avoided as it removes less total suspended solids than filter strips planted with native vegetation.

Filter strip along municipal building in Algonquin, IL

The wider they are the more effective filter strips are because the amount of time water has for interception/ interaction with the plants and soil within the filter strip is increased. When installed and functioning properly, the USEPA has documented that filter strips can reduce total suspended solids (sediment) by 73%, total phosphorus by 45%, and total nitrogen by 40% (MDEQ, 1999).

Vegetated Filter Strip Recommendations

Vegetated filter strips work in a variety of locations. Vegetated filter strips in rural and urban areas should be installed along streams, lakes, or ponds. Additionally, they can be used adjacent to buildings and parking lots that sheet drain. The water would then pass through the vegetated filter strip and into a waterway, such as a vegetated swale, stream, lake, pond, or other stormwater feature.

5.1.6 Natural Area Restoration & Native Landscaping (New)

Native landscaping near residential home

Natural area restoration and native landscaping are essentially one in the same but at different scales. Natural area restoration involves transforming a degraded natural area into one that exhibits better ecological health and is typically done on larger sites such as nature/forest preserves. Native landscaping is done at smaller scales around homes or businesses and is often formal in appearance. Both require the use of native plants to create environments that mimic historic landscapes such as prairie, woodland, and wetland. Native plants are defied as indigenous terrestrial or aquatic plant species that evolved naturally in an ecosystem. The use of native plants in natural areas or native landscaping is well documented. They adapt well to environmental conditions, reduce erosion, improve water quality, promote water infiltration, do not need fertilizer, provide wildlife food and habitat, and have minimal maintenance costs.

Several environmental agencies support the use of native plants including Illinois Nature Preserves Commission (INPC), Illinois Department of Natural Resources (IDNR), McHenry County and Kane County Forest Preserve Districts, the SWCDs, U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), National Wildlife Federation (NWF), and the Conservation Foundation (TCF).

Natural Area Restoration/Native Landscaping Recommendations

Large residential lots with existing natural components such as oak woodlands and wetlands and golf courses provide many of the best opportunities for natural area restoration and native landscaping at a larger scale. Homeowners interested in restoring natural areas or implementing native landscaping can find guidance through the agencies listed above or by contacting a local ecological consulting company. Homeowners need to check with their local ordinances to determine what regulations local municipalities have for installing native vegetation on private property.

Backyard habitats can be certified through the National Wildlife Federation's Certified Wildlife Habitat program or Conservation Foundation's Conservation@Home program.

5.1.7 Wetland Restoration (New)

Wetland restoration at Carrington Reserve Conservation Development in West Dundee, Illinois

Over 1,056 acres or 71% of the historic wetlands in Woods Creek watershed have been lost to farming and other development practices since European settlement in the 1830s. Wetlands are essential for water quality improvement and flood reduction in any watershed and provide habitat for a wide variety of plant and animal species.

Over 203 acres of drained wetlands were discovered in areas of the watershed where wetland restoration might be possible. These areas are located on land that is either part of the existing floodplain, currently in agricultural production, or slated for a land use change in the future. The wetland restoration process involves returning hydrology (water) and vegetation to soils that once supported wetlands. The USEPA estimates that wetland restoration projects can reduce suspended solids (sediment) by 77.5%, total phosphorus by 44%, and total nitrogen by 20% (MDEQ, 1999).

Wetland Restoration Recommendations

Local governments should strongly consider requiring Conservation Design that incorporates wetland restoration on parcels slated for future development. Another potential option is to restore wetlands as part of a wetland mitigation bank where wetlands are restored on private land. Then, developers can buy wetland mitigation credits from the wetland bank for wetland impacts occurring elsewhere in the watershed. It is also possible that in the future, Illinois EPA may require more strict nutrient policies for wastewater treatment plants. Wetland banks may provide an opportunity for WWTP owners to buy water quality trading credits. The Site-Specific Action Plan section of this report identified sites where wetland restoration might be feasible.

5.1.8 Tree Planting Program (New)

Trees provide extensive evapotranspiration and cooling benefits, improve water and air quality, provide habitat, increase property values, and improve aesthetics in urban landscapes (see **Figure 9**). Trees play a valuable role in absorbing stormwater, reducing pollutants, and holding soil in place during rain events and help to recharge groundwater supplies. A 25-foot canopy diameter tree can

process the runoff of a 2,400 square foot adjacent impervious surface (EPA, 2016). Depending on the size and species, one tree can store 100 gallons or more of stormwater (Fazio, 2010).

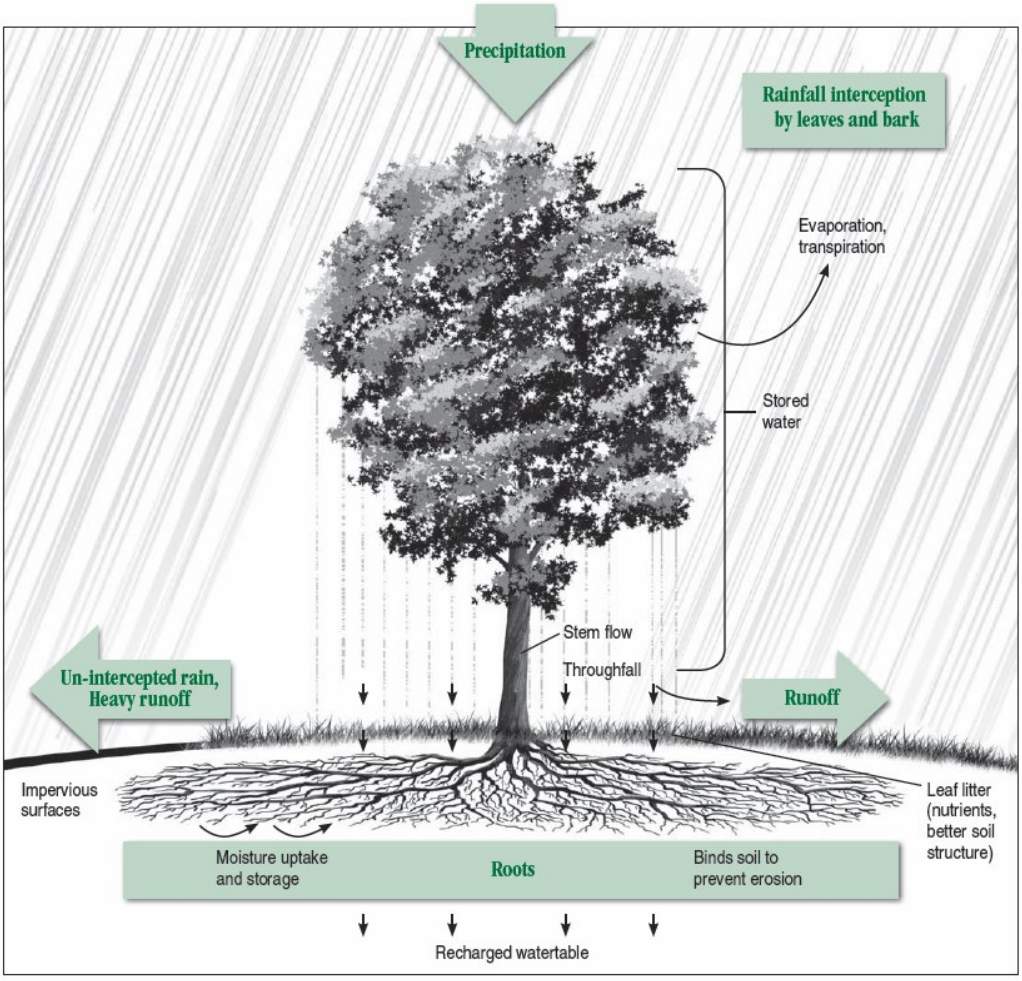


FIGURE 9. Illustration of how trees help with stormwater management. (Source: Fazio, 2010).

Implementing a successful tree program can be complicated. Space and soil quality constraints can often be the limiting factors on whether a site is appropriate for installing trees. Other constraints include finding an appropriate species of tree, steep slopes, utility lines, impervious surfaces, and pre-existing structures. With a little planning and engineering, many of these constraints can be overcome. In 2016, USEPA produced a Technical Memorandum on Stormwater Trees that provides detailed information on the benefits and challenges to implementing an effective program and maintaining the trees over time. This report is available on the USEPA's website at https://www.epa.gov/green-infrastructure/stormwater-trees.

Municipalities in the watersheds should consider adopting a tree planting program where these are not already in place.

5.1.9 Street Sweeping & Yard Waste Management (new)

Street sweeping is often overlooked as a Management Measure option to reduce pollutant loading in watersheds. Municipal street sweeping programs could significantly reduce non-point source pollutants from urban areas in Woods Creek watershed. Street sweeping works because pollutants such as sediment, trash, road salt, oils, nutrients, and metals that would otherwise wash into stormsewers and streams following rain events are gathered and disposed of properly. The USEPA and Center for Watershed Protection (CWP) report similar pollutant removal efficiencies for street sweeping; weekly street sweeping can remove between 9% and 16% of sediment and between 3% and 6% of nitrogen and phosphorus (MDEQ, 1999; CWP 2017).

Yard waste, such as grass clipping and leaf litter, can also impact water quality when not managed correctly. "Grasscycling and composting are two techniques homeowners can use to reduce waste disposal and possible water contamination as well as save time, money and energy while returning valuable nutrients back into their lawns and gardens. (Gibb, 2012)" Composting of yard waste and grasscyclying, or leaving grass clippings on a lawn, can keep nutrients such as nitrogen in place. When grasscycling or composting, it is important to keep clippings on the lawn and off sidewalks, driveways, or other impervious surfaces where they might otherwise get washed into adjacent drainage systems or become a safety hazard (Gibb, 2012).

Routine street sweeping is an effective Management Measure

Street Sweeping Recommendations

It is likely that several if not all the municipalities in the watershed already implement street sweeping to some degree. The frequency of street sweeping is a matter of time and budget and should be determined by each municipality. Weekly street sweeping would provide the best results, but bi-weekly sweeping is cited as being sufficient in most cases. Homeowners should also compost yard waste and practice grasscycling at home.

5.1.10 Stream & Riparian Area Restoration & Maintenance (New)

Stream and riparian area restoration is one of the best Management Measures that can be implemented to improve degraded stream and riparian area conditions. This work involves improvements to a stream channel using artificial pool-riffle complexes, streambank stabilization using a combination of bioengineering with native vegetation and hard armoring with rock if needed. Adjacent riparian areas should also be improved via removal of non-native vegetation and replacement with native species. These practices are typically done together to improve water

quality by reducing sediment transport, increasing oxygen, and improving habitat. The USEPA cites that as much as 90% of sediment, phosphorus, and nitrogen can be reduced following stream restoration. Stream restoration projects include detailed construction plans, regulatory permitting, and construction that must be done by a qualified contractor. Stream maintenance includes an ongoing program to remove blockages caused by accumulated sediment, fallen trees, etc. and is a cost-effective way to prevent flooding and streambank erosion.

Woods Creek Reach 3 restoration in Algonquin

Riparian buffers are defined as land adjoining any water body including ponds, lakes, streams, and wetlands. In 2010 the Southeastern Wisconsin Regional Planning Commission (SEWRPC) produced a document entitled "Managing the Water's Edge: Making Natural Connections" (SEWRPC, 2010). The research presented in SEWRPC's document was conducted to determine if an optimal riparian buffer design or width could be determined that effectively reduces pollutants, provides water quality protection, helps prevent channel erosion, provides adequate fish and wildlife habitat, enhances environmental corridors, augments baseflow, and moderates water temperature.

No consensus of optimal buffer width could be determined but what is apparent is that many riparian corridors no longer fulfill their potential due to encroachment by agricultural and urban development. SEWRPC's document summarizes how to maximize both water quality protection and conservation of aquatic and terrestrial wildlife populations using buffers as shown in **Figure 10**.

As described in SERWPC's document, implementing the green infrastructure network to connect open space and other natural area features should be embraced, whereby 75% minimum of the total stream length should be naturally vegetated to protect the functional integrity of the water resource and 75-foot-wide minimum riparian buffers are recommended from the top edge of each stream bank that are naturally vegetated to protect water quality.

Stream & Riparian Area Recommendations

There are many opportunities to implement stream and riparian area restoration in the watershed. All stream and riparian area opportunities are identified in the Site-Specific Action Plan. It is also important to note that not all debris in streams is harmful. The American Fisheries Society has created a short document called "Stream Obstruction Removal Guidelines" which is meant to clarify the appropriate ways to maintain obstructions in streams to preserve fish habitat.

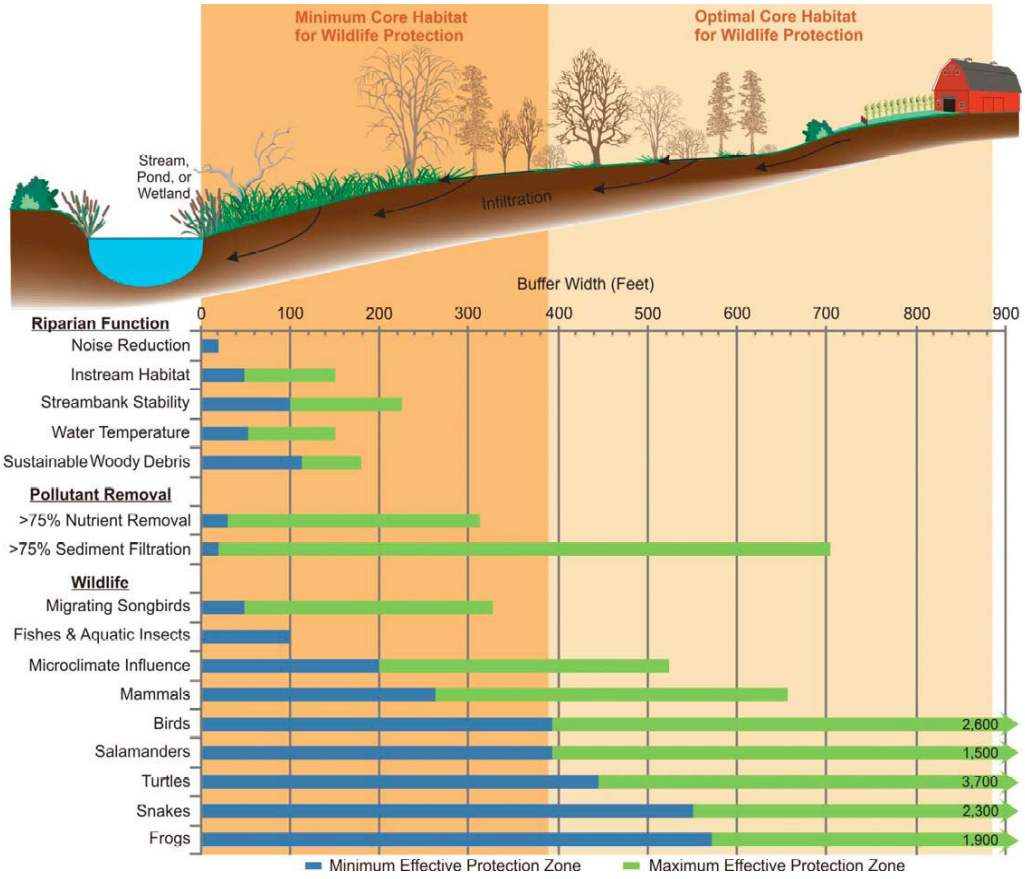


FIGURE 10. Riparian benefits for various buffer widths. (Source: SEWRPC, 2010)

5.1.11 Septic System Maintenance (New)

Septic systems in McHenry and Kane County are managed by the respective County Health Departments. When septic systems are not maintained and subsequently fail, they can contribute high levels of nutrients and bacteria to the surrounding environment. The failure rate of septic systems in the watershed is unknown. However, literature sources across the nation indicate a failure rate of approximately 20% (Brown, 1998; Mancl, 1984; Stout, 2003; UKCE, 2012).

Septic System Recommendations

Septic owners should contact the McHenry or Kane County Health Department to schedule a septic system inspection to ensure that they are designed and operating properly. More information and resources are available online at https://www.mchenrycountyil.gov/departments/health-department/environmental-health/onsite-wastewater-treatment for McHenry County or https://www.kanehealth.com/Pages/Septic-Sewage.aspx for Kane County. USEPA also provides an excellent guide for septic system owners called "A Homeowner's Guide to Septic Systems (USEPA,

2005)." The guide explains how septic systems work, why and how they should be maintained, and what makes a system fail.

5.1.12 Agricultural Management Practices (New)

While small pockets of agriculture remain in the watershed today, local comprehensive plans suggest that these remaining agricultural areas will be phased out and developed in the future. Agricultural recommendations are provided here as a guide because watershed-wide changes to agricultural practices can have a dramatic effect on pollutant loading in the watershed. Fortunately, there are numerous agricultural measures and funding sources that can be utilized by farmers to implement practices on their land to improve water quality and soil health, while reducing soil and nutrient losses. Many recommended programs are offered through the local county Soil and Water Conservation Districts (SWCD), U.S. Department of Agriculture (USDA) Natural Resource Conservation Program (NRCS), and Farm Service Agency (FSA).

Conservation Tillage (no till) farming

No-till is a land management option within the EQIP program and is the leading recommendation for farmers in Woods Creek watershed. With no-till, the land is left undisturbed from harvest through planting, preserving a canopy of crop residue on the surface to protect the soil from erosion. Along with soil conservation benefits, high fuel prices are driving a switch to no-till for many farmers. Eliminating tillage passes reduces both fuel and labor expenses (USDA, 2020).

Agricultural Conservation Easement Program (ACEP)

The Agricultural Conservation Easement Program (ACEP) assists landowners, land trusts, and other entities to protect, restore, and enhance wetlands, grasslands, and working farms and ranches through conservation easements. There are two components to ACEP, the Agricultural Land Easements component and the Wetland Reserve Easement component. The NRCS Agricultural Land Easements component helps American Indian tribes, state and local governments, and nongovernmental organizations protect working agricultural lands and limit non-agricultural uses

of the land. NRCS Wetland Reserve Easements component, helps to restore, protect, and enhance enrolled wetlands through the purchase of easements and assistance in restoration (NSAC, 2019).

ACEP - Wetland Reserve Easements (WRE)

The Wetlands Reserve Easement program (WRE) is a voluntary program offering farmers the opportunity to protect, restore, enhance, and protect wetlands on their property. The NRCS provides technical and financial support to help landowners with their wetland restoration efforts. The goal of NRCS is to achieve the greatest wetland functions and values, along with optimum wildlife habitat, on every acre enrolled in the program. This program offers landowners an opportunity to establish long-term conservation and wildlife practices and protection. Land that's eligible for enrollment in ACEP as a Wetland Reserve Easement includes farmed or converted wetland that can be successfully restored as natural wetland habitat in a cost-effective manner. NRCS prioritizes applications for Wetland Reserve Easements based upon their potential for protecting and enhancing habitat for migratory birds and other wildlife. Wetland reserve easements enable landowners to reduce impacts from flooding, recharge groundwater, enhance and protect wildlife habitat and provide outdoor recreational and educational opportunities. Producers can retain grazing rights as part of a wetland easement if the grazing activity is consistent with long-term wetland protection and enhancement goals for which the easement was established. The easement payment would be reduced by an amount equal to the grazing value (USDA, 2020).

ALE- Agricultural Land Easements (ALE)

The purpose of the Agricultural Land Easement (ALE) component is to protect farms and ranches from development, specifically to ensure farm viability for future generations, and to conserve grazing land, rangeland, pasture and shrub land. NRCS provides financial assistance to eligible partners for purchasing Agricultural Land Easements that protect the agricultural use and conservation values of eligible land. In the case of working farms, the program helps farmers and ranchers keep their land in agriculture. The program also protects grazing uses and related conservation values by conserving grassland, including rangeland, pastureland and shrubland. Eligible partners include American Indian tribes, state and local governments and non-governmental organizations that have farmland, rangeland or grassland protection programs. For Agricultural Land Easements, NRCS can contribute up to 50% of the fair market value of the agricultural land easement. Where NRCS determines that grasslands of special environmental significance will be protected, NRCS may contribute up to 75% of the fair market value of the agricultural land easement. Eligible entities can now include cash contributions, landowner contributions, or other non-USDA federal funding to satisfy the match requirements.

Farm Service Agency (FSA)- Conservation Reserve Program (CRP)

The USDA Farm Service Agency's (FSA) CRP is a voluntary program that contracts agricultural producers so that environmentally sensitive agricultural land is devoted to conservation benefits. The Food Security Act of 1985, as amended, authorized CRP. The program is implemented by FSA on behalf of USDA's Commodity Credit Corporation. In exchange for a yearly rental payment, farmers

enrolled in the program agree to remove environmentally sensitive land from agricultural production and plant species that will improve environmental health and quality. Contracts for land enrolled in CRP are 10-15 years in length.

CRP participants establish long-term, resource-conserving vegetative species, such as approved grasses or trees (known as "covers"), to control soil erosion, improve the water quality and enhance wildlife habitat. The long-term goal of the program is to re-establish valuable land cover to help improve water quality, prevent soil erosion, and reduce loss of wildlife habitat. CRP protects millions of acres of American topsoil from erosion and is designed to safeguard the nation's natural resources. By reducing water runoff and sedimentation, CRP protects groundwater and helps improve the condition of lakes, rivers, ponds and streams. The vegetative covers also make CRP a major contributor to increased wildlife populations in many parts of the country.

Additionally, there is a CRP Grasslands program which helps landowners and operators protect grassland, rangeland, and pastureland while maintaining the areas as grazing lands. The program emphasizes support for grazing operations, plant and animal biodiversity, and grassland and land containing shrubs and forbs under the greatest threat of conversion.

Grass waterway on highly erodible soils

The following conservation practices are eligible under CRP, and thus land must be suitable for any of these practices: Grass Waterway, Shallow Water Area for Wildlife, Contour Grass Strip, Filter Strip, Riparian Buffer, Denitrifying Bioreactor on Filter Strip and Riparian Buffer, Saturated Filter Strip and Riparian Buffer, Habitat Buffers for Upland Birds, Wetland and Buffer SAFE Practices, Wetland Restoration on Floodplain and Non-Floodplain, Prairie Strips, Windbreaks, Shelterbelts, Living Snow Fences, Marginal Pastureland Wetland Buffer and Wildlife Habitat Buffers, Long Leaf Pine Establishment, Duck Nesting Habitat, Pollinator Habitat, Bottomland Timber Establishment on Wetlands, Farmable Wetlands Program (FWP) Constructed Wetland, FWP Aquaculture Wetland Restoration, FWP Flooded Prairie Wetland, Farmable Wetlands and Farmable Wetland Buffer, and Wellhead Protection Area Practices.

Principles of Soil Health

Improving water quality in runoff from agricultural lands can often be achieved by maintaining soil health and following soil health principles. There are five principles of soil health; they include soil armor, minimizing soil disturbance, plant diversity, continual live plant/root, and livestock integration. Armoring the soil refers to cover for the soil and controls erosion and evaporation rates,

maintains soil temperatures, reduces compaction, suppresses weed growth and provides habitats for species. Minimizing soil disturbance reduces erosion, increases infiltration, and helps keep organic matter in the soil. Diversifying crop rotations can improve biodiversity, improve infiltration and nutrient cycling, and reduce pests. Providing some type of live plant root on a year-round basis is important for building soil health, ensuring that there is food for the soil web continuously throughout the year. Finally, integrating animals or livestock in the form of grazing can help balance the carbon to nitrogen ration, manage crop rotation, and help suppress weeds by fulfilling the natural symbiotic relationships between plants, animals, and the soil web (Fuhrer, 2018). Landowners should work with their local USDA-NRCS representative and cropping consultants to implement a system that will work for them.

Regenerative Agriculture

Regenerative agriculture promotes a method of farming that encourages the regeneration of topsoil, improves water quality, increases biodiversity, and supports carbon sequestration in effort to mitigate the effects of climate change (Terra Genesis International, 2016). The practice is guided by a holistic approach of making appropriate, context-specific recommendations for farmers based on agroecology and restoration ecology methodologies with the goal of rebuilding quantity and quality of topsoil while creating equitable and just relationships amongst all stakeholders. By rebuilding soil organic matter and soil health, yields should increase, and fewer inputs should be needed over time. Simultaneously, the improved biomass helps to sequester carbon and offset greenhouse gases, while the reduced disturbance of the soil improves water quality (Regeneration International, 2019). Many of the practices involved are recommended by NRCS, the county Soil and Water Conservation Districts, and the principles of soils health. Potential practices include "no-till/minimum tillage techniques, the use of cover crops, crop rotations, compost, and animal manures, the inoculation of soils with composts or compost extracts to restore soil microbial activity, and managed grazing (CSU Chico, 2017)."

The regenerative agriculture approach, research, and methodologies are evolving and need to be tailored to the context of individual farms. Many sources of additional information are available including online resources available from Regeneration International, Terra Genesis International, and California State University – Chico, among others.

5.1.13 Downspout Disconnection/Rainwater Harvesting & Re-use (New)

Downspout disconnection and rain barrel programs help to reduce the amount of stormwater that travels downstream. Water harvesting and re-use via rain barrels and cisterns are important options to decrease the amount of stormwater runoff in a watershed. It is a simple, economical solution that can be done by any homeowner or business. On most homes and buildings, the storm water from roofs flows into downspouts and then onto streets, parking areas, and into storm sewers. Disconnecting downspouts and using either rain barrels or cisterns for stormwater re-use later can reduce the flood levels in local streams.

Water re-use differs based on the type of storage and treatment. A rain barrel is typically attached to a downspout and collects water for later use, such as irrigation purposes. In some areas, irrigation can account for almost 50 percent of residential water consumption. Re-using water collected in a rain barrel is a great way of minimizing outdoor water consumption and reducing water bills.

A cistern also stores water from rooftop runoff to be used later. However, a cistern is often larger, sealed, and the water can be filtered for a wider variety of uses. Cistern water can be used many outdoor uses such as lawn and garden watering, irrigation, car washing, and window cleaning.

The primary purpose of rain barrels and cisterns is water storage. Rain barrels typically store 55 gallons each. Cisterns can store greater amounts. Rain barrels and cisterns also reduce outdoor water demand in summer months by reducing the potable water used for irrigation or other outdoor household uses.

Rain barrel adjacent to residential home

Rainwater Harvesting & Reuse Recommendations

Education programs in the watershed should focus on teaching residents and businesses the beneficial uses of downspout disconnection, rain barrels and cisterns. Local governments in the watershed can install demonstration projects as a way for the public to better engage in their water use and re-use around residential homes and businesses.

5.1.14 Conservation Design & Low Impact Development (New)

Conservation design facilitates development density needs while preserving the most valuable natural features and ecological functions of a site. One way to do this is by reducing the lot size while increasing the available land area to allow for open space and natural resources (**Figures 13-15**). Open space is typically preserved or restored as natural areas that are integrated with Stormwater Treatment Train features and recreational trails. They also serve as an amenity to the entire development. The open space allows the residents to feel like they have larger or more private lots because most of the lots adjoin the open space system.

FIGURE 11. Conservation development concept plan in Algonquin (Source: Lennar, 2023).

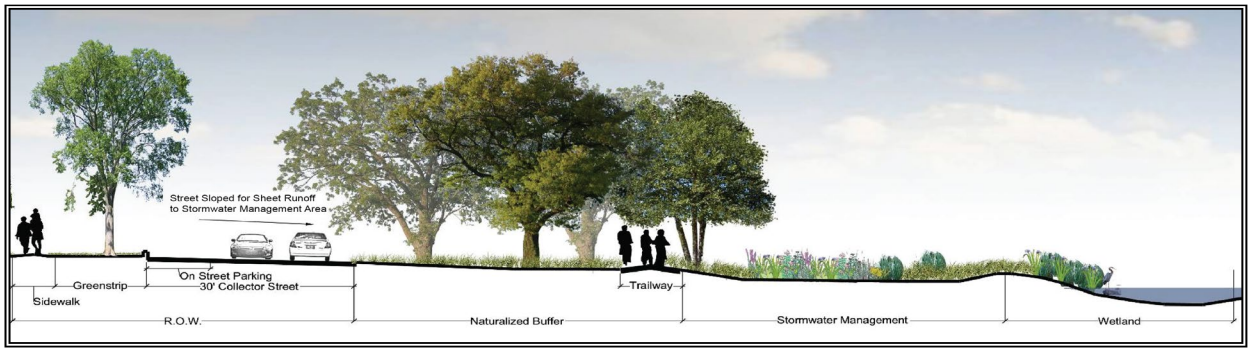


FIGURE 12. Stormwater Treatment Train within Conservation Development.

FIGURE 13. Conservation/Low Impact development design.

Conservation design can help to retain or increase the development rights of the property owner and the number of occupancy units permitted by the underlying zoning designation, while encouraging environmentally responsible development. Conservation design is most appropriate in areas having natural and open space resources to be protected and preserved such as floodplains, groundwater recharge areas, wetlands, woodlands, streams, wildlife habitat, etc. It can also be used to preserve and integrate agricultural uses into the land pattern. The approach first considers the natural landscape and ecology of a development site rather than determining design features based on pre-established density criteria. The general steps included below are generally followed when designing the layout of a development site:

Step 1: Identify natural resources, conservation areas, open space areas, physical features, and scenic areas and preserve and protect these areas from any negative impacts generated because of the development.

Step 2: Locate building sites to take advantage of open space and scenic views by requiring smaller lot sizes or cluster housing as well as to protect the development rights of the property owner and the number of occupancy units permitted by the underlying zoning of the property.

Step 3: Design the transportation system to provide access to building sites and to allow movement throughout the site and onto adjoining lands; roads should not traverse sensitive natural areas.

Step 4: Prepare engineering plans which indicate how each building site can be served by essential public utilities.

Low impact development (LID) focuses on the hydrologic impact of development and tries to maintain pre-development hydrologic systems, treating water as close to the source as possible (see **Figure 16**). LID principles can be incorporated into development or stormwater ordinances and used in new development or retrofitting existing developments. Green infrastructure systems are created to mimic natural processes that promote water infiltration, native plant evapotranspiration, and stormwater reuse.

FIGURE 14. Greener streetscape using LID practices (Source: "Greening the Code", Washington County, OR).

Low impact development seeks to keep stormwater out of pipes and instead keep the entire infrastructure more natural and above ground. Solutions start at the lot scale such as rain gardens and overflows to swales adjacent to roads. Larger impervious areas, such as commercial development, may utilize constructed wetlands for stormwater storage while adding value to the area by enhancing aesthetics, site interest, and ecological health. Entities such as Milwaukee Metropolitan Sewerage District have been influential in determining pollutant reductions for various LID methodologies.

Both conservation developments and low impact developments (LID) are not only environmentally sound choices, but economical ones for both developers and municipalities. Conservation design can produce some of its biggest cost savings in infrastructure costs such as site preparation, stormwater management, site paving, and sidewalks (Conservation Research Institute, 2005). According to a study conducted by Applied Ecological Services, Inc., the average savings created by choosing conservation development over more traditional footprints is 24% (**Table 11**) (AES, 2007). Not only do lots in conservation developments typically cost less to install, but they also "carry a price premium … and sell more quickly than lots in conventional subdivisions (Mohamed, 2006)." Another

study conducted in Concord, Massachusetts found that over an eight-year period, a cluster development with protected open space had a 2.6% higher annual appreciation rate over "residential properties with significantly larger private yards, but without the associated open-space (Lacy, 1990)."

TABLE 11. Savings of Conservation Design over traditional subdivision design for 10 Midwestern conservation development projects (AES, 2007).

Positive numbers are savings of Conservation Development over Traditional.
Negative numbers are costs of Conservation Development over Traditional.

Project:	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	Average
ITEM											
Grading	-$214,740	$257,832	$1,813,726	$2,215,025	$1,856,206	$1,862,988	$796,705	$291,957	$302,497	$2,852,312	51.00%
Roadway	$84,702	$18,754	-$16,477	-$130,230	$1,464,599	$1,187,386	$205,168	$9,231	-$9,963	$801,484	18.00%
Storm Sewer	$181,611	$31,220	$6,648	$89,676	$974,689	$547,184	$210,289	$65,501	$110,021	$678,302	40.00%
Sanitary Sewer	$41,614	-$4,365	$0	-$203,064	$850,962	$224,776	$72,436	-$15,502	$5,960	$423,458	6.00%
Water	$44,483	-$4,671	-$63,680	-$215,881	$905,157	$240,064	$76,815	-$16,257	$5,973	$451,084	5.00%
Ecological	-$56,500	-$74,857	-$277,472	-$400,321	-$407,131	-$625,084	-$160,341	-$93,954	-$264,513	-$380,992	-154.00%
Amenities	$17,572	-$16,202	-$94,399	-$226,216	$552,667	$221,666	$7,825	-$15,749	-$39,274	$266,982	6.00%
Contingencies	$132,055	$51,928	$342,087	$282,247	$1,549,287	$914,745	$302,225	$56,307	$27,675	$1,273,157	24.00%
Total Savings	$660,277	$259,639	$1,710,433	$1,411,235	$7,746,436	$4,573,725	$1,511,124	$281,534	$138,377	$6,365,787	
Total Percent Savings	19.00%	20.00%	33.00%	15.00%	43.00%	32.00%	25.00%	15.00%	4.00%	37.00%	24.30%*
Cost Savings Per Lot	$8,725.00	$6,978.00	$147,012.00	$29,012.00	$7,904.00	$20,077.00	$7,346.00	$4,078.00	$4,959.00	$67,676.00	$30,376.70

* Total Savings Percentage is *not* the percentage savings of all individual Items added together, because dollar-values of Items are different.
Visit www.appliedeco.com for more detailed info.

While low impact development covers a range of stormwater practices, it has some of the same cost benefits as conservation design. Typically LID practices "can cost less to install, have lower operations and maintenance costs, and provide more cost-effective stormwater management and water-quality services than conventional stormwater controls (ECONorthwest, 2007)." Like conservation design, cost savings from utilizing LID practices can be found as a reduction in the amount of drainage infrastructure and land disturbance required; additionally, property values can be increased by 12 - 16% (UNH Stormwater Center, 2011).

There is also evidence that combining both conservation and low impact development practices through holistic site design can create deeper cost savings for developers as well as increased ecosystem benefits – particularly by combining clustered site designing and naturalized stormwater management systems (Conservation Research Institute, 2005). Not only do conservation and low impact development practices provide a more economical possibility for developers and municipalities, but they can improve water quality, habitat, and property values in the watershed.

5.1.15 Green Infrastructure Network Planning (New)

A green infrastructure network provides communities with a tool to identify and prioritize open space land use or conservation opportunities and plan development that benefits both people and nature by providing a framework for future growth. It identifies areas not suitable for development, areas suitable for development but that should incorporate conservation or low impact design standards, and areas that do not affect green infrastructure.

Park Districts, Forest Preserve Districts, IDNR, and watershed stakeholders can use green infrastructure plans for trail routing, open space linkages, and natural area restoration decisions. Residents can use green infrastructure recommendations to reduce runoff from their properties and to see how their properties fit into the larger network. A Green Infrastructure Network for the watershed was developed in Section 3.9.

Green Infrastructure Network *implementation* has several actions:

- Protect specific unprotected green infrastructure parcels through acquisition, regulation, and/or incentives.
- Incorporate conservation or low impact design standards on green infrastructure parcels where development is planned.
- Incorporate agricultural preservation and enhanced agricultural best management practices on green infrastructure parcels where appropriate.
- Limit future subdivision of green infrastructure parcels.
- Implement long-term management of green infrastructure.

Green Infrastructure Recommendations

A Green Infrastructure Network can only be realized by coordinated planning efforts of local municipalities, park districts, developers, and private landowners. Stakeholders should follow the recommended process below to initiate and implement the Green Infrastructure Network for the Woods Creek watershed.

- Include all green infrastructure parcels in updated community comprehensive plans and development review maps.
- Utilize tools such as protection overlays, setbacks, open space zoning, conservation easements, conservation and/or low impact development, agricultural preservation, etc. on all green infrastructure parcels.
- Utilize tools such as Development Impact Fees, Stormwater Utility Taxes, Special Service Area (SSA) Taxes, etc. to help fund future management of green infrastructure components where new and redevelopment occurs.
- Identify important unprotected green infrastructure parcels not suited for development then protect and implement long term management.
- Work with private landowners along stream/tributary corridors to manage their land for green infrastructure benefits.

- Use the Green Infrastructure Network to identify new trails and trail connections.

5.1.16 Water Quality Trading & Adaptive Management (New)

While Illinois has not yet set up policies or a system to implement water quality trading or adaptive management, nearby Wisconsin has developed policies and several resources for both, and their guidance could be used as a model to follow in Illinois. The following information is cited directly from a Wisconsin Department of Natural Resources (WDNR) document entitled "A Water Quality Trading How to Manual" (WDNR, 2013).

Water Quality Trading presents a way for municipal and industrial NPDES permit holders to demonstrate compliance with water quality-based effluent limitations. Generally, trading involves a point source facing relatively high pollutant reduction costs compensating another party to achieve less costly pollutant reduction with the same or greater water quality benefit. In other words, trading provides point sources with the flexibility to acquire pollutant reductions from other sources in the watershed to offset their point source load so that they will comply with their own permit requirements, while simultaneously helping to fund water quality improvements nearby. Trading is not a mandatory program or regulatory requirement, but rather a market-based option that may enable some industrial and municipal facilities within the watershed to meet regulatory requirements more cost-effectively. With ever-tightening water quality standards and restrictions going into effect, trading may become economically preferable to other compliance options.

There are many benefits to trading:

- Permit compliance through trading may be economically preferable to other compliance options.

- New and expanding point source discharges can utilize trading to develop new economic opportunities in a region, while still meeting water quality goals.

- Permittees, and the point and nonpoint sources that work cooperatively with them, can demonstrate their commitment to the community and to the environment by working together to protect and restore local water resources.

Adaptive management is sometimes confused with trading since both options allow permittees to work with nonpoint or other point sources of phosphorus in a watershed to reduce the overall phosphorus load to a given waterbody. In Wisconsin, which has developed a numeric phosphorus criterion, adaptive management is solely focused on phosphorus compliance and improving water quality so that the applicable phosphorus criterion is met. Trading is not limited to phosphorus and may be used to meet limits for any pollutant for which a criterion has been established. Trading focuses on compliance with a discharge *limit* while adaptive management focuses on compliance with phosphorus *criteria.*

Water quality trading has seven components: pollutant, trading participants, pollution reduction credit, credit threshold, trade ratio, location, and timing (**Figure 17**). Each of these components must be adequately addressed in a trading strategy. The "pollutant" is simply the contaminant being traded. The "trading participants" are entities involved in the trade. "Credit" is the amount of a given pollutant that is available for trading. "Credit Threshold" is the amount of pollutant reduction that needs to be achieved before credits are generated. "Trade ratios" are put in place due to uncertainty margins. "Location" refers to the fact that the credit user and generator must discharge to the same waterbody. "Timing" is important because credits must be generated before they can be used to offsite the pollution.

For more information and guidance on water quality trading and adaptive management, see Wisconsin Department of Natural Resources (WDNR) document entitled "A Water Quality Trading How to Manual" (WDNR, 2013).

FIGURE 15. Water quality trading components (Source: WDNR).

5.2 Site-Specific Measures Action Plan (Update)

Over 200 Site-Specific Management Measures (Best Management Practices) were assessed and listed by jurisdiction with recommendations backed by findings from the 2013 watershed field inventory. In the ten years since the plan was completed, many projects have been implemented by multiple entities and the watershed has seen marked improvement in ecological conditions. Additionally, a limited watershed field reassessment inventory was conducted (within the Village of Algonquin) as well as input gathered from stakeholders to identify new projects and updates to some past projects. While many of the projects listed in the original 2013 plan are still valid, new and updated projects are shown in **Table 12**. The vast majority of these are detention basin retrofits, followed by a few stream and riparian area restorations. The Site-Specific Measures Action Plan Update is organized by jurisdiction with significant detail and estimated pollutant reduction and cost. This makes it easy for users to identify project sites and valuable supporting details.

5.2.1 Detention Basin Retrofits & Maintenance (Update)

During the reassessment, 101 detention basin retrofit opportunities were assessed within the Algonquin portion of Woods Creek watershed. Updated recommended detention basin retrofits and/or maintenance recommendations are shown in **Figure 18** by priority and Site ID# which correspond with the ID# used in the field investigation. In total, there were 27 detention basins identified as High Priority/Critical Areas. Details about each recommendation can be found in the Action Plan Table (**Table 12**) within the appropriate jurisdictional boundary. All the High priority

recommendations are considered Critical Areas. Most of these basins were prioritized based on their ability to treat polluted stormwater runoff, have significant problems, or present a good opportunity for retrofitting. Low or Medium priority is generally assigned to smaller private basins and those with fewer problems or maintenance needs.

During the Woods Creek watershed plan update process, 40 detention basins were identified by the Village of Algonquin as being prioritized for future acquisition with the intent of restoring and managing them for green infrastructure benefit. These basins are mapped on **Figure 19** and include Site IDs 6-8, 17-21, 23, 29-33, 39-53, 68-70, 88, and 90-93.

5.2.3 Streambank & Channel Recommendations and 5.2.4 Riparian Area Restoration & Maintenance (Update - Combined)

During the reassessment, some stream reaches within the Village of Algonquin were updated during the field inventory for the watershed plan update. Updated recommended streambank and riparian area restoration recommendations are shown in **Figure 20** by priority and Site ID# which correspond with the ID# used in the field investigation. In total, there were eight reaches identified as Critical Area/High Priority for restoration, 1 reach identified as low priority, and 6 previously restored stream reaches identified as Critical Maintenance. Details about each recommendation can be found in the Action Plan Table (**Table 12**) within the appropriate jurisdictional boundary. All the High priority recommendations are considered Critical Areas.

5.2.6 Priority Green Infrastructure Protection Areas (Update)

The Village of Algonquin supplied updates to their Priority Green Infrastructure Protection Areas. Updated recommended Priority Green Infrastructure Protection Areas are shown in **Figure 21** by priority and Site ID# which correspond with the ID# assigned by the Village of Algonquin. In total, there were 22 Critical Area/High Priority parcels identified as Priority Green Infrastructure Protection Areas (700.8 acres). Details about each recommendation can be found in **Table 12** by project type. All 22 parcels are considered Critical Area/High Priority based on their importance in preserving the Green Infrastructure Network in the future.

5.2.7 Other Management Measures (Update)

The Village of Algonquin supplied updates to their Other Management Measure Recommendations. Updated recommended other management measure recommendations are shown in **Figure 22** by priority and Site ID# which correspond with the ID# assigned by the Village of Algonquin. In total, there were 4 Critical Area/High Priority other management measures, 3 medium, and 1 low priority other management measures. Details about each recommendation can be found in **Table 12** by project type. Most of these were prioritized based on their ability to treat polluted stormwater runoff, have significant problems, or present a good opportunity for restoration. Low priority is generally assigned to areas with less urgent concerns.

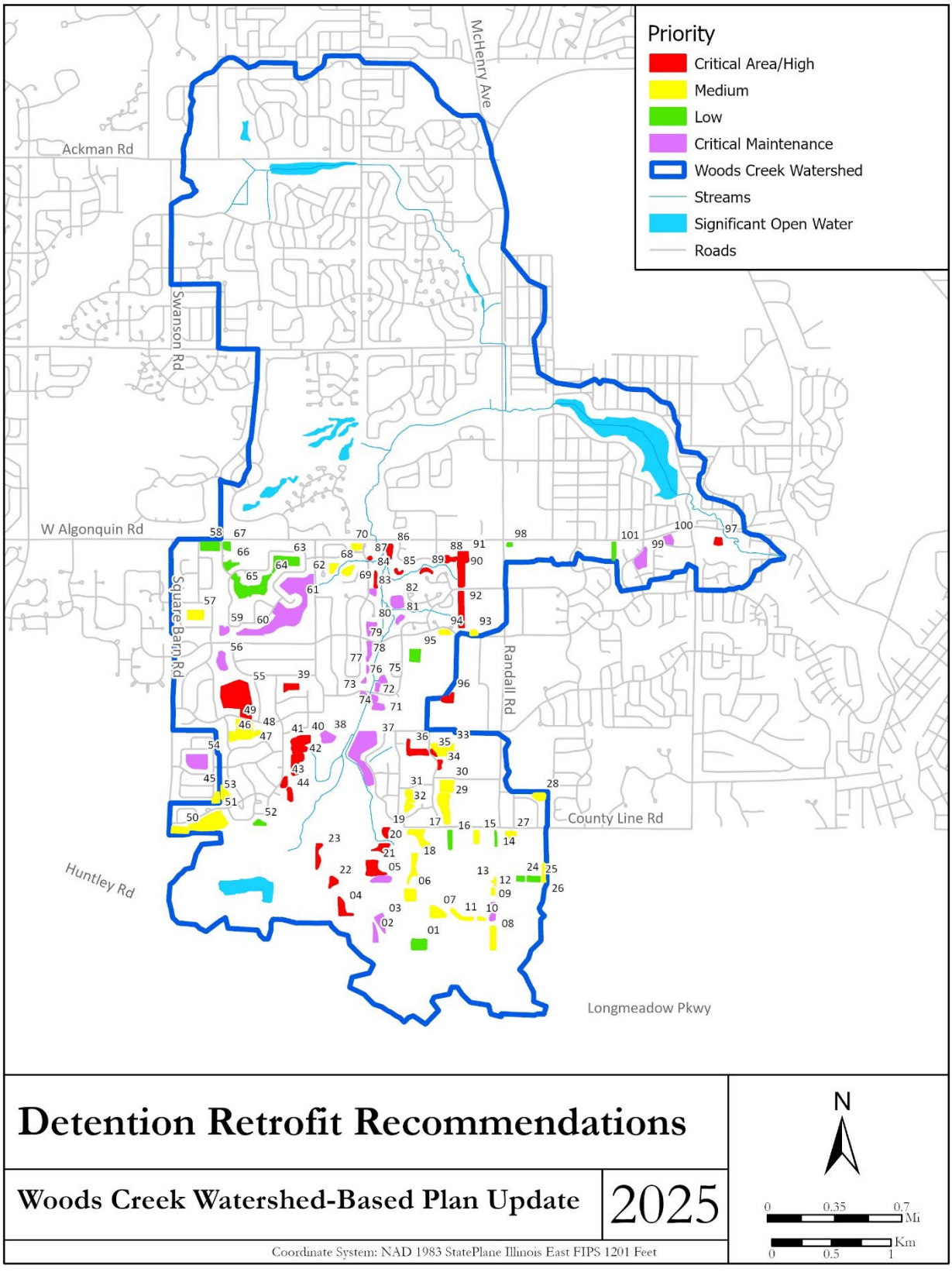


FIGURE 16. Detention Basin Retrofit Recommendations.

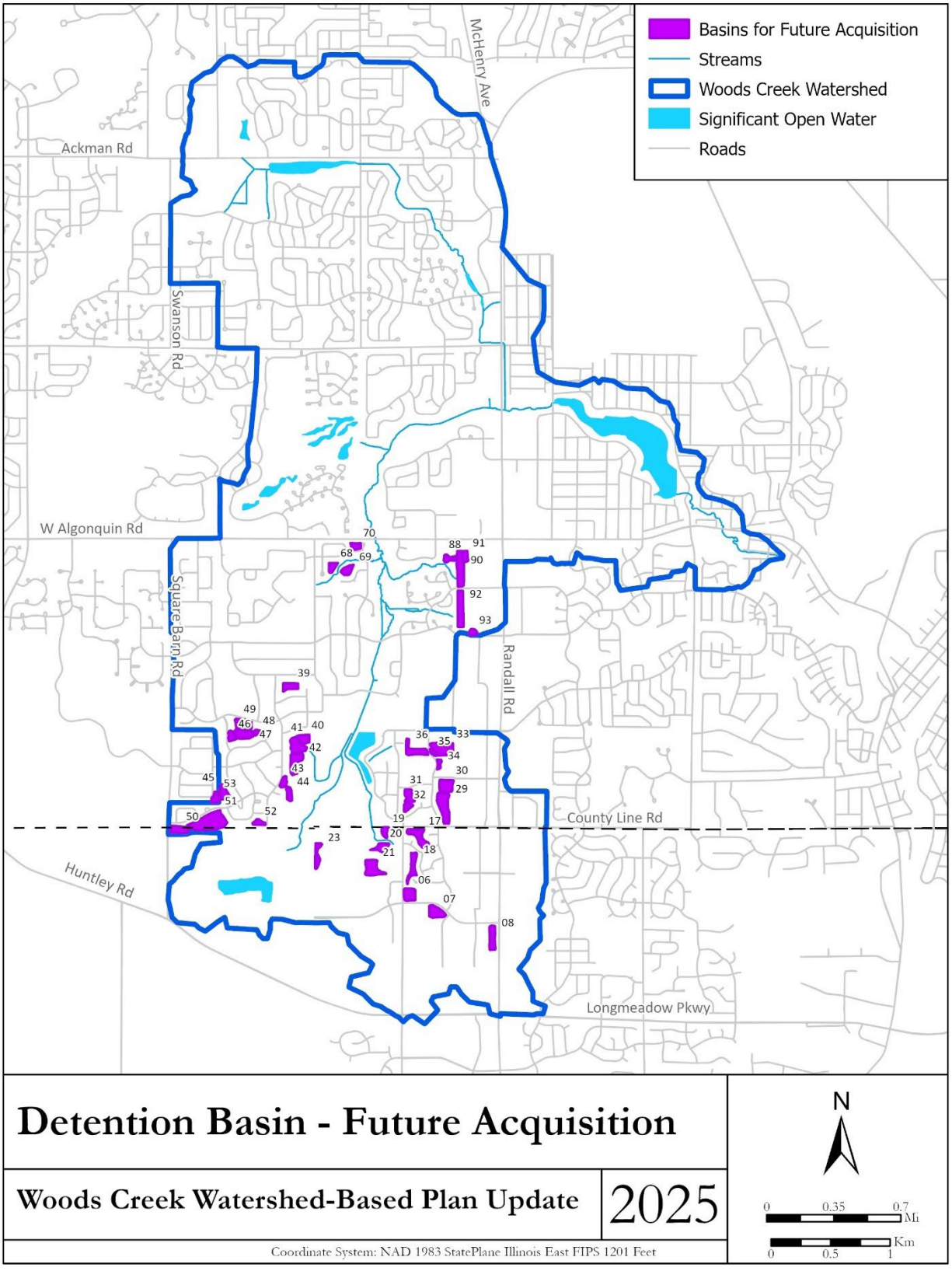


FIGURE 17. Detention Basins for Future Acquisition by the Village of Algonquin.

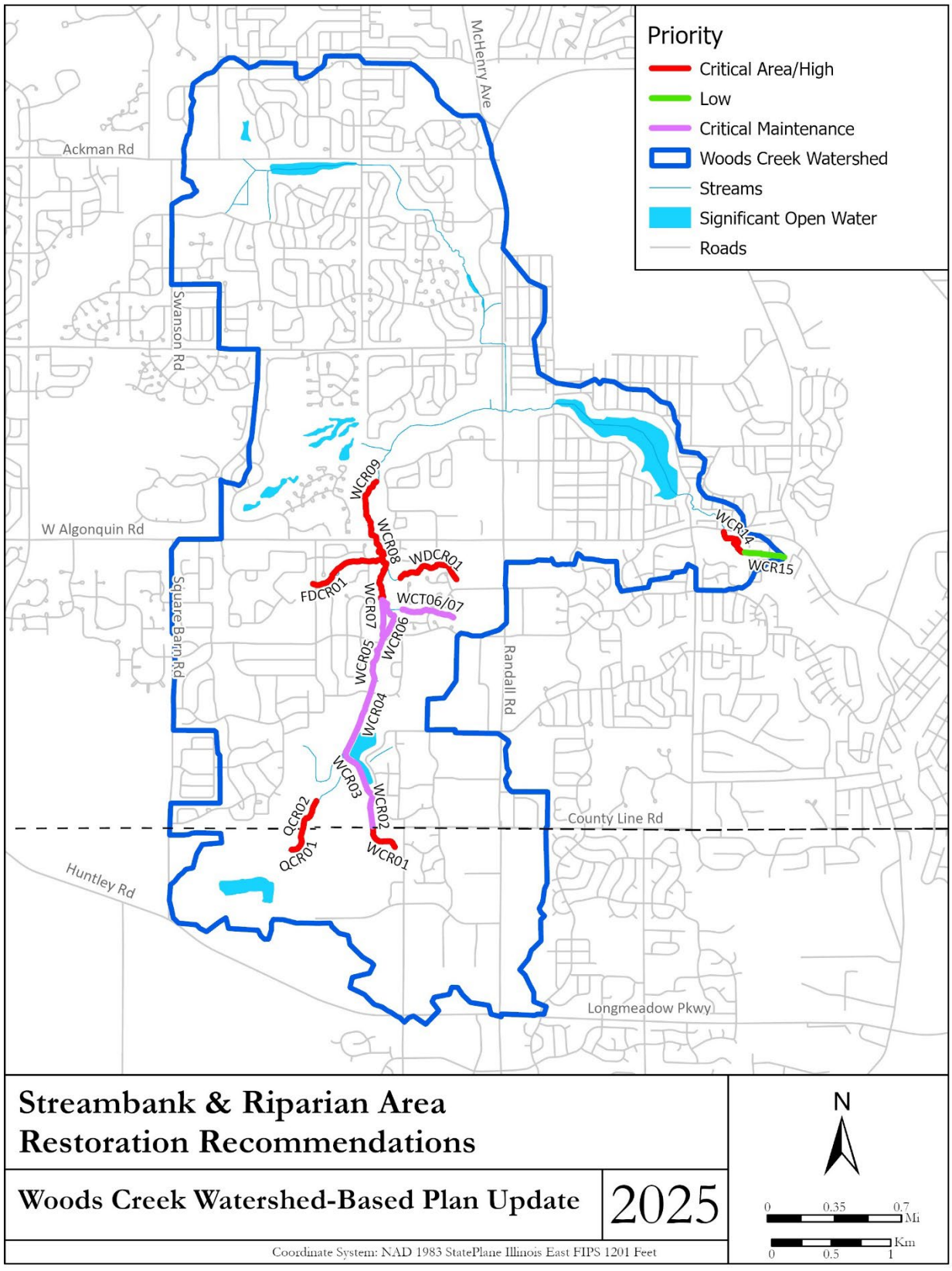


FIGURE 18. Streambank & Riparian Area Restoration Recommendations.

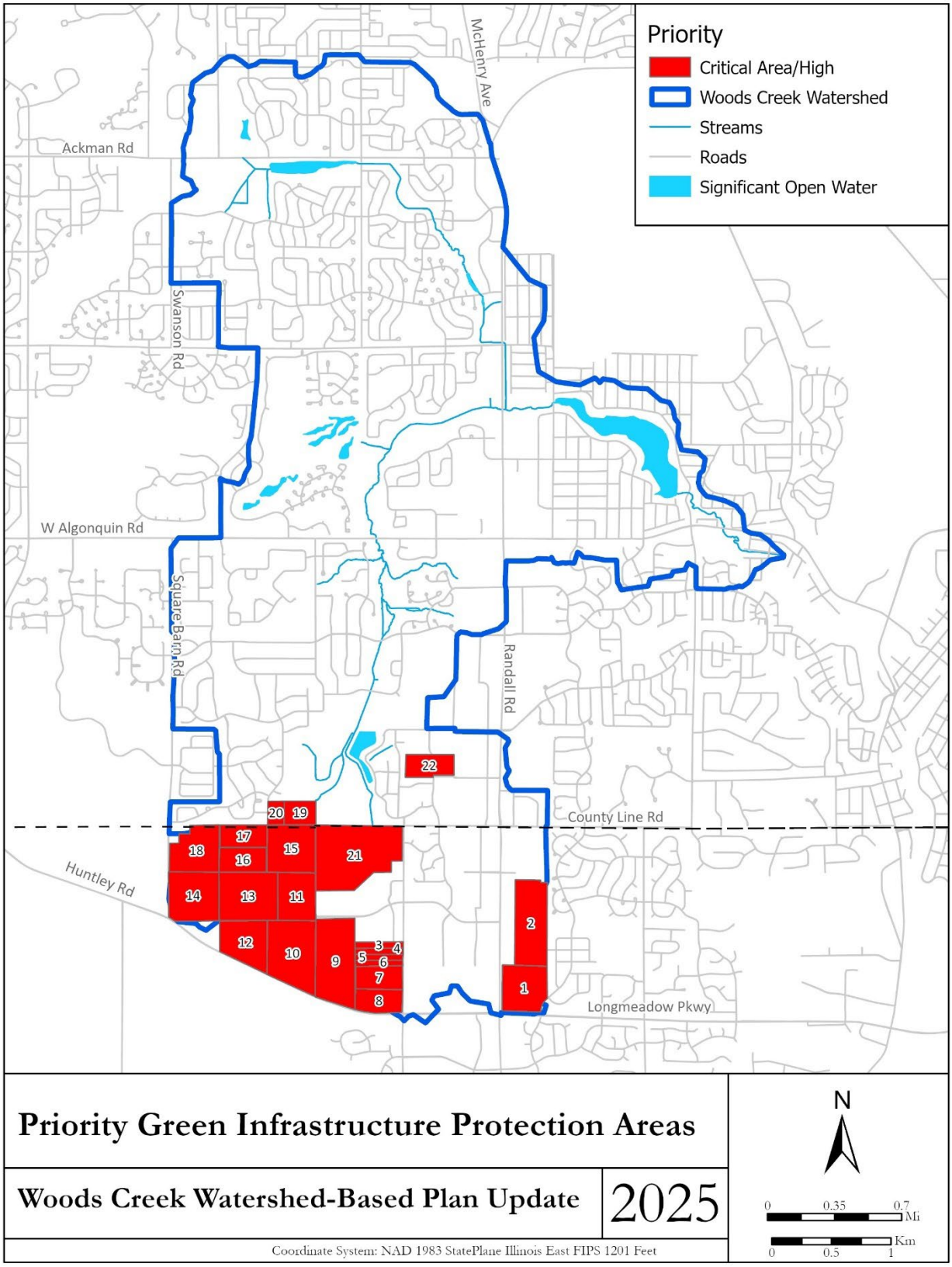


FIGURE 19. Priority Green Infrastructure Protection Areas.

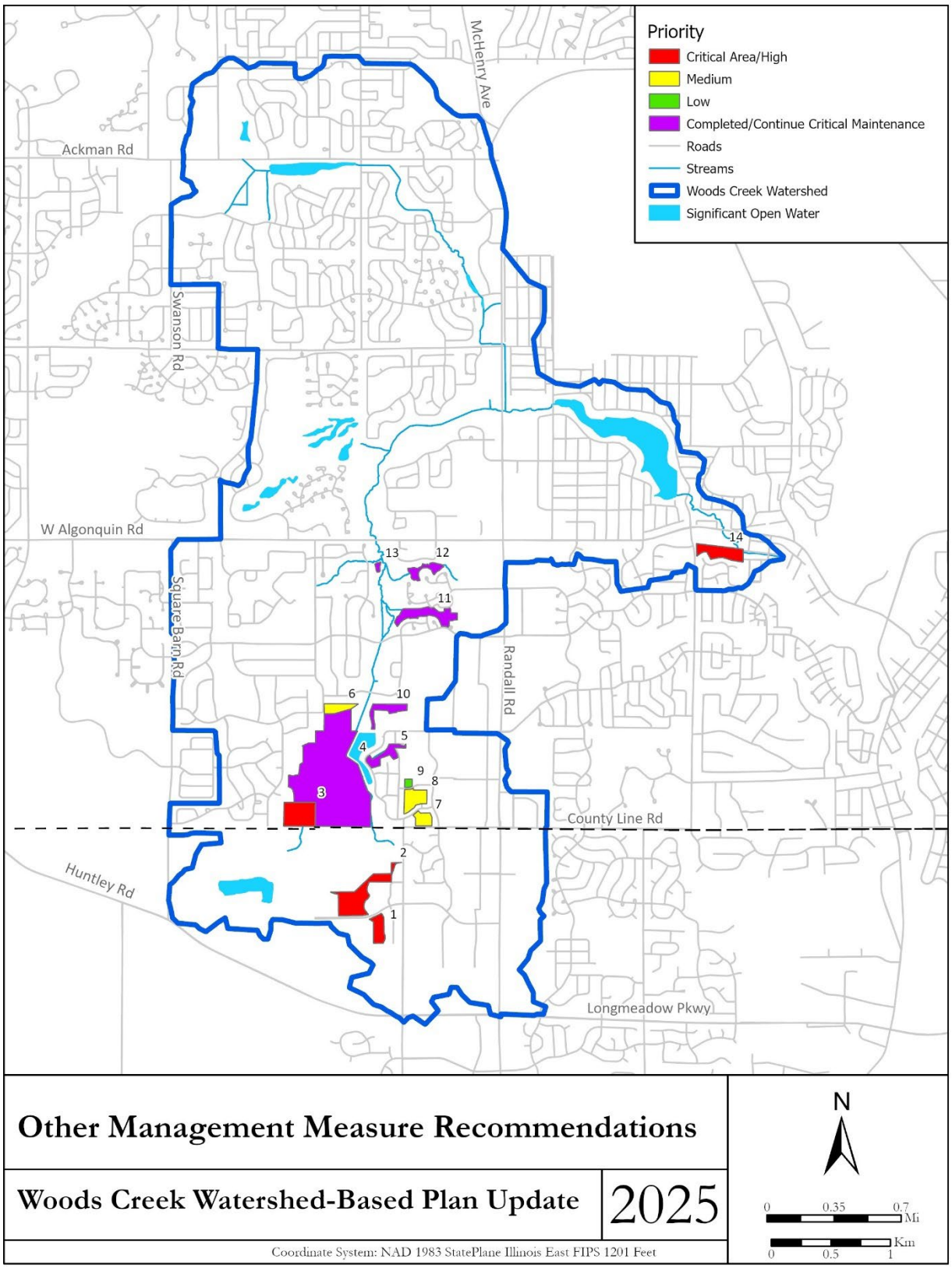


FIGURE 20. Other Management Measure Recommendations.

TABLE 12. New and Updated Site-Specific Action Plan Project Recommendations.

ALGONQUIN

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Pollutant Reduction Efficiency			Priority	Owner & Responsible Entity	Sources of Technical Assistance	Cost Estimate	Implementation Schedule (Years)
					TSS (tons/yr)	TP (lbs/yr)	TN (lbs/ yr)					
Detention Basin Retrofit Recommendations - See Figure 18 for project location												
01	Algonquin Square Apartment Detention	2.8	Wet bottom detention area in average ecological condition, buffer consisting of mostly invasive herbaceous vegetation and willow, with minor toe erosion.	Design and implement a project to remove invasive species and plant with native plants.	0	1	3	Low	Private Owner	Ecological Consultant/ Contractor	$56.6K to design and construct. $9.9K to implement three-year M&M.	10-20+ Years
02	Corporate Campus Preserve Detention	1.1	Wetland bottom detention area in average ecological condition, previously naturalized but now with nonnative and woody resprouts.	Design and implement a project to remove invasive species and replant with natives.	1	1	13	Critical Area/High	Village of Algonquin	Ecological Consultant/ Contractor	$22.6K to design and construct. $4K to implement three-year M&M.	1-10 Years
03	Corporate Campus Preserve Detention	1.9	Wetland bottom detention area in average ecological condition, previously naturalized but now with nonnative and woody resprouts.	Design and implement a project to remove invasive species and replant with natives.	0	1	2	Critical Area/High	Village of Algonquin	Ecological Consultant/ Contractor	$37.5K to design and construct. $6.6K to implement three-year M&M.	1-10 Years
04	Corporate Campus Preserve Detention	2.1	Wet bottom detention area in average ecological condition, with a basin buffer dominated by invasive species.	Design and implement a project to remove invasive species, seed side slopes, and add plant plugs.	1	2	24	Critical Area/High	Village of Algonquin	Ecological Consultant/ Contractor	$42.4K to design and construct. $7.4K to implement three-year M&M.	1-10 Years
05	Corporate Campus Preserve Detention	1.8	Wetland bottom detention area in average ecological condition, previously naturalized basin now becoming dominated by woody second growth.	Design and implement a project to remove invasive species and replant with natives.	0	1	2	Critical Area/High	Village of Algonquin	Ecological Consultant/ Contractor	$37.5K to design and construct. $6.6K to implement three-year M&M.	1-10 Years
06	Corporate Drive Detention	2.3	Wet bottom detention area in average ecological condition, basin dominated by invasive herbaceous and woody species.	Design and implement a project to remove invasive species, seed or plug with native species, and maintain the site. Potential future acquisition.	1	2	27	Medium	Private Owner	Ecological Consultant/ Contractor	$45.6K to design and construct. $8K to implement three-year M&M.	5-15 Years
07	Corporate Drive Detention	2.5	Wet bottom detention area in poor ecological condition, with a basin buffer dominated by invasive species and second growth woody.	Design and implement a project to remove invasive species, seed native species or add plugs; Potential Future Acquisition Opportunity	0	1	8	Medium	Private Owner	Ecological Consultant/ Contractor	$50K to design and construct. $8.7K to implement three-year M&M.	5-15 Years
08	Hobby Lobby Detention	2.3	Wet bottom detention area in average ecological condition, previously naturalized detention buffers taken over by alder, calorie pear, and phragmites.	Design and implement a project to remove woody invasives and treat phragmites; Potential Future Acquisition Opportunity	1	2	27	Medium	Private Owner	Ecological Consultant/ Contractor	$45.4K to design and construct. $7.9K to implement three-year M&M.	5-15 Years

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Pollutant Reduction Efficiency			Priority	Owner & Responsible Entity	Sources of Technical Assistance	Cost Estimate	Implementation Schedule (Years)
					TSS (tons/yr)	TP (lbs/yr)	TN (lbs/ yr)					
10	Algonquin Commons Detention Private	0.4	Wet bottom detention area in average ecological condition, previously naturalized basin now lacking maintenance with woody resprouts and phragmites.	Design and implement a project to recommend the owner establish ongoing maintenance.	0	0	5	Medium	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	5-15 Years
11	Algonquin Commons Detention Private	1.5	Wet bottom detention area in poor ecological condition, previously naturalized basin lacking maintenance and becoming dominated by woody invasives and phragmites.	Design and implement a project to reestablish maintenance by the owner.	1	1	17	Medium	Private Owner	Ecological Consultant/ Contractor	$29.9K to design and construct. $5.2K to implement three-year M&M.	5-15 Years
12	Algonquin Commons Detention Private	0.4	Wetland bottom detention area in poor ecological condition, previously naturalized basin lacking maintenance now dominated by invasive woody and herbaceous species.	Design and implement a project to reestablish maintenance by the owner.	0	0	5	Medium	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	5-15 Years
13	Algonquin Commons Detention Private	0.3	Wet bottom detention area with poor ecological condition, featuring turf and hardscape buffer with some toe erosion.	Design and implement a project to reseed the basin buffer and control invasives.	0	0	3	Medium	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	5-15 Years
14	Algonquin Commons Detention Private	0.4	Wet bottom detention area in poor ecological condition, with a buffer dominated by rye grass and sweet clover.	Design and implement a project to implement toe stabilization.	0	0	5	Low	Private Owner	Ecological Consultant/ Contractor	$8.4K to design and construct. $1.5K to implement three-year M&M.	10-20+ Years
15	Algonquin Commons Detention Private	1.1	Wet bottom detention area in poor ecological condition, with side slopes dominated by perennial rye grass and sweet clover.	Design and implement a project to reestablish owner maintenance and stabilize the toe slope.	1	1	13	Medium	Private Owner	Ecological Consultant/ Contractor	$22.6K to design and construct. $4K to implement three-year M&M.	5-15 Years
16	Algonquin Commons Detention Private	1.3	Wet bottom detention area in average ecological condition, basin erosion present due to steep slope, and second growth woody species and phragmites.	Design and implement a project to completely reseed buffers and perform minor toe stabilization.	1	1	15	Low	Private Owner	Ecological Consultant/ Contractor	$25.6K to design and construct. $4.5K to implement three-year M&M.	10-20+ Years
17	Canterbury Townhomes Detention	3.0	Wet bottom detention area in poor ecological condition, previously naturalized basin lacking maintenance now a failing due to woody and herbaceous species.	Design and implement a project to ensure continued maintenance by the HOA; Potential Future Acquisition Opportunity	0	2	10	Medium	Private Owner	Ecological Consultant/ Contractor	$59K to design and construct. $10.3K to implement three-year M&M.	5-15 Years
18	Canterbury Townhomes Detention	2.1	Wetland bottom detention area in average ecological condition, with a naturalized basin showing evidence of maintenance.	Design and implement a project to have the HOA continue maintenance; Potential Future Acquisition Opportunity	0	1	7	Medium	Private Owner	Ecological Consultant/ Contractor	$41.9K to design and construct. $7.3K to implement three-year M&M.	5-15 Years

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Pollutant Reduction Efficiency			Priority	Owner & Responsible Entity	Sources of Technical Assistance	Cost Estimate	Implementation Schedule (Years)
					TSS (tons/yr)	TP (lbs/yr)	TN (lbs/ yr)					
19	Plote Property	0.9	Wetland bottom detention area in average ecological condition, naturalized basin undergoing some form of maintenance.	Design and implement a project to seed the buffer, install emergent plant plugs, and stabilize emergent areas as needed; Potential Future Acquisition Opportunity	0	0	0	Critical Area/High	Private Owner	Ecological Consultant/ Contractor	$18K to design and construct. $3.1K to implement three-year M&M.	1-10 Years
20	Plote Property	1.5	Wet bottom detention area in poor ecological condition, with a buffer dominated by woody and herbaceous species and some toe erosion.	Design and implement a project to seed with native species and install emergent plant plugs; Potential Future Acquisition Opportunity	0	0	2	Critical Area/High	Private Owner	Ecological Consultant/ Contractor	$29.1K to design and construct. $5.1K to implement three-year M&M.	1-10 Years
21	Plote Property	3.4	Wet bottom detention area in poor ecological condition, with a buffer dominated by invasive species.	Design and implement a project to seed with native plants and install emergent plant plugs; Potential Future Acquisition Opportunity	0	0	4	Critical Area/High	Private Owner	Ecological Consultant/ Contractor	$68K to design and construct. $11.9K to implement three-year M&M.	1-10 Years
22	Plote Property	1.2	Wet bottom detention area in poor ecological condition, with a buffer dominated by woody and herbaceous invasive species.	Design and implement a project to install native seed and emergent plant plugs.	0	0	2	Critical Area/High	Private Owner	Ecological Consultant/ Contractor	$23.4K to design and construct. $4.1K to implement three-year M&M.	1-10 Years
23	Plote Property	1.6	Wet bottom detention area in poor ecological condition, with a buffer dominated by invasive woody and herbaceous species.	Design and implement a project to install native seed and emergent plant plugs. Potential future Acquisition.	0	0	2	Critical Area/High	Private Owner	Ecological Consultant/ Contractor	$31.3K to design and construct. $5.5K to implement three-year M&M.	1-10 Years
24	Kensington Development Detention	0.7	Wet bottom detention area in poor ecological condition, with a buffer dominated by woody and herbaceous species.	Design and implement a project to mow side slopes, monitor, and maintain erosion as needed.	0	1	8	Low	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	10-20+ Years
25	Kensington Development Detention	1.2	Wet bottom detention area in average ecological condition, with a previously restored buffer being taken over by willow and phragmites.	Design and implement a project to mow side slopes and monitor or maintain as needed.	1	1	14	Low	Private Owner	Ecological Consultant/ Contractor	$24K to design and construct. $4.2K to implement three-year M&M.	10-20+ Years
26	Galleria Center Detentions	1.1	Wet bottom detention area in poor ecological condition, with a buffer dominated by woody and herbaceous species.	Design and implement a project to reseed the buffer with native species and install emergent plant plugs.	1	1	13	Medium	Private Owner	Ecological Consultant/ Contractor	$21.2K to design and construct. $3.7K to implement three-year M&M.	5-15 Years
27	Galleria Center Detentions	1.3	Wet bottom detention area in average ecological condition, with a previously restored buffer being taken over by willow and phragmites.	Design and implement a project to reseed the buffer and install emergent native plant plugs.	1	1	15	Medium	Private Owner	Ecological Consultant/ Contractor	$25.3K to design and construct. $4.4K to implement three-year M&M.	5-15 Years
28	Briarwood Center Detention	1.5	Wet bottom detention area in poor ecological condition, with a buffer dominated by woody and herbaceous species.	Design and implement a project to reseed the buffer with emergent native plants.	1	1	17	Medium	Private Owner	Ecological Consultant/ Contractor	$29.8K to design and construct. $5.2K to implement three-year M&M.	5-15 Years

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Pollutant Reduction Efficiency			Priority	Owner & Responsible Entity	Sources of Technical Assistance	Cost Estimate	Implementation Schedule (Years)
					TSS (tons/yr)	TP (lbs/yr)	TN (lbs/ yr)					
29	Wal Mart Detention	4.5	Wet bottom detention area in average ecological condition, with a buffer dominated by second growth woody species.	Design and implement a project to remove woody vegetation and reseed with native species; Potential Future Acquisition Opportunity	2	4	52	Medium	Private Owner	Ecological Consultant/ Contractor	$90.7K to design and construct. $15.9K to implement three-year M&M.	5-15 Years
30	Millbrook Townhome Detentions	2.7	Wetland bottom detention area in average ecological condition, with buffers dominated by second growth woody species and evidence that it was once a planted prairie.	Design and implement a project to remove woody invasives and assess how prairie vegetation responds, Potential Future Acquisition Opportunity	1	2	11	Medium	Private Owner	Ecological Consultant/ Contractor	$53.1K to design and construct. $9.3K to implement three-year M&M.	5-15 Years
31	Millbrook Townhome Detentions	1.6	Wet bottom detention area in poor ecological condition, with a previously naturalized basin now overrun by second growth woody species.	Design and implement a project to reseed the buffer and plant emergent plant plugs; Potential Future Acquisition Opportunity	0	1	5	Medium	Private Owner	Ecological Consultant/ Contractor	$32.3K to design and construct. $5.7K to implement three-year M&M.	5-15 Years
32	Millbrook Townhome Detentions	0.9	Wet bottom detention area in poor ecological condition, with a previously naturalized basin now overrun by second growth woody species.	Design and implement a project to reseed the buffer and plant emergent plant plugs; Potential Future Acquisition Opportunity	0	0	3	Medium	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	5-15 Years
33	Oakridge Shopping Center Detention	4.1	Wet bottom detention area in average ecological condition, with a previously naturalized basin beginning to show signs of woody and herbaceous species.	Design and implement a project to remove woody invasives and manage the buffer; Potential Future Acquisition Opportunity	2	4	47	Medium	Private Owner	Ecological Consultant/ Contractor	$82.7K to design and construct. $14.5K to implement three-year M&M.	5-15 Years
34	Spectrum Detentions	0.5	Wet bottom detention in good ecological condition	Potential future Acquisition by the Village of Algonquin.	Not applicable			Critical Area/High	Private Owner	Not applicable	Not applicable	1-10 Years
35	Spectrum Detentions	0.5	Dry bottom detention in good ecological condition	Potential future Acquisition by the Village of Algonquin.	Not applicable			Critical Area/High	Private Owner	Not applicable	Not applicable	1-10 Years
36	Spectrum Detentions	2.5	Wet bottom detention in good ecological condition	Potential future Acquisition by the Village of Algonquin.	Not applicable			Critical Area/High	Private Owner	Not applicable	Not applicable	1-10 Years
39	Coves Unit 1 Subdivision	1.6	Dry bottom detention area with turf in poor ecological condition, featuring a mowed turf grass buffer bottom when dry.	Design and implement a project to seed side slopes to prairie base and add wet prairie plugs to the base and bottom; Potential Future Acquisition Opportunity	0	0	3	Critical Area/High	Private Owner	Ecological Consultant/ Contractor	$31.4K to design and construct. $5.5K to implement three-year M&M.	1-10 Years
40	Coves Unit 1 Subdivision	1.5	Dry bottom detention area with turf in poor ecological condition.	Design and implement a project to naturalize with native species; Potential Future Acquisition Opportunity	0	0	3	Critical Area/High	Private Owner	Ecological Consultant/ Contractor	$30.8K to design and construct. $5.4K to implement three-year M&M.	1-10 Years

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Pollutant Reduction Efficiency			Priority	Owner & Responsible Entity	Sources of Technical Assistance	Cost Estimate	Implementation Schedule (Years)
					TSS (tons/yr)	TP (lbs/yr)	TN (lbs/ yr)					
41	Coves Subdivision Unit 1	2.9	Wetland bottom detention area in poor ecological condition, dominated by herbaceous and woody species.	Design and implement a project to remove invasive species and install a variety of native vegetation communities; Potential Future Acquisition Opportunity	0	1	3	Critical Area/High	Private Owner	Ecological Consultant/ Contractor	$58.9K to design and construct. $10.3K to implement three-year M&M.	1-10 Years
42	Cove Unit 1 Detention	3.1	Wetland bottom detention area in average ecological condition, featuring primarily turf buffer and native vegetation on the basin bottom.	Design and implement a project to naturalize the basin buffer and manage the basin bottom; Potential Future Acquisition Opportunity	0	1	4	Critical Area/High	Private Owner	Ecological Consultant/ Contractor	$62.9K to design and construct. $11K to implement three-year M&M.	1-10 Years
43	Cove Unit 1 Detention	0.9	Wet bottom detention area with turf in poor ecological condition, with a mowed turf grass buffer and slight erosion.	Design and implement a project to naturalize the buffer, stabilize the eroded toe, and install emergent plant plugs; Potential Future Acquisition Opportunity	0	0	3	Critical Area/High	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	1-10 Years
44	Cove Unit 1 Detention	1.1	Wet bottom detention area with turf in poor ecological condition, with a mowed turf grass buffer and slight erosion.	Design and implement a project to naturalize the buffer, stabilize the eroded toe, and install emergent plant plugs; Potential Future Acquisition Opportunity	0	1	4	Critical Area/High	Private Owner	Ecological Consultant/ Contractor	$21.4K to design and construct. $3.7K to implement three-year M&M.	1-10 Years
45	Coves Unit 2 Detention	1.6	Wet bottom detention area with turf in poor ecological condition, with mowed turf grass side slopes and significant toe erosion.	Design and implement a project to naturalize side slopes and stabilize the erosion. Potential future Acquisition.	0	1	5	Medium	Private Owner	Ecological Consultant/ Contractor	$32.7K to design and construct. $5.7K to implement three-year M&M.	5-15 Years
46	Coves Unit 2 Detention	1.0	Wetland bottom detention area in poor ecological condition, with a basin bottom dominated by cattail and side slopes dominated by woody and herbaceous species.	Design and implement a project to naturalize the buffer; Potential Future Acquisition Opportunity	0	0	1	Medium	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	5-15 Years
47	Coves Unit 2 Detention	2.5	Wetland bottom detention area in poor ecological condition, with a basin bottom dominated by cattail and side slopes dominated by woody and herbaceous species.	Design and implement a project to naturalize the buffer; Potential Future Acquisition Opportunity	0	1	3	Medium	Private Owner	Ecological Consultant/ Contractor	$49.3K to design and construct. $8.6K to implement three-year M&M.	5-15 Years
48	Coves Unit 2 Detention	0.5	Wetland bottom detention area in poor ecological condition, with a basin bottom dominated by cattail and side slopes dominated by woody and herbaceous species.	Design and implement a project to naturalize the buffer; Potential Future Acquisition Opportunity	0	0	1	Medium	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	5-15 Years

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Pollutant Reduction Efficiency			Priority	Owner & Responsible Entity	Sources of Technical Assistance	Cost Estimate	Implementation Schedule (Years)
					TSS (tons/yr)	TP (lbs/yr)	TN (lbs/ yr)					
49	Coves Unit 2 Detention	2.7	Wetland bottom detention area in poor ecological condition, with a basin bottom dominated by cattail and side slopes dominated by woody and herbaceous species.	Design and implement a project to naturalize the buffer; Potential Future Acquisition Opportunity	0	1	3	Medium	Private Owner	Ecological Consultant/ Contractor	$54.2K to design and construct. $9.5K to implement three-year M&M.	5-15 Years
50	Coves Unit 3 Detention	1.9	Wet bottom detention area in poor ecological condition, with side slopes overrun by woody and herbaceous species and a severe algae problem.	Design and implement a project to naturalize the buffer; Potential Future Acquisition Opportunity	0	1	2	Medium	Private Owner	Ecological Consultant/ Contractor	$37.5K to design and construct. $6.6K to implement three-year M&M.	5-15 Years
51	Coves Unit 3 Detention	8.2	Wetland bottom detention area in poor ecological condition, with buffers dominated by second growth woody and herbaceous species.	Design and implement a project to naturalize the buffer; Potential Future Acquisition Opportunity	1	3	10	Medium	Private Owner	Ecological Consultant/ Contractor	$146.7K to design and construct. $24.5K to implement three-year M&M.	5-15 Years
52	Coves Unit 3 Detention	0.8	Wetland bottom detention area in poor ecological condition, with a basin dominated by woody and herbaceous species.	Design and implement a project to remove invasive species and naturalize with native plants; Potential Future Acquisition Opportunity	0	0	1	Low	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	10-20+ Years
53	Westview Crossing Detention Private	1.1	Wetland bottom detention area with turf in poor ecological condition, with a turf buffer and basin bottom dominated by cattails.	Design and implement a project to seed side slopes with native vegetation; Potential Future Acquisition Opportunity	0	0	1	Medium	Private Owner	Ecological Consultant/ Contractor	$22.8K to design and construct. $4K to implement three-year M&M.	5-15 Years
55	Wood Park Detention	14.3	Wetland bottom detention area in average ecological condition, with a buffer dominated by second growth woody vegetation and a basin dominated by cattail.	Design and implement a project to dredge wetlands, design to restore wetland capacity, and redesign to be a naturalized detention area.	2	5	17	Critical Area/High	Village of Algonquin	Ecological Consultant/ Contractor	$228.7K to design and construct. $35.7K to implement three-year M&M.	1-10 Years
57	Prestwicke Subdivision Detention	2.5	Dry bottom detention area with turf in poor ecological condition, with mowed turf grass on side slopes, base, and bottom.	Design and implement a project to naturalize basin side slopes and the bottom.	0	1	5	Medium	Private Owner	Ecological Consultant/ Contractor	$50.9K to design and construct. $8.9K to implement three-year M&M.	5-15 Years
58	Prestwicke Subdivision Detention	2.8	Wet bottom detention area with turf in poor ecological condition, featuring riprap toe and mowed side slopes.	Design and implement a project to naturalize the side slopes.	0	2	9	Low	Private Owner	Ecological Consultant/ Contractor	$56.4K to design and construct. $9.9K to implement three-year M&M.	10-20+ Years
63	Trails of Woods Creek Detention Private	4.2	Wet bottom detention area with turf in poor ecological condition, featuring mowed turf grass side slopes with no emergent cattails.	Design and implement a project for continued maintenance.	1	2	14	Low	Private Owner	Ecological Consultant/ Contractor	$84.9K to design and construct. $14.9K to implement three-year M&M.	10-20+ Years
64	Trails of Woods Creek Detention Private	3.8	Wet bottom detention area with turf in poor ecological condition, featuring mowed turf grass side slopes with no emergent cattails.	Design and implement a project for continued maintenance.	1	2	13	Low	Private Owner	Ecological Consultant/ Contractor	$76.1K to design and construct. $13.3K to implement three-year M&M.	10-20+ Years

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Pollutant Reduction Efficiency			Priority	Owner & Responsible Entity	Sources of Technical Assistance	Cost Estimate	Implementation Schedule (Years)
					TSS (tons/yr)	TP (lbs/yr)	TN (lbs/ yr)					
65	Trails of Woods Creek Detention Private	3.6	Wet bottom detention area with turf in poor ecological condition, featuring mowed turf grass side slopes with no emergent cattails.	Design and implement a project for continued maintenance.	0	2	12	Low	Private Owner	Ecological Consultant/ Contractor	$71.7K to design and construct. $12.5K to implement three-year M&M.	10-20+ Years
66	Trails of Woods Creek Detention Private	1.3	Wet bottom detention area with turf in poor ecological condition, featuring mowed turf grass side slopes with no emergent cattails.	Design and implement a project for continued maintenance.	0	1	4	Low	Private Owner	Ecological Consultant/ Contractor	$25.2K to design and construct. $4.4K to implement three-year M&M.	10-20+ Years
67	Trails of Woods Creek Detention Private	1.0	Wet bottom detention area with turf in poor ecological condition, featuring mowed turf grass side slopes with no emergent cattails.	Design and implement a project for continued maintenance.	0	1	3	Low	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	10-20+ Years
68	Fairway View Estates Detentions	1.0	Wet bottom detention area in average ecological condition, previously naturalized basin now with second growth woody and phragmites.	Design and implement a project to salvage the site and treat phragmites; Potential Future Acquisition Opportunity	0	1	3	Medium	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	5-15 Years
69	Fairway View Estates Detentions	1.3	Wet bottom detention area in average ecological condition, previously naturalized basin now with second growth woody and phragmites.	Design and implement a project to salvage the site and treat phragmites; Potential Future Acquisition Opportunity	0	1	4	Medium	Private Owner	Ecological Consultant/ Contractor	$27K to design and construct. $4.7K to implement three-year M&M.	5-15 Years
70	Fairway View Estates Detentions	1.0	Wet bottom detention area in average ecological condition, previously naturalized basin now with second growth woody and phragmites.	Design and implement a project to salvage the site and treat phragmites; Potential Future Acquisition Opportunity	0	1	3	Medium	Private Owner	Ecological Consultant/ Contractor	$20.3K to design and construct. $3.6K to implement three-year M&M.	5-15 Years
84	Woods Creek Reach Corridor 8 Detention	0.7	Wet bottom detention area with turf in poor ecological condition, featuring a buffer dominated by second growth woody and herbaceous species.	Design and implement a project to remove invasive species and reseed with native plants and plugs.	0	0	2	Critical Area/High	Village of Algonquin	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	1-10 Years
85	Woods Creek Reach Corridor 8 Detention	0.4	Wet bottom detention area with turf in poor ecological condition, featuring a buffer dominated by second growth woody and herbaceous species.	Design and implement a project to remove invasive species and reseed with native plants and plugs.	0	0	1	Critical Area/High	Village of Algonquin	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	1-10 Years
86	Woods Creek Reach Corridor 8 Detention	1.3	Wet bottom detention area with turf in poor ecological condition, featuring a buffer dominated by second growth woody and herbaceous species.	Design and implement a project to remove invasive species and reseed with native plants and plugs.	0	1	4	Critical Area/High	Village of Algonquin	Ecological Consultant/ Contractor	$26.4K to design and construct. $4.6K to implement three-year M&M.	1-10 Years
87	Woods Creek Reach Corridor 8 Detention	0.2	Wet bottom detention area in poor ecological condition, with part of the turf buffer exhibiting second growth woody and herbaceous invasive species.	Design and implement a project to remove invasive species and reseed with native plants and plugs.	0	0	1	Critical Area/High	Village of Algonquin	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	1-10 Years

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Pollutant Reduction Efficiency			Priority	Owner & Responsible Entity	Sources of Technical Assistance	Cost Estimate	Implementation Schedule (Years)
					TSS (tons/yr)	TP (lbs/yr)	TN (lbs/ yr)					
88	Winding Creek Center Detention	1.0	Wet bottom detention area in poor ecological condition, with wart turf buffer with second growth woody and herbaceous invasive species.	Design and implement a project to remove invasive species and install native plants and plugs and reseed with natives; Potential Future Acquisition Opportunity	0	0	3	Critical Area/High	Private Owner	Ecological Consultant/ Contractor	$20.3K to design and construct. $3.6K to implement three-year M&M.	1-10 Years
89	Winding Creek Townhome Subdivision	0.7	Wetland bottom detention area in good ecological condition, with naturalized side slopes under existing management.	Potential future acquisition by the Village of Algonquin.	Not applicable			Critical Area/High	Private Owner	Private Owner	Private Owner	1-10 Years
90	Home Depot Detentions	3.8	Wet bottom detention area in poor ecological condition, with side slopes dominated by invasive species.	Design and implement a project to remove invasive species and install native plants and plugs; Potential Future Acquisition Opportunity	1	2	13	Critical Area/High	Private Owner	Ecological Consultant/ Contractor	$75.3K to design and construct. $13.2K to implement three-year M&M.	1-10 Years
91	Home Depot Detentions	1.0	Wet bottom detention in poor ecological condition; side slopes dominated by invasive species.	Design and implement a project to remove invasive species and install native plants and plugs; Potential Future Acquisition Opportunity	0	1	3	Critical Area/High	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	1-10 Years
92	Meijer Detention	3.4	Wetland bottom detention in poor ecological condition; side slopes dominated by woody and herbaceous species with a bottom mostly covered by phragmites.	Design and implement a project to remove invasive species and install native plants and plugs; Potential Future Acquisition Opportunity	0	1	4	Critical Area/High	Private Owner	Ecological Consultant/ Contractor	$68.1K to design and construct. $11.9K to implement three-year M&M.	1-10 Years
93	Meijer Detention	0.7	Wetland bottom detention in poor ecological condition; buffer dominated by second growth woody and herbaceous species.	Design and implement a project to remove invasive species and install native plants and plugs. Potential future acquisition.	0	0	1	Medium	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	5-15 Years
94	Jacobs High School Detention	0.9	Wetland bottom detention in average ecological condition; basin bottom natural and in good condition, south side slope dominated by second growth woody species.	Design and implement a project to remove woody vegetation from the south slope and reseed with native species.	0	0	1	Medium	School District 300	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	5-15 Years
95	Jacobs High School Detention	2.2	Wetland bottom detention in poor ecological condition; surrounded by second growth woody species.	Design and implement a project to control woody invasives.	0	1	3	Low	School District 300	Ecological Consultant/ Contractor	$43.5K to design and construct. $7.6K to implement three-year M&M.	10-20+ Years

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Pollutant Reduction Efficiency			Priority	Owner & Responsible Entity	Sources of Technical Assistance	Cost Estimate	Implementation Schedule (Years)
					TSS (tons/yr)	TP (lbs/yr)	TN (lbs/ yr)					
96	Jacobs High School Detention	1.4	Wet bottom detention in average ecological condition; basin toe is naturalized, but buffer is turf grass	Design and implement a project to remove turf and naturalize basin and slopes with natives.	0	1	4	Medium	School District 300	Ecological Consultant/ Contractor	$26.4K to design and construct. $4.6K to implement three-year M&M.	5-15 Years
97	Funeral Home Detention	1.0	Wet bottom detention in poor ecological condition; basin buffer dominated by second growth woody and herbaceous species.	Design and implement a project to remove invasive species and install native plants and plugs.	0	1	4	Critical Area/High	Village of Algonquin	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	1-10 Years
98	Jewel Detention Basin	0.3	Dry bottom detention with turf in poor ecological condition; mowed turf on side slopes and bottom.	Design and implement a project to continue mowing as is.	0	0	1	Low	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	10-20+ Years
101	Clarendale Detention	1.1	Wet bottom detention in poor ecological condition; relatively new basin with mowed turf grass side slopes, edge dominated by second growth woody species and other herbaceous species.	Design and implement a project to grade side slopes and manage invasive species along the edge.	1	1	2	Low	Private Owner	Ecological Consultant/ Contractor	$22.8K to design and construct. $4K to implement three-year M&M.	10-20+ Years
Stream & Riparian Area Restoration Recommendations - See Figure 20 for project location												
FDCR01	Fairway View Drive Creek - Fairview Dr. to Woods Creek	2,228.0	The stream riparian area is characterized by scrub/shrub and is dominated by second-growth invasive trees and shrubs.	Design, permit, and implement a project to remove invasive trees and shrubs and install native vegetation in the stream and riparian area. Additionally, selectively armor eroded stream banks and grade other banks to create floodplain shelves.	70	71	149	Critical Area/High	Village of Algonquin	Environmental Consultant/ Contractor, McHenry County, MCSWCD	$1M to design and construct. $76.7K to implement three-year M&M.	1-10 Years
QCR01	Quarry Creek – Gravel pit off Square Barn to ComEd parcel	834.5	The stream riparian area is characterized by scrub/shrub and is dominated by second-growth invasive trees, shrubs, and herbaceous species.	Design, permit, and implement a project to restore the stream channel and riparian area. Naturalize the area with native vegetation.	37	41	77	Critical Area/High	Private Owner	Environmental Consultant/ Contractor, McHenry County, MCSWCD	$376K to design and construct. $29K to implement three-year M&M.	1-10 Years
QCR02	Quarry Creek – ComEd parcel	832.4	The stream riparian area is characterized by scrub/shrub and is dominated by second-growth invasive trees, shrubs, and herbaceous species.	Design, permit, and implement a project to restore the stream channel and riparian area. Naturalize the area with native vegetation.	37	41	77	Critical Area/High	ComEd	Environmental Consultant/ Contractor, McHenry County, MCSWCD	$374K to design and construct. $29K to implement three-year M&M.	1-10 Years

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Pollutant Reduction Efficiency			Priority	Owner & Responsible Entity	Sources of Technical Assistance	Cost Estimate	Implementation Schedule (Years)
					TSS (tons/yr)	TP (lbs/yr)	TN (lbs/ yr)					
WCR01	Woods Creek Reach 1 - Boyer Rd to WCR02	995.9	The stream riparian area, characterized by scrub/shrub, is in an agricultural zone and is dominated by second-growth woody and herbaceous species.	Design, permit, and implement a project to restore stream channel banks and the riparian area. Naturalize the area with native vegetation.	22	24	65	Critical Area/High	Private Owner	Environmental Consultant/ Contractor, Kane County, KDSWCD	$448.1K to design and construct. $34.3K to implement three-year M&M.	1-10 Years
WCR08	Woods Creek Reach 8 – South of Algonquin Rd and east of Brookside Dr	2,110.1	The stream riparian area is characterized by scrub/shrub and has a buffer dominated by second-growth woody species.	Design, permit, and implement a project to selectively armor eroded banks, regrade other portions of the bank, and create floodplain benches. Restore degraded riparian areas and maintain higher-quality areas, naturalizing them with native vegetation.	45	47	110	Critical Area/High	Village of Algonquin	Environmental Consultant/ Contractor, McHenry County, MCSWCD	$949.5K to design and construct. $72.7K to implement three-year M&M.	1-10 Years
WCR14	Woods Creek Reach 14 - South of Algonquin Road west of Scotty Ave.	1,142.8	The stream is characterized by scrub/shrub, with severely eroded banks and an actively down-cutting channel.	Design, permit, and implement a project to selectively armor stream banks, regrade other stream banks, install floodplain shelves, and restore riparian areas.	37	38	88	Critical Area/High	Village of Algonquin	Environmental Consultant/ Contractor, McHenry County, MCSWCD	$514.3K to design and construct. $39.4K to implement three-year M&M.	1-10 Years
WCR15	Woods Creek Reach 15 - W. of Dennis Ave. to Crystal Creek	1,114.2	The area is primarily characterized by homeowner practices and landscaping, with a lot of second-growth woody species.	Design and implement a project to clean up invasive second-growth vegetation.	47	47	96	Low	Private Owner	Environmental Consultant/ Contractor, McHenry County, MCSWCD	$501.4K to design and construct. $38.4K to implement three-year M&M.	10-20+ Years
WDCR01	Winding Creek Reach 1 – south of Talaga Dr.	1,963.8	The stream riparian area is characterized by scrub/shrub and is dominated by second-growth woody species. Some areas are in good condition and managed upstream, while others have been previously restored or are dominated by second-growth trees and shrubs.	Design and implement a project to remove second-growth trees and shrubs and plant native vegetation. Conduct ongoing maintenance on previously restored areas, remove invasive species from upstream areas, and restore them with native plants.	6	7	25	Critical Area/High	Village of Algonquin	Environmental Consultant/ Contractor, McHenry County, MCSWCD	$883.7K to design and construct. $67.6K to implement three-year M&M.	1-10 Years
Priority Green Infrastructure Protection Areas – See Figure 21 for project location												
1	Private Ag Parcel	35	Privately owned parcels currently in agricultural production	Incorporate Conservation Design standards into future development with an emphasis on promoting groundwater/ aquifer recharge and reducing impervious surfaces. Future acquisition opportunity for the Village of Algonquin.	Not applicable			Critical Area/High	Private Owner	Ecological Consultant; USACE; NRCS/ SWCD; IEPA; Kane County	Not Applicable	1-10 Years

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Pollutant Reduction Efficiency			Priority	Owner & Responsible Entity	Sources of Technical Assistance	Cost Estimate	Implementation Schedule (Years)
					TSS (tons/yr)	TP (lbs/yr)	TN (lbs/ yr)					
2	Kensington Parcel	48.3	Privately owned parcel, currently in agricultural production, east of Enclave Development	Incorporate Conservation Design standards into future development with an emphasis on promoting groundwater/ aquifer recharge and reducing impervious surfaces. Future acquisition opportunity for the Village of Algonquin.	Not applicable			Critical Area/High	Private Owner	Ecological Consultant; USACE; NRCS/ SWCD; IEPA; Kane County	Not Applicable	1-10 Years
3-6	Private Residential Property	20.3	Privately owned residential parcels east of Boyer Rd	Incorporate Conservation Design standards into future development with an emphasis on promoting groundwater/ aquifer recharge and reducing impervious surfaces. Future acquisition opportunity for the Village of Algonquin.	Not applicable			Critical Area/High	Private Owner	Ecological Consultant; USACE; NRCS/ SWCD; IEPA; Kane County	Not Applicable	1-10 Years
7-11	Private Ag Parcel	182.8	Privately owned parcels currently in agricultural production	Incorporate Conservation Design standards into future development with an emphasis on promoting groundwater/ aquifer recharge and reducing impervious surfaces. Future acquisition opportunity for the Village of Algonquin.	Not applicable			Critical Area/High	Private Owner	Ecological Consultant; USACE; NRCS/ SWCD; IEPA; Kane County	Not Applicable	1-10 Years
12-17	Quarry Property	205.9	Privately owned parcels currently a quarry north of Huntley Rd and east of Square Barn Rd	Incorporate Conservation Design standards into future development with an emphasis on promoting groundwater/ aquifer recharge and reducing impervious surfaces. Future acquisition opportunity for the Village of Algonquin.	Not applicable			Critical Area/High	Private Owner	Ecological Consultant; USACE; NRCS/ SWCD; IEPA; Kane County	Not Applicable	1-10 Years
18	Private Ag Parcel	36.1	Privately owned parcels currently in agricultural production	Incorporate Conservation Design standards into future development with an emphasis on promoting groundwater/ aquifer recharge and reducing impervious surfaces. Future acquisition opportunity for the Village of Algonquin.	Not applicable			Critical Area/High	Private Owner	Ecological Consultant; USACE; NRCS/ SWCD; IEPA; Kane County	Not Applicable	1-10 Years
19-20	ComEd Parcel	20.0	ComEd parcel at end of Par Dr	Incorporate Conservation Design standards into future development with an emphasis on promoting groundwater/ aquifer recharge and reducing impervious surfaces. Future acquisition opportunity for the Village of Algonquin.	Not applicable			Critical Area/High	ComEd/ Private	Ecological Consultant; USACE; NRCS/ SWCD; IEPA; McHenry County	Not Applicable	1-10 Years

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Pollutant Reduction Efficiency			Priority	Owner & Responsible Entity	Sources of Technical Assistance	Cost Estimate	Implementation Schedule (Years)
					TSS (tons/yr)	TP (lbs/yr)	TN (lbs/ yr)					
21	Plote Property	84.5	Privately owned parcel on southwest corner of Boyer Rd and County Line Rd	Incorporate Conservation Design standards into future development with an emphasis on promoting groundwater/ aquifer recharge and reducing impervious surfaces. Future acquisition opportunity for the Village of Algonquin.	Not applicable			Critical Area/High	Private Owner	Ecological Consultant; USACE; NRCS/ SWCD; IEPA; Kane County	Not Applicable	1-10 Years
22	Beckly Lynn Ln Wetland	18.7	Privately owned parcel north of Becky Lynn Ln right-of-way	Incorporate Conservation Design standards into future development with an emphasis on promoting groundwater/ aquifer recharge and reducing impervious surfaces. Future acquisition opportunity for the Village of Algonquin.	Not applicable			Critical Area/High	Private Owner	Ecological Consultant; USACE; NRCS/ SWCD; IEPA; McHenry County	Not Applicable	1-10 Years
Other Management Measure Recommendations – See Figure 22 for project location												
1	Corporate Campus Preserve Swale Retrofit	5.5	Corporate Campus Preserve west of Boyer Rd and south of Corporate Parkway	Future restoration opportunity.	21	31	339	Critical Area/High	Village of Algonquin	Ecological Consultant/ Contractor	Not Applicable	1-10 Years
2	Corporate Campus Preserve Wetlands	17.1	Corporate Campus Preserve west of Boyer Rd and north of Corporate Parkway	Future restoration opportunity.	68	97	1,075	Critical Area/High	Village of Algonquin	Ecological Consultant/ Contractor	Not Applicable	1-10 Years
3	ComEd Parcel	13.2	ComEd parcel at south end of Par Dr.	Future acquisition by the Village of Algonquin and future restoration opportunity.	5	15	59	Critical Area/High	ComEd	Ecological Consultant/ Contractor	Not Applicable	1-10 Years
6	Spella Park Degraded Woodland	4.3	Spella Park degraded woodland north of Spella Sled Hill	Future restoration opportunity.	2	5	25	Medium	Village of Algonquin	Ecological Consultant/ Contractor	Not Applicable	5-15 Years
7	County Line Rd Open Space	3.8	County Line Rd open space between County Line Rd and Williamsburg Dr.	Future acquisition by the Village of Algonquin and future restoration opportunity.	1	3	22	Medium	Private	Ecological Consultant/ Contractor	Not Applicable	5-15 Years
8	11905 Eshbach Ln	7.0	11905 Eshbach Ln	Future acquisition by the Village of Algonquin and future restoration opportunity.	2	5	36	Medium	Private	Ecological Consultant/ Contractor	Not Applicable	5-15 Years
9	Pond View Dr Park	1.0	Pond View Dr Park on Pond View Dr.	Future restoration opportunity.	1	1	7	Low	Village of Algonquin	Ecological Consultant/ Contractor	Not Applicable	20+ Years
14	Highland Glen Townhomes Woodland	9.4	Highland Glen Townhomes woodland between townhomes and WCR14	Future acquisition by the Village of Algonquin and future restoration opportunity.	11	25	221	Critical Area/High	Private	Ecological Consultant/ Contractor	Not Applicable	1-10 Years

LAKE IN THE HILLS

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Pollutant Reduction Efficiency			Priority	Owner & Responsible Entity	Sources of Technical Assistance	Cost Estimate	Implementation Schedule (Years)
					TSS (tons/yr)	TP (lbs/yr)	TN (lbs/ yr)					
Stream & Riparian Area Restoration Recommendations – See Figure 20 for project location												
WCR09	Woods Creek Reach 9	1,887.7	The stream riparian area is characterized by scrub/shrub and features a riparian corridor dominated by second-growth trees and shrubs. It additionally has areas of low-quality, cattail marsh. The banks are severely eroded, and the channel is actively downcutting.	Design, permit, and implement a project to remove second-growth trees and shrubs and plant native vegetation. Regrade banks, enhance existing riffles, create floodplain benches, and remeander where feasible.	305	307	626	Critical Area/High	Private Owner	Environmental Consultant/ Contractor, McHenry County, MCSWCD	$849.5K to design and construct. $65K to implement three-year M&M.	1-10 Years

In the ten years since the plan was completed, many projects have been implemented by multiple entities and the watershed has seen marked improvement in ecological conditions. **Table 13** provides a list of projects recommended in the original 2013 Woods Creek WBP plan that have been completed over the last 10 years, again listed by jurisdiction. These projects will require ongoing maintenance by the Village/landowner and are prioritized as "Completed/Continue Critical Maintenance" and mapped as such on **Figure 18**, **20**, and **22**. Highlights include:

Village of Algonquin

- 31 detention basin retrofits (69.2 acres)
- 7 Streambank & Channel Restorations (9,597.6 LF)
- 2 Riparian Area Restorations (194.7 acres)
- 6 Other Management Measures (131.8 acres)

Left: Restored Woods Creek Reach 2-3, Right: Restored Woods Creek Reach 5

Crystal Lake Park District

- 5 detention basin retrofits (33 acres)
- 2 Streambank & Channel Restorations (3,803 LF)
- 2 Riparian Area Restorations (29 acres)
- 1 Other (30 acres) - Willows Edge Park

Left: Restored Fetzner Park Detention, Right: Restored Woods Creek Tributary Reach 4

Village of Lake in the Hills

- 3 Stream & Riparian Area Restorations (6,479 LF)
- 1 Lake Shoreline Restoration (1,000 acres) – Turtle Island Park

Left: Restored Woods Creek Reach 10, Right: Restored Woods Creek Reach 11

TABLE 13. Projects completed from 2013 plan.

ALGONQUIN

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Priority
Detention Basin Retrofit					
09	Algonquin Commons Detention	1.4	Wet bottom detention area in good ecological condition, with a previously restored native buffer.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
34	Spectrum Detentions	0.5	Wet bottom detention area in good ecological condition, with a naturalized basin actively being managed.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
35	Spectrum Detentions	0.5	Dry bottom detention area in good ecological condition, with a naturalized detention being actively managed.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Priority
36	Spectrum Detentions	2.5	Wet bottom detention area in good ecological condition, with a restored buffer actively being managed.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
37	Grand Reserve Detention	11.8	Wet bottom detention area in good ecological condition, with a previously restored basin actively being managed.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
38	Spella Park Detention	2.1	Wetland bottom detention area in good ecological condition, with a previously restored basin actively being managed.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
54	Westview Crossing Detention Village	4.8	Wet bottom detention area in average ecological condition, featuring new development with native vegetation in the establishment phase.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
56	Wood Park Detentions	2.4	Wet bottom detention area in good ecological condition, featuring a recently restored buffer and emergent native plant plugs.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
59	Trails of Woods Creek Detention	1.1	Wet bottom detention area in good ecological condition, recently restored with native vegetation.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
60	Trails of Woods Creek Detention	2.0	Wet bottom detention area in good ecological condition, recently restored with native vegetation.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
61	Trails of Woods Creek Detention	11.7	Wet bottom detention area in good ecological condition, recently restored with native vegetation.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
62	Trails of Woods Creek Detention	7.7	Wet bottom detention area in good ecological condition, recently restored with native vegetation.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
71	Woods Creek Corridor Detention	1.2	Wet bottom detention area in good ecological condition, previously restored with natives.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
72	Woods Creek Corridor Detention	0.9	Wet bottom detention area in good ecological condition, previously restored with natives.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Priority
73	Woods Creek Corridor Detention	1.0	Wet bottom detention area in good ecological condition, previously restored with natives.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
74	Woods Creek Corridor Detention	0.5	Wet bottom detention area in good ecological condition, previously restored with natives.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
75	Woods Creek Corridor Detention	0.8	Wet bottom detention area in good ecological condition, previously restored with natives.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
76	Woods Creek Corridor Detention	0.2	Wet bottom detention area in good ecological condition, previously restored with natives.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
77	Woods Creek Corridor Detention	0.2	Wet bottom detention area in good ecological condition, previously restored with natives.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
78	Woods Creek Corridor Detention	0.2	Wet bottom detention area in good ecological condition, previously restored with natives.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
79	Woods Creek Corridor Detention	0.9	Wet bottom detention area in good ecological condition, previously restored with natives.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
80	Woods Creek Corridor Detention	1.4	Wet bottom detention area in good ecological condition, previously restored with natives.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
81	Woods Creek Corridor Detention	0.7	Wet bottom detention area in good ecological condition, previously restored with natives.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
82	Woods Creek Corridor Detention	2.4	Wet bottom detention area in good ecological condition, previously restored with natives.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
83	Woods Creek Corridor Detention	0.6	Wet bottom detention area with turf in poor ecological condition, featuring a buffer dominated by second growth woody and herbaceous species.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Priority
99	Lake Drive South Detention	2.8	Wet bottom detention in good ecological condition; previously restored with native species.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
100	Arquilla Detention	1.2	Wetland bottom detention in good ecological condition; previously restored with natives.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
Streambank & Channel Restoration					
WCR02	North of County Line	1,073.4	The stream riparian area is characterized by prairie with previously restored banks and channels.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
WCR03	South of pedestrian bridge at Spella Park	1,963.3	The stream riparian area is characterized by prairie with previously restored banks and channels.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
WCR04	Between Spella Park pedestrian bridge & Woods Creek Ln.	1,077.2	The stream riparian area is characterized by prairie with previously restored banks and channels.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
WCR05	Between Woods Creek Ln. and Bunker Hill Dr.	1,590.9	The stream riparian area is characterized by prairie with previously restored banks and channels.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
WCR06	North of Bunker Hill Dr	1,335.6	The stream riparian area is characterized by prairie with previously restored banks and channels.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
WCR07	N. of Bunker Hill Dr. & W. of Reach 6	1,072.9	The stream riparian area is characterized by prairie with previously restored banks and channels.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
WCT06 /07 (CCR01 from 2013 plan)	N. of Woods Creek Ln	1,484.3	The stream riparian area is characterized by prairie with previously restored banks and channels.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Priority
Riparian Area Restoration (as identified in 2013 Plan)					
2	Woods Creek Riparian Corridor Reaches 2-7: County Line to Algonquin Rd.	185.0	The stream riparian area is characterized by prairie with previously restored banks and channels.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
Other Management Measures					
4	Spella Wetland/Sled Hill/Southwest Fen	105.1	Previously restored natural areas, wetland, and fen	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
5	Grand Reserve Prairie	5.4	Previously restored prairie	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
10	Woods Creek Library/ Soccer Field	5.5	Previously restored natural area	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
11	Creekside Townhomes Riparian Area	10.7	Previously restored riparian area	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
12	Winding Creek Corridor Restored Section	4.3	Previously restored riparian area	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
13	Brookside Bridge Prairie	0.7	Previously restored prairie	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance

CRYSTAL LAKE PARK DISTRICT

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Priority
Detention Basin Retrofit					
97	Hampton	3.5 ac	An approximately 0.16 ac pollinator plot/rain garden was installed in 2017 around two drain outlets on the east side of the park.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
101	Woodscreek Park	17.0 ac	Invasive trees and shrubs were removed throughout the pond buffer in winter 2023-24. Native mesic prairie buffer and wet prairie shoreline/lower slope seed mixes have been installed. Some supplemental native emergent plugs have been installed along the shoreline edge. Ongoing vegetation maintenance is being conducted, directed at control of invasive herbaceous and woody vegetation.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
113, 114	Fetzner Park	4.5 ac	Both dry bottom basins have been converted to native vegetation (2018) and have received ongoing vegetation maintenance directed at control of invasive herbaceous and woody vegetation for several years.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
121, 123	Winding Creek Park	4.5 ac	Invasive trees and shrubs were removed in winter 2023-24 throughout the western pond buffers on CLPD property. Native mesic prairie buffer and wet prairie shoreline/lower slope seed mixes have been installed. Ongoing vegetation maintenance is being conducted, directed at control of invasive herbaceous and woody vegetation.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
124	Indian Prairie Park	3.5 ac	Ongoing vegetation maintenance is being conducted, directed at control of invasive herbaceous and woody vegetation.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
Streambank & Channel Restoration					
WCTR 2: Woods Cr Trib Reach 2	Fetzner Park	2,396 lf	Four artificial riffle structures were installed within the stream channel as part of a riparian corridor restoration project in 2017.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Priority
TRB: Unnamed Trib B	N. of Alexandra Blvd. along path in Woodscreek Park	1,407 lf	In winter 2023-24, European black alder trees were removed from the banks of this tributary, immediately west of Woodscreek Park. Herbaceous invasive vegetation control including common reed control is being conducted along this reach.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
Riparian Area Restoration & Maintenance					
13	Woods Creek Reach 2 Riparian Corridor in Fetzner Park	15 ac	In conjunction with Critical Detention Project # 113/114 and high priority Streambank/Channel Restoration WCTR 2, selective removal of invasive trees, shrubs and turf grass has been conducted along the stream banks and immediate buffer in 2017. Native seed mixes as well as native trees and shrubs have been installed. Ongoing vegetation maintenance is being conducted, directed at control of invasive herbaceous and woody vegetation.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
15	Riparian Corridor along Woods Creek Trib. Reach 4 along Winding Creek Park	14 ac	Winter 2022-23, some invasive shrub and smaller invasive tree removal work was conducted within the corridor along the western bank on CLPD property. Ongoing vegetation maintenance is being conducted, directed at control of invasive herbaceous and woody vegetation within the corridor and buffers.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
Other Management Measures					
11	Willows Edge Park	30 ac	(winter 2022-23) In selected areas along the trail corridor, invasive shrub and tree removal work were carried out. Ongoing vegetation maintenance is being conducted, directed at control of invasive herbaceous and woody vegetation throughout the buffer areas. Native seed mixes and plugs have been installed in restoration project areas.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance

LAKE IN THE HILLS

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Priority
Stream & Riparian Area Restoration					
WCR10	Carpenter Park	1,817 lf	Completed in 2019. 1,800 linear feet of stream restoration and 25 acres of riparian wetlands and prairie restoration. Involved herbaceous and woody invasive species removal followed by native seeding in the riparian area. Streambanks were regraded with some areas stabilized with stone toe. Various cross vane riffles were also restored. Project design and construction were funded by IEPA 319 Grant.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
WCR11	Carpenter Park	3,129 lf	Completed in 2022. 3,100 linear feet of stream remeandering and restoration and 25 acres of riparian and wetlands and prairie restoration. Involved herbaceous and woody invasive species removal followed by native seeding in the riparian area. Entire reach was previously channelized and entire reach remeandered. Streambanks were regraded with some areas stabilized with stone toe. Various cross vane riffles were also restored. Project design and construction were funded by IEPA 319 Grant.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance
WCR12	Morningside Park/Acorn Ln	1,533 lf	Completed in 2023. 700 liner feet of streambank stabilization. Outside meanders were stabilized with rock toe and several wing deflectors. Debris jams were removed from the stream channel. Invasive shrubs were removed from the streambanks.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance

ID #	Site Name/ Location	Units (Acres or Linear Feet)	Existing Condition	Management Measure Recommendation	Priority
Lake Shoreline Restoration					
Turtle Island Park	Five LITH-owned parks around Woods Creek Lake	1,000 lf	LITH completed a shoreline stabilization project in 2019 along the adjacent shoreline of Turtle Island Park and along the circumference of Turtle Island, located on Woods Creek Lake. The shoreline along the island was experiencing severe erosion. The project included approximately 388 linear feet of shoreline stabilization using bioengineered techniques. The shoreline was stabilized using two separate methods, which include limestone fishing outcroppings and coir log toe protection with native vegetation. Additionally, a butterfly garden, bioswale and native landscaping was incorporated into the Park.	Continue ongoing site maintenance.	Completed/ Continue Critical Maintenance

Woods Creek Reach 11 after restoration

7.4 Additional Investigations (New)

Over the course of the planning process several instances were identified that were beyond the scope of the initial planning process where additional research or discovery in the future might further plan goals and implementation. Additional potential watershed investigations that the Woods Creek Watershed Committee (WCWC) could pursue in the future include, but are not limited to, the following:

- Updated Comprehensive Plan from the Village of Algonquin or other communities as appropriate
- Augmenting or modifying the Site-Specific Action Plan to reflect any new projects
- Review of FEMA's updated regulatory floodplain maps and how changes might affect Woods Creek watershed

These additional investigations are considered High Priority/Critical Areas for future funding should the WCWC decide to pursue them in the future.

7.5 Plan Amendments (New)

Data, research, and methodologies are continuously updating and evolving. To accommodate new and updated information, WCWC may decide to update the plan by way of Amendment as often as yearly, if necessary. The process for updating the plan will be led by WCWC and include amendments as agreed to and documented during meetings and attached to the final watershed-based plan as an Amendment. Amendments should be written as stand-alone documents that reference the plan and appropriate plan sections. The process is outlined as follows:

- WCWC research and documents Amendment
- WCWC approves Amendment
- WCWC sends Amendment to IEPA for review and approval
- IEPA and WCWC agree to make edits as necessary
- WCWC publishes Amendment

Amendments might include additional projects that were not identified during the planning process; new practices, methodologies, or programs that will improve implementation and our watershed outcomes; the results or outcomes of any additional investigations (as identified in Section 7.4); updated Illinois State Water Survey groundwater research; or any similar findings that WCWC and IEPA agree to. WCWC will house a link to the approved watershed-based plan and any approved

amendments on the Village of Algonquin's website, currently available at https://www.algonquin.org/egov/documents/1378486374_5526.pdf.

8.2 Goal Milestones/Progress Evaluation "Report Cards" (Update)

As part of the update process, the original report cards of the plan were reviewed and progress towards milestones was recorded. In some cases, it was determined that some of the 10–20-year milestones needed to be revised to align with current policies and practices. For example, there have been massive changes around getting the word out to stakeholders about the watershed; the Village now uses QR Codes at project restoration sites to inform residents of the project and watershed plan details. These QR Codes drive much more extensive and targeted engagement than methods utilized ten years ago – one site alone had over a thousand views with high levels of engagement. A summary of milestone progress and adaptive management revisions to report cards follows, by report card.

Goal A Report Card

Identify, protect, and manage the Green Infrastructure Network.

Historic and Current Condition:

- The historic landscape was a mix of prairie, savanna, and wetland prior to European settlement in the 1830s.
- In 2012, medium density residential comprises the most acreage in the watershed (1,812.3 acres; 32.9%) followed by transportation (753.1 acres; 13.7%), and commercial/retail (458.3 acres; 8.3%). Only 404.9 acres (7.4%) of wetlands remain.
- The largest loss of a land use/land cover is predicted to occur on agricultural land (-293.6 acres; -5.3%) in the next 30 years.
- A parcel level inventory found that green infrastructure comprises over 2,000 acres or nearly 40% of the watershed.
- Several Ecologically Significant Areas remain as green infrastructure: 5 ADID wetlands, Spella Park wetland, 2 McNAI sites.

Criteria to Meet Goal Objectives:

- # of communities incorporating Green Infrastructure Plan into Comprehensive Plans and development review maps.
- # of new developments on "Priority Green Infrastructure Protection Areas" that incorporate Conservation Design.
- % of protected green infrastructure parcels harboring "Ecologically Significant Areas" or T&E species.
- % of public natural area Green Infrastructure Network parcels with management plans that are implemented.
- Dollars leveraged from road expansion projects used to fund green infrastructure management.

Goal Milestones:	**Grade**
1-5 Yrs: *(Critical)* 1) The Green Infrastructure Plan is incorporated into all municipal Comp Plans and development reviews. 2) All "Priority Green Infrastructure Protection Area" recommendations are followed. 3) Management plans are developed for all of public natural area Green Infrastructure Network parcels. 4) >$100K is leveraged from road & other infrastructure projects for green infrastructure management.	A
1-10 Yrs: *(Short)* 1) At least 50% of sites with Ecologically Significant Areas or T&E species are protected. 2) All "Priority Green Infrastructure Protection Areas" recommendations are followed. 3) All management plans developed for public natural area Green Infrastructure Network parcels are implemented. 4) >$200K is leveraged from road & other infrastructure projects for green infrastructure management.	A
10-20 Yrs *(Long)* 1) At least 75% of sites with Ecologically Significant Areas or T&E species are protected. 2) All "Priority Green Infrastructure Protection Area" recommendations are followed. 3) All management plans developed for public natural area Green Infrastructure Network parcels are updated and implemented. 4) >$400K is leveraged from road & other infrastructure projects for green infrastructure management.	

Monitoring Needs/Efforts:

- Track number of communities that incorporate Green Infrastructure Plan into Comp Plans and development reviews.
- Track new developments on "Priority Green Infrastructure Protection Areas" that incorporate Conservation Design.
- Track number of protected parcels with "Ecologically Significant Areas" or T&E species.
- Track number of green infrastructure natural areas with management plans and those where implementation has occurred.
- Track dollars levered from road & other infrastructure projects that is used to manage green infrastructure.

Remedial Actions:

- Find out why a community does not include the Green Infrastructure Plan in Comp Plans and development reviews.
- Reassess municipal budgets for green infrastructure protection efforts and adjust if necessary.
- Check permitting process to ensure "Priority Green Infrastructure Protection Area" recommendations are considered.
- Determine if an attempt was made to leverage money from road & other infrastructure projects.

Notes:

Excellent track record on Green Infrastructure protection

Grade Evaluation: 80%-100% met = A; 60%-79% met = B; 40%-59% met = C; and < 40% = failed.

Goal B Report Card

Create policy to protect watershed resources from the impacts of future development.

Current Policy and Regulations:

- Various levels of watershed protection policy and regulations exist for Woods Creek watershed.
  - Land development is regulated by county Stormwater Ordinances.
  - Other entities with watershed jurisdictional or technical advisory roles include the USACE, USFWS and IDNR, and the McHenry and Kane Soil and Water Conservation Districts (SWCDs).
  - Municipalities in the watershed may or may not provide additional watershed protection above and beyond existing county watershed ordinances under local Village Codes.
  - The Illinois EPA Bureau of Water regulates wastewater and stormwater discharges to streams and lakes via the National Pollutant Discharge Elimination System (NPDES) program.

Criteria to Meet Goal Objectives:

- # of municipalities that adopt the Woods Creek Watershed-Based Plan.
- # of municipal ordinances that include a protection overlay requiring Conservation Design on green infrastructure parcels.
- % of new developments where protection, restoration, and/or donation of natural areas is required.
- Policy is in place that requires Development Impact Fees/Special Service Area taxes used to fund green infrastructure.
- % of watershed partners who actively use the watershed plan for policy purposes.

Goal Milestones:	**Grade**
1-5 Yrs: 1) All municipalities in the watershed adopt the Woods Creek Watershed-Based Plan. *(Critical)* 2) All municipal ordinances include a watershed protection overlay that specifically requires some degree of Conservation Design for all development located on green infrastructure parcels. 3) Each municipality creates policy that requires Development Impact Fees/Special Service Area taxes.	B
1-10 Yrs: 1) >50% of new developments protect, restore, and/or donate natural areas to the appropriate management agency. *(Short)* 2) All watershed partners actively use the watershed plan for policy purposes.	A
10-20 Yrs: 1) All municipalities include policy recommendations in Comp Plan and ordinance updates. *(Long)* 2) All municipal ordinances leverage a watershed protection overlay to protect the GIN.	

Monitoring Needs/Efforts:

- Track number of municipalities that adopt the Woods Creek Watershed-Based Plan.
- Track municipal ordinances that include Conservation Design policy on Green Infrastructure parcels.
- Each municipality track % of developments where natural areas are donated to appropriate agency for management.
- Track requirements of each municipality related to Impact Fees/SSAs that fund green infrastructure.
- Create stakeholder survey related to phosphorus use.
- Track number of municipalities that use the watershed plan for policy purposes.

Remedial Actions:

- Find out why a partner may not have adopted the Woods Creek Watershed-Based Plan or any of the policy recommendations and work with the partner(s) to address concerns.
- Find out how Impact Fees/SSAs are being collected and used to fund green infrastructure and work with partners to find appropriate natural area management companies.
- Offer free soil testing related to phosphorus use if surveys indicate no positive change.
- Work with partners to implement the watershed plan who do not have a professional on staff dedicated to this role.

Notes:

Algonquin has completed all of the 1-5 year milestones; need more support from other partners.
IL Phosphorus laws have changed requiring updates to long-term goals. Revised accordingly.

Grade Evaluation: 80%-100% met = A; 60%-79% met = B; 40%-59% met = C; and < 40% = failed.

Goal C Report Card

Restore and manage aquatic and terrestrial habitat.

Current Condition:

- The historic landscape consisted of prairies, savannas, and wetlands prior to European settlement in the 1830s.
- Following European settlement, fires rarely occurred, prairies were tilled for farmland or developed, wetlands were drained, and several streams were channelized.
- Several "Ecologically Significant Areas" remain within the watershed: 5 ADID wetlands, Spella Park wetland, 2 McNAI sites.
- Over 64% of stream length is moderately to high channelized; 62% of stream length is moderately to highly eroded.
- 269 acres (57%) of riparian corridor is in poor condition; 205 acres (43%) is average to good condition.
- 134 total detention basins, 9 (7%) provide "Good" ecological and water quality benefits, 34 (26%) provide "Fair" benefits, 91 (68%) basins provide "Poor" ecological/water quality benefits.
- Aquatic plant cover in Woods Creek Lake is 54%.

Criteria to Meet Goal Objectives:

- Percentage of natural area Green Infrastructure Network parcels with management plans that are implemented.
- Acres of riparian habitat managed, restored, or enhanced.
- Linear feet and/or number of stream reaches where habitat is enhanced.
- Percentage of good to fair ecological condition detention basins that are actively managed.
- Number of "Critical Area" and "High Priority" detention basins retrofitted with native vegetation.
- Overall aquatic plant cover in Woods Creek Lake less than 40%.

Goal Milestones:	**Grade**
1-5 Yrs: (Critical) 1) Management plans are developed for all of public natural area Green Infrastructure Network parcels. 2) ≥ 2 "Critical Area" stream reaches where habitat is enhanced. 3) >50% of all good to fair condition detention basins are managed. 4) ≥ 2 "Critical Area" detention basins retrofitted with native vegetation.	A
1-10 Yrs: (Short) 1) All management plans for public natural area Green Infrastructure Network parcels are implemented. 2) >250 acres of riparian habitat is managed, restored, or enhanced. 3) ≥ 2 "Critical Area" or "High Priority" stream reaches where habitat is enhanced. 4) >75% of all good to fair condition detention basins are managed. 5) ≥ 4 "Critical Area" or "High Priority" detention basins retrofitted with native vegetation. 6) Aquatic plant cover in Woods Creek Lake is maintained at less than 40%.	B
10-20 Yrs: (Long) 1) All management plans for public natural area Green Infrastructure Network parcels are updated and implemented. 2) >100 additional acres of riparian habitat is managed, restored, or enhanced. 3) ≥ 4 "Critical Area" or "High Priority" stream reaches where habitat is enhanced. 4) All good to fair condition detention basins are managed. 5) ≥ 10 "Critical Area" detention basins retrofitted with native vegetation. 6) Aquatic plant cover in Woods Creek Lake is maintained at less than 40%.	

Monitoring Needs/Efforts:

- Public entities track % and acres of natural green infrastructure areas where management plans have been developed and implemented.
- Track total linear feet of stream or number of stream reaches where habitat is enhanced.
- Track number of good to fair condition detention basins that are managed.
- Track number of "Critical Area" and "High Priority" detention basins retrofitted with native vegetation.
- IDNR and VLMP continue to estimate aquatic plant cover in Woods Creek Lake during scheduled inventories.

Remedial Actions:

- Public entities prepare annual budgets for restoring habitat and leverage mitigation dollars from proposed road expansions.
- Assist detention basin owners with selecting ecological management companies and potential funding sources.
- Meet with IDNR or VLMP prior to Woods Creek Lake surveys and request an inventory of aquatic plant cover.

Notes:

Need more work on management of good to fair detention basins and Critical Area detention retrofits.

Grade Evaluation: 80%-100% met = A; 60%-79% met = B; 40%-59% met = C; and < 40% = failed.

Goal D Report Card

Provide watershed educational opportunities.

Current Condition:

- The Village of Algonquin is currently spearheading and promoting the Watershed-Based Plan. Crystal Lake Park District, Crystal Lake, and Lake in the Hills are the other partners involved.
- The watershed partners: Algonquin, Crystal Lake Park District, Crystal Lake, and Lake in the Hills currently promote appreciation and stewardship of the watershed through many education and volunteer campaigns.
- Education will be ongoing and involve constant and continuous campaigns to reach as many target audiences as possible.

Criteria to Meet Goal Objectives:

- Number of ways taken to inform the general public that a watershed plan has been developed.
- Number of people that attend campaigns aimed at land management links to watershed impacts, benefits of ecological restoration, and benefits of managing green infrastructure.
- Number of people that attend education campaigns related to management of phosphorus and road salt use.
- Number of elected officials that attend watershed tours.
- Number of people attending "Volunteer Days" in the watershed.
- Number of school or boy/girl scout service projects.
- Number of demonstration projects implemented.

Goal Milestones:	**Grade**
1-5 Yrs: 1) Watershed partners inform public about the watershed plan via media and watershed activity campaigns. *(Critical)* 2) At least one elected official representing each watershed partner attend a watershed tour. 3) ≥2 demonstration projects are implemented.	B
1-10 Yrs: 1) ≥20 people attend each land management, ecological restoration, and green infrastructure campaign. *(Short)* 2) ≥30 people attend each phosphorus and road salt education campaign. 3) At least two elected officials representing each watershed partner attend a watershed tour. 4) ≥50 people attend each "Volunteer Days" event. 5) ≥5 school or boy/girl scout projects are supported by watershed partners. 6) ≥4 demonstration projects are implemented.	C
10-20 Yrs: 1) ≥50 people follow QR Codes to get more information on ongoing projects in the watershed. *11-(Long)* 2) ≥50 people attend each "Volunteer Days" event. 3) ≥5 school or boy/girl scout projects are supported by watershed partners. 4) ≥4 demonstration projects are implemented.	

Monitoring Needs/Efforts:

- Track number of ways taken to inform general public that a watershed plan has been developed.
- Track number of people accessing QR codes with water quality and project details.
- Track number of elected officials that attend each watershed tour.
- Track number of school and boy/girl scout projects supported.
- Track number of demonstration projects implemented.
- Track attendance at Volunteer Days.

Remedial Actions:

- Woods Creek Watershed Committee (WCWC) consider hiring a Watershed Implementation Coordinator to organize education programs.
- Ask state, county, and government agencies such as IDNR, NRCS, and Conservation Districts to sponsor workshops.
- Actively pursue target audiences if attendance at education campaigns is low.
- Put out requests for volunteers to spearhead watershed education campaigns.
- Contact elected officials with a personal invite to attend watershed tours.
- Provide access, signage, and QR codes for all watershed improvement projects to promote them as demonstrations.

Notes: While there is extensive local government participation, the nature of public outreach has changed dramatically. Algonquin has successfully used signage at restoration projects with QR codes to drive residents to detailied outreach information housed on their website. A single project had nearly 700 unique visitors to its dedicated project website. Goal revised to match current approach.

Grade Evaluation: 80%-100% met = A; 60%-79% met = B; 40%-59% met = C; and < 40% = failed.

Goal E and F Report Card

Improve and monitor surface water quality.
Improve groundwater recharge.

Current Conditions:

- Water quality in Woods Creek is generally fair based on collected data. All parameters tested meet recommend standards during base flow conditions. However, total phosphorus, and total suspended solids exceed recommended standards following significant storm events just upstream of Woods Creek Lake; streambank erosion is a primary cause.
- Woods Creek Lake is fully supporting for aquatic life but impaired for fish consumption because of high mercury levels, and impaired for aesthetic quality because of total suspended solids, total phosphorus, and aquatic plants.
- Sensitive Aquifer Recharge Areas: 4,535 acres (82%) is "Low to Moderate" sensitive, 520 acres (10%) is "Moderately High" sensitive, and 453 acres (8%) has "High" potential for aquifer recharge.
- ISWS modeling shows significantly lower levels of stream discharge (-40% to -60%) and significant shallow bedrock aquifer drawdown (70 to 100 feet) by 2049 compared to predevelopment conditions.

Criteria to Meet Goal Objectives:

- Linear feet of restored streambank and lake shoreline.
- Acres of wetland restoration.
- Mercury management study completed for Woods Creek Lake?
- Number of entities using alternatives to road salt.
- % of surveyed stakeholders who changed phosphorus use on lawns based on soil testing.
- Number of detention basins retrofitted with native vegetation.
- Water quality monitoring plan in place; chemical water quality standards: <20 NTUs, <12 mg/l TSS, <0.0725 mg/l TP.
- % of Sensitive Aquifer Recharge Areas (SARA) developed using model policies in county "Groundwater Protection Plans".

Goal Milestones:	**Grade**
1-5 Yrs: (Critical) 1) Construction plans developed for all "Critical Area" and "High Priority" streambank restoration projects. 2) Construction plans developed for eroded shorelines at five LITH parks along Woods Creek Lake. 3) A mercury study is completed for Woods Creek Lake. 4) The municipalities in the watershed implement recommended water quality monitoring plan. 5) All municipalities adopt policy that protects Sensitive Aquifer Recharge Areas (SARA).	A
1-10 Yrs: (Short) 1) All "Critical Area" and "High Priority" streambank restoration projects implemented. 2) Shorelines at all five LITH parks along Woods Creek Lake stabilized. 3) "Critical Area" wetlands are restored on all parcels where new development occurs. 4) Actions included in the mercury study are implemented by LITH. 5) Alternatives to road salt are used by all municipalities. 6) 25% of surveyed stakeholders reduce phosphorus use on lawns based on soil testing. 7) All "Critical Area" detention basins are retrofitted with native vegetation.	B
10-20 Yrs: *(Long)* 1) > 25 residential lots along Woods Creek Lake have restored shoreline. 2) "Critical Area" wetlands are restored on all parcels where new development occurs. 3) Alternatives to road salt are used by all municipalities and DOTs. 4) All "High Priority" detention basins are retrofitted with native vegetation. 5) Water quality monitoring indicates <20 NTUs, <12 mg/l TSS, <0.0725 mg/l TP in Woods Creek.	

Monitoring Needs/Efforts:

- Water chemistry will need to continue indefinitely to track changes in water quality.
- Track # of streambank, shoreline, wetland, and detention retrofit projects implemented.
- Produce stakeholder survey related to phosphorus use on lawns.

Remedial Actions:

- Assess number of projects and actions that have been implemented versus water quality changes to determine if projects are effectively removing pollutants.
- Review policy changes made to protect Sensitive Aquifer Recharge Areas (SARS).

Notes:
Mercury study no longer needed based on fish sampling - mercury in all Woods Creek Lake samples were less than 0.15 µg/g (Best Choices). Phosphorus law changed -related goals are no longer applicable - updated.

Grade Evaluation: 80%-100% met = A; 60%-79% met = B; 40%-59% met = C; and < 40% = failed.

Goal G Report Card
Increase and/or improve recreational opportunities

Current Conditions:

- Biking path/trails are abundant in the watershed, especially along the Woods Creek and Woods Creek Tributary. However, there are areas that lack connectivity.
- The primary fishing opportunities are found at Woods Creek Lake and Woodscreek Park. Fishing along Woods Creek is limited.
- Many publically owned detention basins in the watershed currently support fish and could be improved for fishing access.
- The watershed partners: Algonquin, Crystal Lake Park District, Crystal Lake, and Lake in the Hills currently provide a wide variety of recreational opportunities via local programs and campaigns.

Criteria to Meet Goal Objectives:

- Number of bike path/trail connections made.
- Number of detention basins and stream reaches where fishing access is created or improved.
- Number of new recreation areas or enhancements to existing areas that protect and incorporate green infrastructure.

Goal Milestones:	Grade
1-5 Yrs: 1) Plan is developed for bike path/trail connection at County Line Rd. to Boyer Rd. to Harnish Dr. *(Critical)* 2) One publically owned detention basin is improved to support fishing.	B
1-10 Yrs: 1) Bike path/trail connection at County Line Rd. to Boyer Rd. to Harnish Dr. is implemented. *(Short)* 2) Two publically owned detention basins and one stream reach along Woods Creek is improved to support fishing. 3) All new recreation areas and improvements to existing areas incorporates green infrastructure amenities.	B
10-20 Yrs: 1) All new recreation areas and improvements to existing areas incorporates green infrastructure amenities. *(Long)* 2) New residential developments that include detentions incorporate fishing access if appropriate.	

Monitoring Needs/Efforts:

- Track number of bike path/trail connections made.
- Track number of detention basins and/or stream reaches where fishing access is created or improved.
- Track number of new recreation areas or enhancements to existing areas that protect and incorporate green infrastructure.

Remedial Actions:

- Reassess municipal budgets related to recreation.
- Perform survey of publically owned basins and stream reaches where fishing opportunities can be created or improved.
- Require a planning/review step for new recreation areas or enhancements to existing areas that aims to protect and incorporate green infrastructure.

Notes:

Fishing areas have not been added. No longer recommended based on interference with natural area restoration and management.

Grade Evaluation: 80%-100% met = A; 60%-79% met = B; 40%-59% met = C; and < 40% = failed.

Goal H Report Card

Mitigate for existing structural flood problem areas.

Current Condition:

- Two documented Flood Problem Areas (FPAs) were identified in the Woods Creek watershed. FPA #1 is located at Wood Creek's intersection with Woods Creek Lane in the Village of Algonquin. During extremely high water events, Woods Creek overtops Woods Creek Lane. This happens because the culverts under Woods Creek Lane are likely undersized and Woods Creek Lane lies relatively low within the FEMA 100-year floodplain. Obvious mitigation opportunities include the construction of a conspan bridge over Woods Creek or increase in existing culvert size. The Village of Algonquin recently implemented a channel maintenance program in this area which is alleviating the flood problem to some degree.
- FPA #2 is located downstream from the dam on Woods Creek Lake between Hilltop Drive and Algonquin Road (Route 62) within the Village of Lake in the Hills. Overbank flooding causes structural damage to homes and other buildings located within FEMA's 100-year floodplain. Potential mitigation measures in this area are limited. Options include flood proofing individual structures, increasing flood storage volume upstream, and reducing impervious cover as new and re-development occurs upstream

Criteria to Meet Goal Objectives:

- Annual inspection of Dam at Woods Creek Lake by LITH.
- Number of stream restoration projects that reconnect the stream channel to the adjacent floodplain.
- % of new and redevelopment that incorporates impervious reduction stormwater measures.
- # of identified FPAs that are mitigated for.

Goal Milestones:	Grade
1-5 Yrs: 1) The dam at Woods Creek Lake is inspected annually by LITH. *(Critical)* 2) Stream reaches WCR2, WCR3, WCR5, WCR10, WCR11 and TRA1 are evaluated for potential to reconnect hydrologically to adjacent floodplain.	A
1-10 Yrs: 1) The dam at Woods Creek Lake is inspected annually by LITH. *(Short)* 2) All "Priority Green Infrastructure Protection Areas" are developed using Conservation Design. 3) Mitigate for flooding at FPA #1. 4) At least one stream reach is modified to help the hydrologic connection to the adjacent floodplain.	A
10-20 Yrs: 1) The dam at Woods Creek Lake is inspected annually by LITH. *(Long)* 2) All "Priority Green Infrastructure Protection Areas" are developed using Conservation Design. 3) At least one stream reach is modified to help the hydrologic connection to the adjacent floodplain.	

Monitoring Needs/Efforts:

- Track number of inspections of Woods Creek dam conducted by LITH.
- Track number of stream projects that include floodplain reconnection.
- Track number of new and redevelopments that incorporate impervious reduction stormwater measures.
- Track number of mitigated Flood Problem Areas

Remedial Actions:

- Reassess municipal budgets for green infrastructure protection efforts.
- Conduct follow-up visits to Flood Problem Area sites during flood events to determine if additional remedial work is needed.
- Conduct inventory of new and redevelopments to determine feasibility for potential flood reduction retrofits.

Notes:

All 1-10 year recommendations completed.

Grade Evaluation: 80%-100% met = A; 60%-79% met = B; 40%-59% met = C; and < 40% = failed.

9.0 Literature Cited updates

Applied Ecological Services, Inc. (AES). 2007. *Applied Ecological Services Helping Developers go – and* make – *green*. Brodhead, WI.

Brown, R.B. 1998. *Soils and septic systems*. IFAS Extension. University of Florida, Gainesville.

Center for Watershed Protection (CWP). 2017. The Code & Ordinance Worksheet: A Tool for Evaluating the Development Rules in Your Community. www.cwp.org, info@cwp.org.

Center for Watershed Protection. 1998. *A Comprehensive Guide for Managing Urbanizing Watersheds*. Prepared for USEPA Office of Wetlands, Oceans and Watersheds and Region V.

Center for Watershed Protection. August 1998. *Better Site Design: A Handbook for Changing Development Rules in Your Community*. Prepared for Site Planning Roundtable.

Conservation Research Institute. February 2005. *Changing Cost Perceptions: An Analysis of Conservation Development*. Prepared for Illinois Conservation Foundation and Chicago Wilderness.

Conservation Research Institute. February 2005. *Changing Cost Perceptions: An Analysis of Conservation Development*. Prepared for Illinois Conservation Foundation and Chicago Wilderness.

ECONorthwest. November 2007. *The Economics of Low-Impact Development: A Literature Review*. Eugene, Oregon.

Fazio, Dr. James R. 2010. How Trees Can Retain Stormwater Runoff. Tree City USA Bulletin No. 55. Arbor Day Foundation. Nebraska City, NE.

Gibb, Terry. 2012. "Yard waste practices impact water quality." Michigan State University, MSU Extension. Retrieved February 25, 2020: https://www.canr.msu.edu/news/yard_waste_practices_impact_water_quality

Illinois State Water Survey, 2019. Water Quality Trend Analysis for the Fox River Watershed: Stratton Dam for the Illinois River. Prairie Research Institute. Retrieved May 29, 2024: https://friendsofthefoxriver.org/wp-content/uploads/2019/03/Water-Quality-Trend-Analysis-for-the-Fox-River-Stratton-Dam-to-the-Illinois-River-April-2019.pdf

Illinois Tollway. 2019. "Invasives to Energy Research Project." Illinois Tollway in partnership with University of Connecticut, and Loyola University Chicago's Environmental Testing Laboratory.

Kane County. 2024. "Mission & Vision Statement." Kane County Government, Illinois. Retrieved Mar 31, 2025: https://www.kanecountyil.gov/pages/countyboard/mission.aspx

Lacy, J. 1990. An examination of market appreciation for clustered housing to permanent open space. Amherst: Center for Rural Massachusetts, University of Massachusetts, Department of Landscape Architecture and Regional Planning.

Mancl, K. 1984. Estimated septic tank pumping frequency. *J. Environ. Engineer*. 110:283-285.

Michigan Department of Environmental Quality. June 1999. *Pollutants Controlled Calculation and Documentation for Section 319 Watersheds Training Manual*.

Mohamed, Rayman. January 2006. "The Economics of Conservation Subdivisions: Price Premiums, Improvement Costs, and Absorption Rates." *Urban Affairs Review*: Vol. 41, No. 3. pp. 376-399. Sage Publications.

Needleman, Hannah. 2015. "The Use, Impact, and Ban of Coal Tar-Based Sealants." Virginia Coastal Policy Center at William & Mary Law School. Sea Grant Virginia.

Paap, Kathleen and Hey, Donald. 2019. "Using Wetlands to Reduce the Effects of Sodium Chloride on Water and Soil Habitats." White paper supplied by Illinois Tollway.

Southeastern Wisconsin Regional Planning Commission (SEWRPC). 2010. *Managing the Water's Edge: Making Natural Connections.* Retrieved February 25, 2020: https://www.delavan-lake.org/ManagingtheWatersEdge-brochure.pdf

Stout, H. M. 2003. Soils and onsite wastewater treatment system performance in northern Indiana. Master's thesis, Purdue University, West Lafayette, IN.

United States Environmental Protection Agency (USEPA). 2016a. "Stormwater Best Management Practice: Coal-Tar Sealcoat, Polycyclic Aromatic Hydrocarbons, and Stormwater Pollution." Office of Water, 4203M. EPA 833-F-12-004. Retrieve Apr 5, 2019: https://www3.epa.gov/npdes/pubs/coaltar.pdf

United States Environmental Protection Agency (USEPA). 2016b. Stormwater Trees. Technical Memorandum. Retrieved Apr 9, 2019: https://www.epa.gov/sites/production/files/2016-11/documents/final_stormwater_trees_technical_memo_508.pdf

United States Environmental Protection Agency. March 2005. A Homeowner's Guide to Septic Systems. Report No. EPA-832-B-02-005. Washington, D.C.

United States Food and Drug Administration (US FDA). 2024. Technical Information on Development of FDA/EPA Advice about Eating Fish for Those Who Might Become or Are Pregnant or Breastfeeding and Children Ages 1-11 Years. Retrieved September 18, 2024: https://www.fda.gov/food/environmental-contaminants-food/technical-information-development-fdaepa-advice-about-eating-fish-those-who-might-become-or-are#:~:text=Any%20fish%20with%20an%20average,week%20%3D%200.23%20%C2%B5g%2Fg.

University of Kentucky Cooperative Extension (UKCE). 2012. "Septic System Failure and Environmental Impacts." Cooperative Extension Service. University of Kentucky College of Agriculture, Lexington, KY. HENV-502.

University of New Hampshire (UNH) Stormwater Center, Virginia Commonwealth University, and Antioch University New England. July 2011. *Forging the Link: Linking the Economic Benefits of Low Impact Development and Community Decisions*. Millerworks: Portsmouth, NH.

Wetlands Research, Inc. 2019. "An Ecological Solution for Reducing Chloride." Donald Hey and Kathleen Paap. Supplied by Illinois Tollway.

Wisconsin Department of Natural Resources. September 2013. *A Water Quality Trading How To Manual*. Guidance # 3400-2013-03.

Village of Algonquin

Algonquin Jelkes Creek-Fox River Watershed-Based Plan 2025 Project Updates

Prepared by:

BAXTER & WOODMAN Consulting Engineers

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4/15/2025

INTRODUCTION

The Jelkes Creek-Fox River Watershed-based Plan was approved by IEPA in 2013 and served as a comprehensive guide to protecting and restoring the health of the watershed. In preparation for a future update, the Village of Algonquin hired Baxter & Woodman to conduct a limited watershed resource field inventory to reassess projects within the Algonquin portion of the Jelkes Creek-Fox River watershed and develop an updated list of action plan and completed projects. A field inventory was conducted in summer 2024 which reprioritized 66 projects and identified 47 which were completed.

DETENTION BASINS

Baxter & Woodman reassessed 88 detention basins within the Village of Algonquin during the field inventory (**Table 1**, **Figure 1**). Assessment methodology included a visit to each site and collection of data relevant to existing conditions. Each basin was assigned a Site ID and detailed notes were recorded related to existing ecological/water quality improvement condition and potential retrofit Management Measures for eventual inclusion into the Action Plan section of this report.

The reassessment resulted in 16 dry bottom basins, 24 wet bottom basins, and 48 wetland bottom basins (**Table 1**). 62 of the basins were naturalized, while 26 had turf grass side slopes. Additionally, 34 (39%) provide *Good* ecological and water quality benefits, 8 basins (9%) likely provide *Average* benefits, while 46 basins (52%) likely provide *Poor* ecological and water quality benefits (**Table 1**, **Figure 1**) because most were designed simply to meet stormwater storage volume requirements. Designs that also improve water quality and wildlife habitat were not necessarily considered because they were not required under local and federal regulations at the time of their construction.

TABLE 1. Summary of detention basin types, ecological condition, and acreage.

Site ID	Basin Type	Buffer Type	Ecological Condition	Size (Acres)
01	Wet Bottom Detention	Turf	Poor	1.4
02	Wet Bottom Detention	Turf	Poor	4.4
03	Wet Bottom Detention	Turf	Poor	2.0
04	Dry Bottom Detention	Turf	Poor	3.8
05	Wet Bottom Detention	Turf	Poor	3.0
06	Wet Bottom Detention	Turf	Poor	1.2
07	Wet Bottom Detention	Turf	Poor	1.5
08	Wet Bottom Detention	Turf	Poor	0.5
09	Wet Bottom Detention	Turf	Poor	0.5
10	Wetland Bottom Detention	Natural	Good	4.2
11	Wetland Bottom Detention	Natural	Good	1.3
12	Wetland Bottom Detention	Natural	Average	0.8
13	Wetland Bottom Detention	Natural	Average	1.4
14	Wetland Bottom Detention	Natural	Average	5.5

Site ID	Basin Type	Buffer Type	Ecological Condition	Size (Acres)
15	Wetland Bottom Detention	Natural	Poor	1.3
16	Wet Bottom Detention	Natural	Average	1.8
17	Dry Bottom Detention	Turf	Poor	4.9
18	Wetland Bottom Detention	Natural	Good	0.2
19	Wetland Bottom Detention	Natural	Good	0.6
20	Wetland Bottom Detention	Natural	Good	1.0
21	Wetland Bottom Detention	Natural	Good	1.1
22	Wetland Bottom Detention	Natural	Good	0.7
23	Wetland Bottom Detention	Natural	Good	1.1
24	Wetland Bottom Detention	Natural	Good	0.4
25	Wetland Bottom Detention	Natural	Good	0.1
26	Dry Bottom Detention	Turf	Poor	2.7
27	Wet Bottom Detention	Turf	Poor	4.0
28	Wet Bottom Detention	Turf	Poor	3.1
29	Wetland Bottom Detention	Natural	Poor	1.3
30	Wetland Bottom Detention	Natural	Poor	1.4
31	Wet Bottom Detention	Turf	Poor	4.2
32	Wet Bottom Detention	Turf	Poor	0.5
33	Wetland Bottom Detention	Natural	Poor	0.7
34	Wetland Bottom Detention	Natural	Poor	0.5
35	Wetland Bottom Detention	Natural	Good	1.8
36	Wet Bottom Detention	Natural	Poor	3.6
37	Wetland Bottom Detention	Natural	Average	1.0
38	Wetland Bottom Detention	Natural	Poor	2.6
39	Wetland Bottom Detention	Natural	Good	1.8
40	Wetland Bottom Detention	Natural	Good	0.7
41	Wetland Bottom Detention	Natural	Good	0.1
42	Wetland Bottom Detention	Natural	Poor	0.9
43	Wetland Bottom Detention	Natural	Poor	0.4
44	Dry Bottom Detention	Turf	Poor	0.4
45	Wetland Bottom Detention	Natural	Good	2.0
46	Wet Bottom Detention	Natural	Good	6.7
47	Wetland Bottom Detention	Natural	Good	4.1
48	Wet Bottom Detention	Turf	Poor	0.5
49	Wetland Bottom Detention	Natural	Good	2.4
50	Wetland Bottom Detention	Natural	Good	0.9
51	Wet Bottom Detention	Natural	Good	1.2
52	Wetland Bottom Detention	Natural	Good	0.7
53	Dry Bottom Detention	Turf	Poor	0.3
54	Dry Bottom Detention	Turf	Poor	0.4
55	Dry Bottom Detention	Turf	Poor	0.5

Site ID	Basin Type	Buffer Type	Ecological Condition	Size (Acres)
56	Wetland Bottom Detention	Natural	Good	0.8
57	Wetland Bottom Detention	Natural	Poor	0.3
58	Wetland Bottom Detention	Natural	Good	0.4
59	Wetland Bottom Detention	Natural	Good	0.2
60	Wetland Bottom Detention	Natural	Good	0.3
61	Wetland Bottom Detention	Natural	Good	0.4
62	Wetland Bottom Detention	Natural	Good	0.3
63	Wetland Bottom Detention	Natural	Good	0.1
64	Wetland Bottom Detention	Natural	Good	0.1
65	Wetland Bottom Detention	Natural	Average	1.4
66	Dry Bottom Detention	Turf	Poor	1.4
67	Wetland Bottom Detention	Natural	Good	3.5
68	Wetland Bottom Detention	Natural	Good	3.4
69	Dry Bottom Detention	Natural	Poor	0.3
70	Dry Bottom Detention	Turf	Poor	0.4
71	Dry Bottom Detention	Turf	Poor	0.1
72	Wetland Bottom Detention	Natural	Poor	0.6
73	Wet Bottom Detention	Turf	Poor	1.4
74	Dry Bottom Detention	Turf	Poor	0.5
75	Wet Bottom Detention	Natural	Average	10.3
76	Wet Bottom Detention	Natural	Average	3.6
77	Dry Bottom Detention	Natural	Poor	1.3
78	Dry Bottom Detention	Natural	Poor	0.9
79	Dry Bottom Detention	Natural	Poor	4.6
80	Wet Bottom Detention	Natural	Poor	10.6
81	Wet Bottom Detention	Natural	Poor	3.7
82	Wet Bottom Detention	Natural	Poor	22.6
83	Wet Bottom Detention	Natural	Poor	2.8
84	Dry Bottom Detention	Turf	Poor	3.1
85	Wetland Bottom Detention	Natural	Poor	2.2
86	Wetland Bottom Detention	Natural	Good	4.7
87	Wetland Bottom Detention	Natural	Good	3.5
88	Wetland Bottom Detention	Natural	Good	2.7

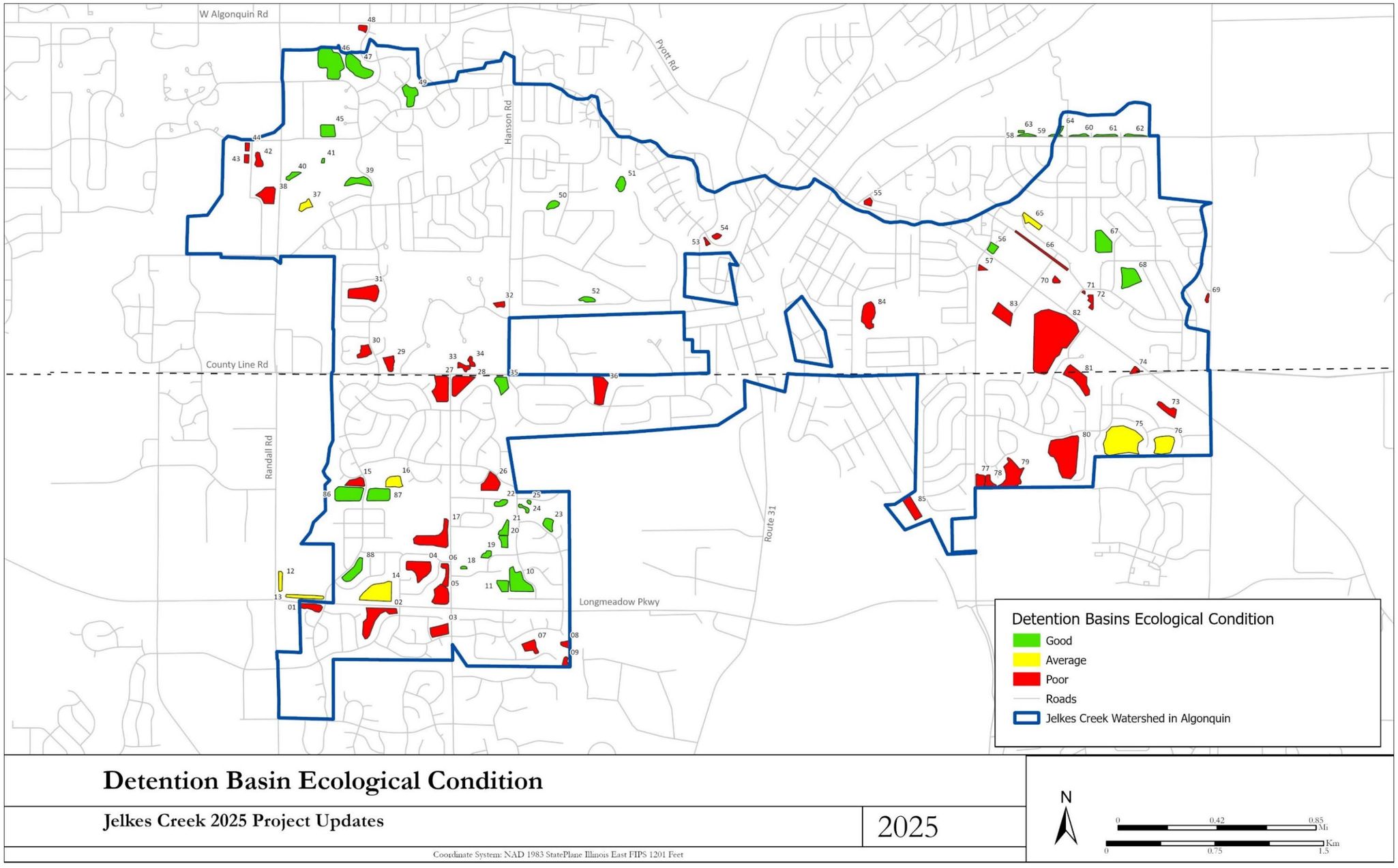

FIGURE 1. Detention Basin Ecological Condition.

STREAMS ASSESSED

Baxter & Woodman assessed the stream reaches within the Village of Algonquin during the field inventory. Streams and tributaries were assessed based on stream reaches, consistent with the original watershed-based plan. Methodology included walking accessible portions of streams, collecting measurements, taking photos, and noting stream conditions on Stream Inventory/BMP Data Forms as well as making map notations as appropriate.

Channelization

Each updated stream reach was characterized as either having little-to-no channelization (highly sinuous, no human disturbance), moderate channelization (some sinuosity but altered), or highly channelized (straightened by humans) (**Table 2; Figure 2**). Summarizing channelization on the reassessed streams, 62% (20,259 linear feet) of stream and tributary length is naturally meandering; approximately 21% (6,707 linear feet) is moderately channelized; 17% (5,693 linear feet) is highly channelized.

TABLE 2. Summary of updated stream and tributary channelization.

Stream or Tributary Name	Reach Code	Stream Length Assessed (ft)	None or Low Channelization		Moderate Channelization		High Channelization	
			feet	%	feet	%	feet	%
Dixie Creek	DC	9,903.6	8,779.0	89			1,124.6	11
Lawndale Park Creek	LPC	824.2	824.2	100				
Ratt Creek	RC	13,364.3	9,631.9	72	919.5	7	2,812.9	21
Souwanas Creek	SOC	5,064.0	1,023.9	20	4,040.1	80		
Surrey Creek	SC	2,420.7			665.0	27	1,755.7	73
Surrey Creek Tributary	SCT	1,082.6			1,082.6	100		
Totals		**32,659.4**	**20,259.0**	**62**	**6,707.2**	**21**	**5,693.2**	**17**

Streambank Erosion

The location and severity of streambank erosion in the watershed is summarized for the updated stream reaches in **Table 3** and depicted on **Figure 3**. Approximately 46% (15,149 linear feet) of the total stream and tributary length exhibits no or low bank erosion while moderate erosion is occurring along 17% (5,420 linear feet) of streambanks. Highly eroded streambanks account for 37% (12,090 linear feet) of the total stream length.

TABLE 3. Summary of stream and tributary bank erosion.

Stream or Tributary Name	Reach Code	Stream Length Assessed (ft)	None/Low Erosion		Moderate Erosion		High Erosion	
			feet	%	feet	%	feet	%
Dixie Creek	DC	9,903.6	5,805.1	59	2,018.6	20	2,079.9	21
Lawndale Park Creek	LPC	824.2	824.2	100				
Ratt Creek	RC	13,364.3	4,632.9	35	2,677.7	20	6,053.7	45
Souwanas Creek	SOC	5,064.0	1,695.0	34	724.1	14	2,644.9	52
Surrey Creek	SC	2,420.7	1,108.8	46			1,311.9	54
Surrey Creek Tributary	SCT	1,082.6	1,082.6	100				
Totals		**32,659.4**	**15,148.6**	**46**	**5,420.4**	**17**	**12,090.4**	**37**

Riparian Area Condition

The location and condition of updated riparian area reaches are summarized in **Table 4** and **Figure 4**. Approximately 13% (along 4,125 linear feet of streams) of the riparian areas are Poor quality. Another 17,194 linear feet or 53% of riparian areas are in Average condition and 35% (11,340 linear feet) are in Good condition.

TABLE 4. Summary of stream and tributary riparian area condition.

Stream or Tributary Name	Reach Code	Stream Length Assessed (ft)	Good Condition		Average Condition		Poor Condition	
			feet	%	feet	%	feet	%
Dixie Creek	DC	9,903.6	7,425.4	75	2,478.2	25		
Lawndale Park Creek	LPC	824.2	824.2	100				
Ratt Creek	RC	13,364.3	2,066.6	15	8,484.7	64	2,813.0	21
Souwanas Creek	SOC	5,064.0	1,023.9	20	4,040.1	80		
Surrey Creek	SC	2,420.7			1,108.8	46	1,311.9	54
Surrey Creek Tributary	SCT	1,082.6			1,082.6	100		
Totals		**32,659.4**	**11,340.1**	**35**	**17,194.4**	**53**	**4,124.9**	**13**

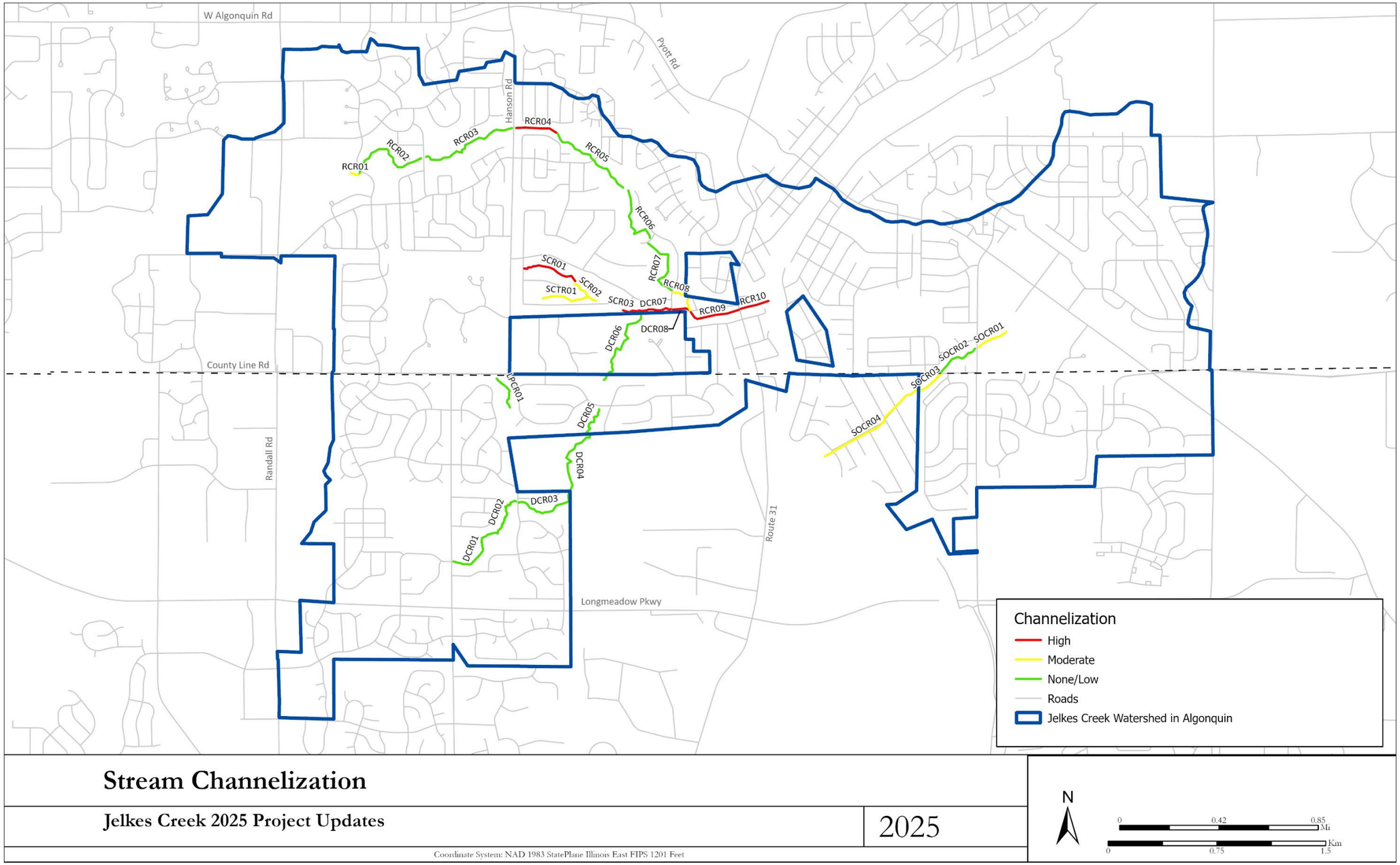

FIGURE 2. Stream Channelization.

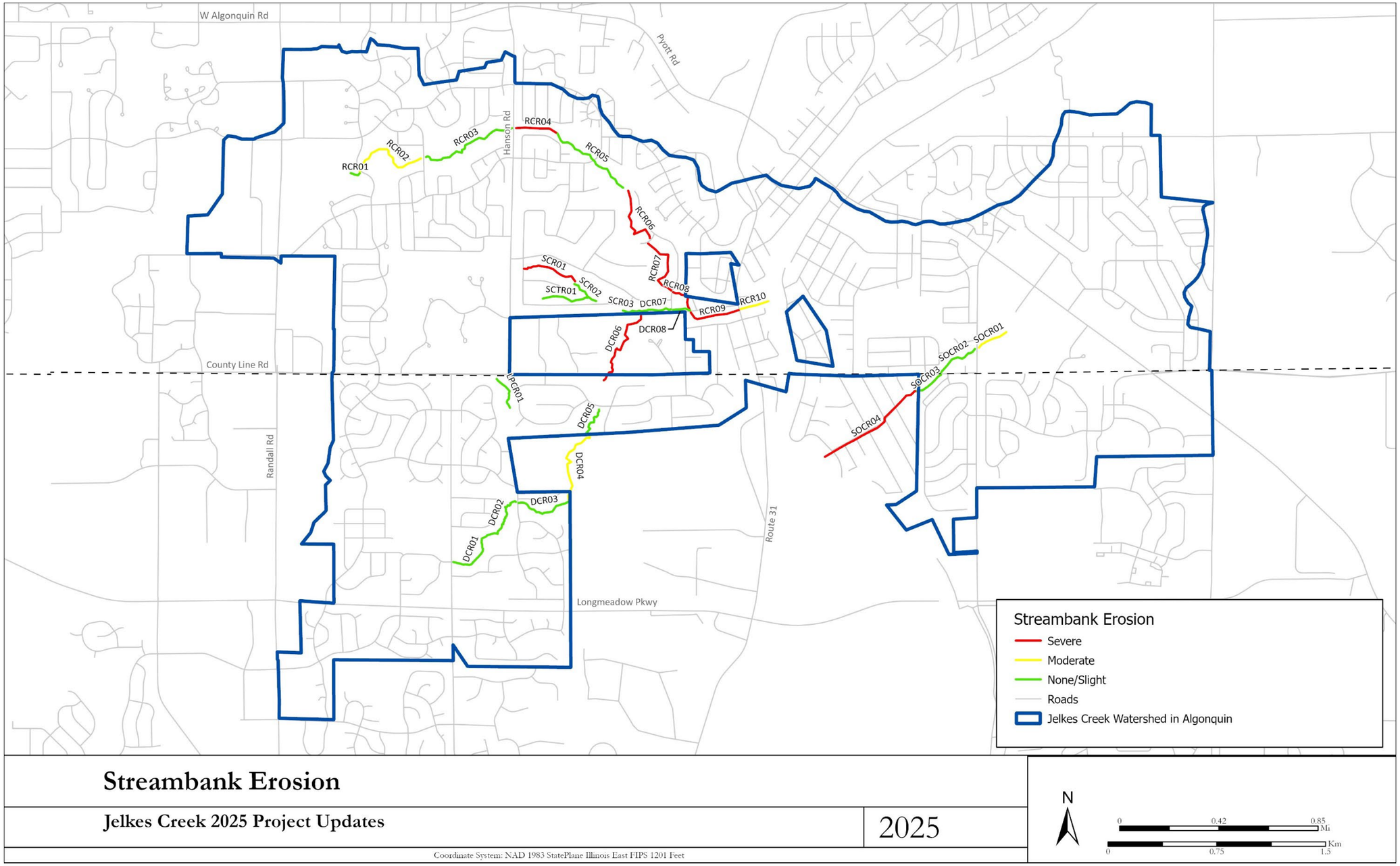

FIGURE 3. Streambank Erosion.

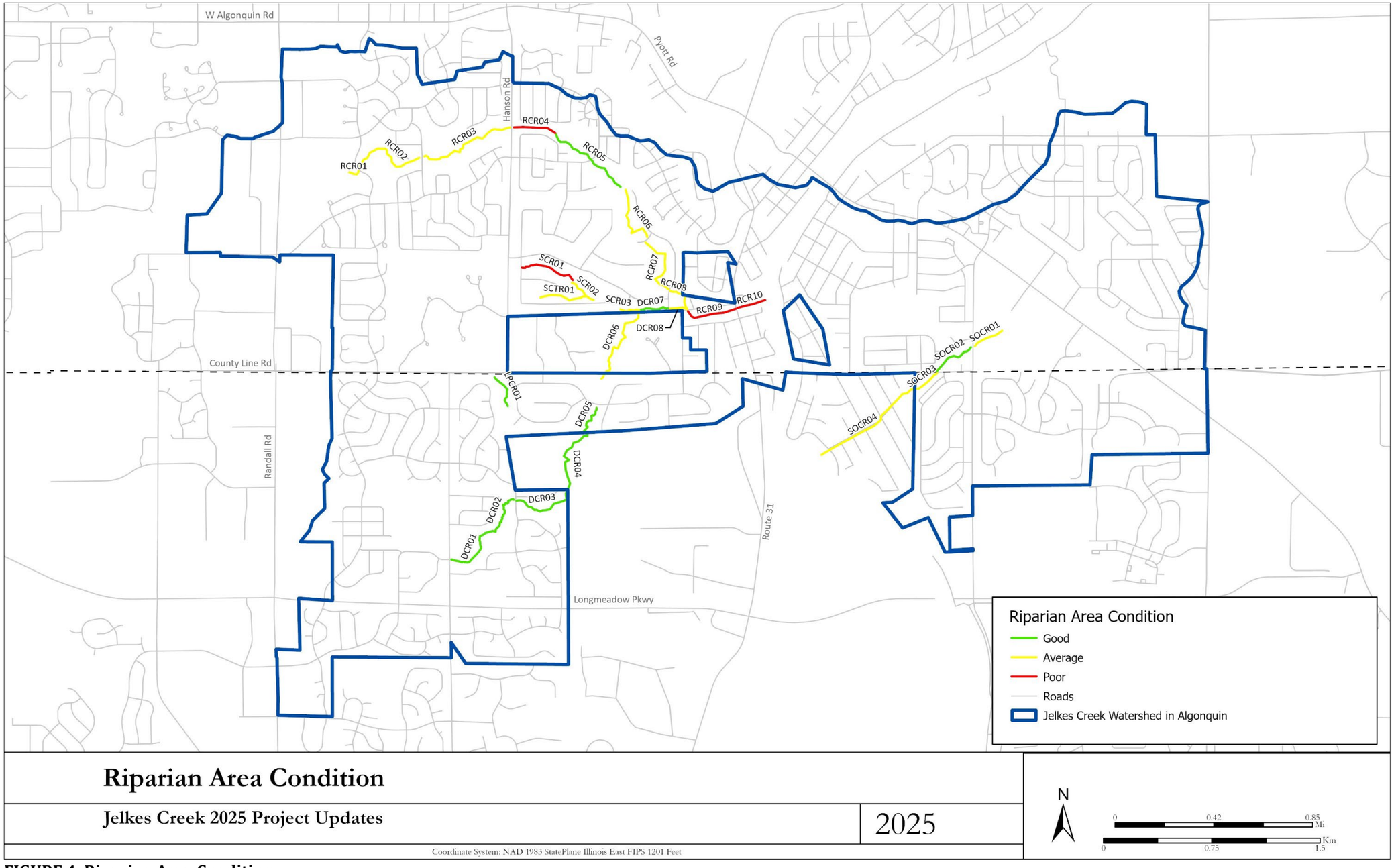

FIGURE 4. Riparian Area Condition.

ACTION PLAN PROJECT RECOMMENDATIONS UPDATES

Detention Basin Retrofits & Maintenance Project Summary

During the reassessment of projects in Algonquin, 88 detention basin retrofit opportunities were assessed within the Algonquin portion of Jelkes Creek watershed. Updated recommended detention basin retrofits and/or maintenance recommendations are shown in **Figure 5** by priority and Site ID# which correspond with the ID# used in the field investigation. In total, there were 7 Critical Area/High Priority basins, 11 medium priority basins, and 34 low priority basins. Details about each recommendation can be found in **Table 5** by project type. All the High priority recommendations are considered Critical Areas. Most of these basins were prioritized based on their ability to treat polluted stormwater runoff, have significant problems, or present a good opportunity for retrofitting. Low or Medium priority is generally assigned to smaller private basins and those with fewer problems or maintenance needs.

Since the original Jelkes Creek watershed-based plan was completed, the Village of Algonquin has implemented 47 projects. **Table 6** provides a list of projects recommended in the original plan that have been completed. These projects will require ongoing maintenance by the Village and are prioritized as "Completed/Critical Maintenance" and mapped on **Figure 5**. Completed projects include 32 detention basin retrofits, totaling 44.4 acres.

Streambank & Riparian Area Restoration Recommendations Project Summary

During the reassessment of projects in Algonquin, 27 stream and tributary reaches were assessed within the Algonquin portion of Jelkes Creek watershed. Updated recommended streambank and riparian area restoration recommendations are shown in **Figure 6** by priority and Site ID# which correspond with the ID# used in the field investigation. In total, there were 6 Critical Area/High Priority stream reaches and 6 low priority stream reaches (there were no medium priority stream reaches). Details about each recommendation can be found in **Table 5** by project type. All the High priority recommendations are considered Critical Areas. Most of these reaches were prioritized based on their ability to treat polluted stormwater runoff, have significant problems, or present a good opportunity for restoration. Low priority is generally assigned to stream reaches with less urgent concerns.

Since the original Jelkes Creek watershed-based plan was completed, the Village of Algonquin has implemented restoration projects along 15 stream reaches. **Table 6** provides a list of projects recommended in the original plan that have been completed. These projects will require ongoing maintenance by the Village and are prioritized as "Completed/Critical Maintenance" and mapped on **Figure 6**. Completed projects include 15 Streambank & Riparian Areas Restorations, totaling 14,475.3 linear feet.

Other Management Measures Recommendations Project Summary

The Village of Algonquin supplied updates to their Other Management Measure Recommendations. Updated recommended other management measure recommendations are shown in **Figure 7** by priority and Site ID# which correspond with the ID# assigned by the Village of Algonquin. In total, there was 1 Critical Area/High Priority other management measure, two medium, and 1 low priority other management measures. Details about each recommendation can be found in **Table 5** by project type. Most of these were prioritized based on their ability to treat polluted stormwater runoff, have significant problems, or present a good opportunity for restoration. Low priority is generally assigned to areas with less urgent concerns.

Since the original Jelkes Creek watershed-based plan was completed, the Village of Algonquin has implemented restoration projects of 9 other management measures. **Table 6** provides a list of projects recommended in the original plan that have been completed. These projects will require ongoing maintenance by the Village and are prioritized as "Completed/Critical Maintenance" and mapped on **Figure 7**. Completed projects include 69 acres of other management measure recommendations.

Priority Green Infrastructure Protection Areas Project Summary

The Village of Algonquin supplied updates to their Priority Green Infrastructure Protection Areas. Updated recommended Priority Green Infrastructure Protection Areas are shown in **Figure 8** by priority and Site ID# which correspond with the ID# assigned by the Village of Algonquin. In total, there were 12 Critical Area/High Priority parcels identified as Priority Green Infrastructure Protection Areas. Details about each recommendation can be found in **Table 5** by project type. All 12 parcels are considered Critical Area/High Priority based on their importance in preserving the Green Infrastructure Network in the future.

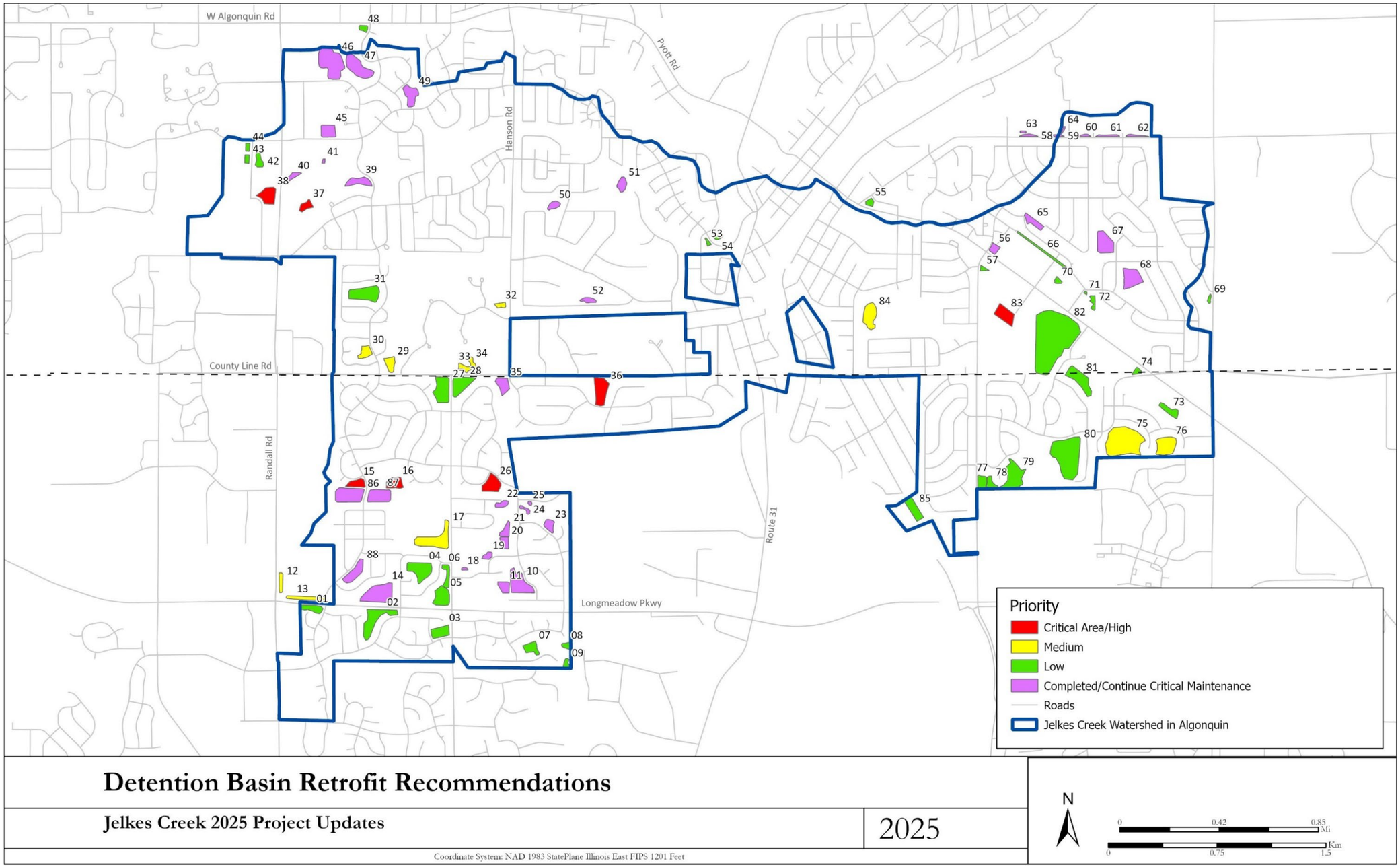

FIGURE 5. Detention Basin Retrofit Recommendations.

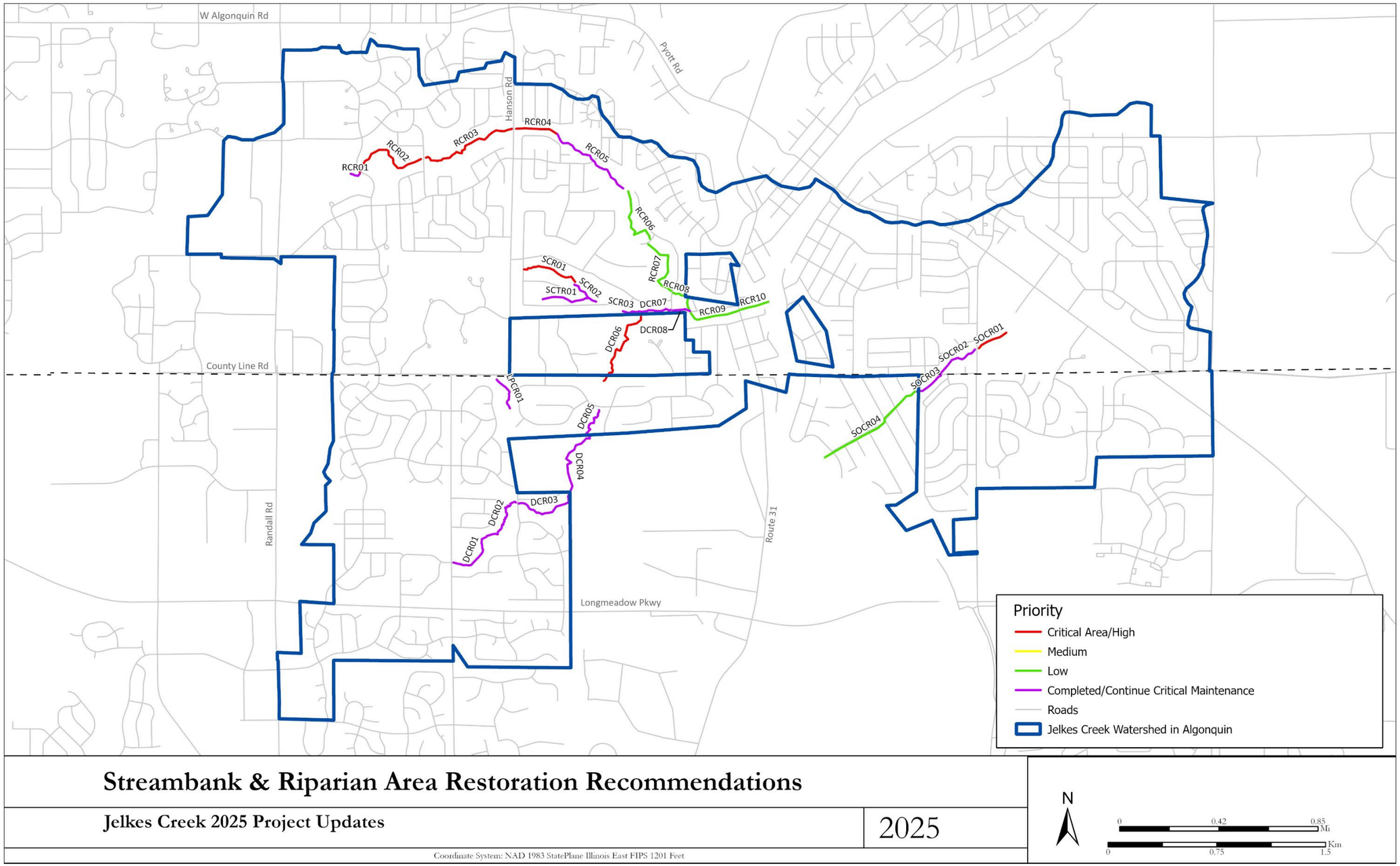

FIGURE 6. Streambank & Riparian Area Restoration Recommendations.

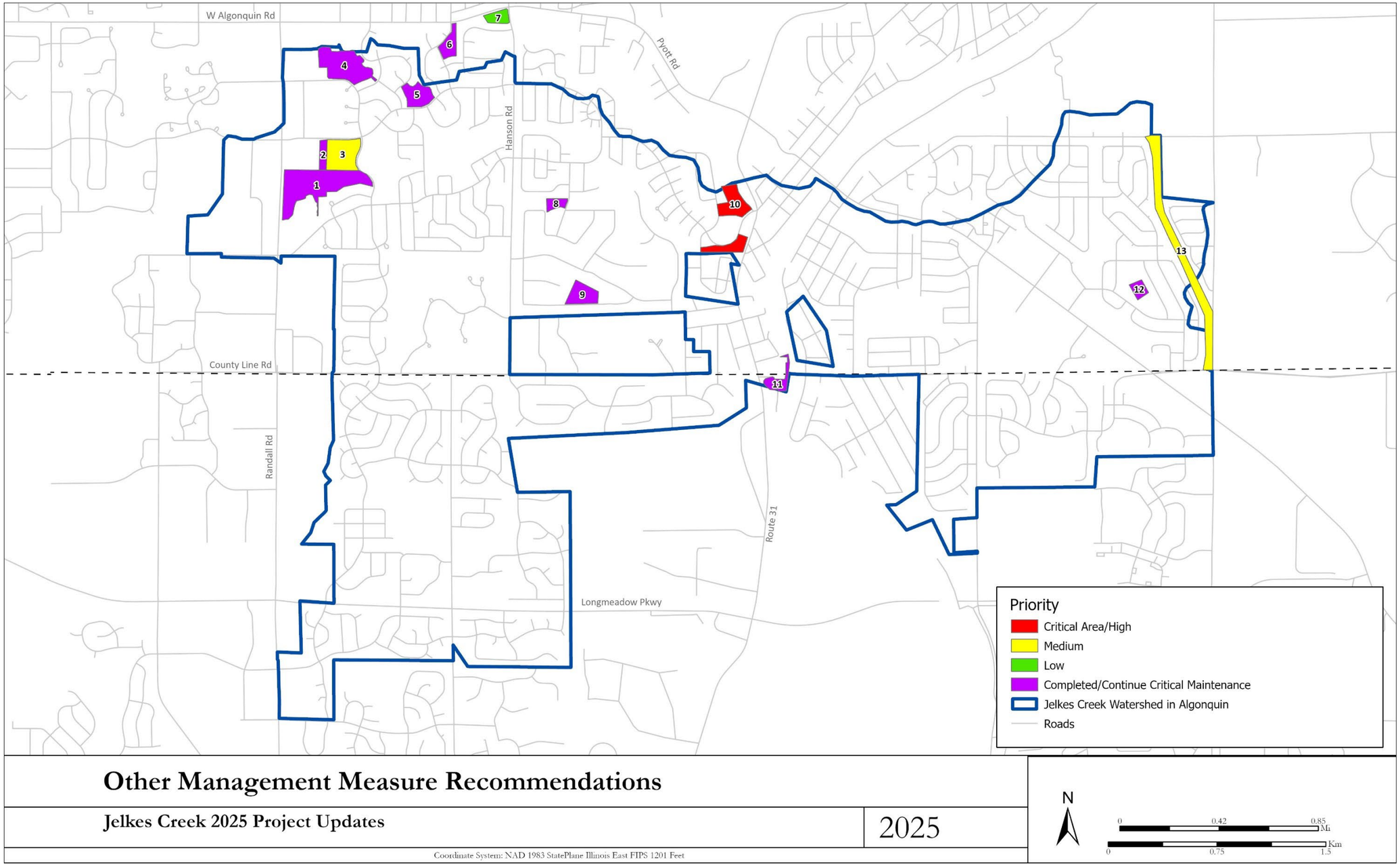

FIGURE 7. Other Management Measure Recommendations.

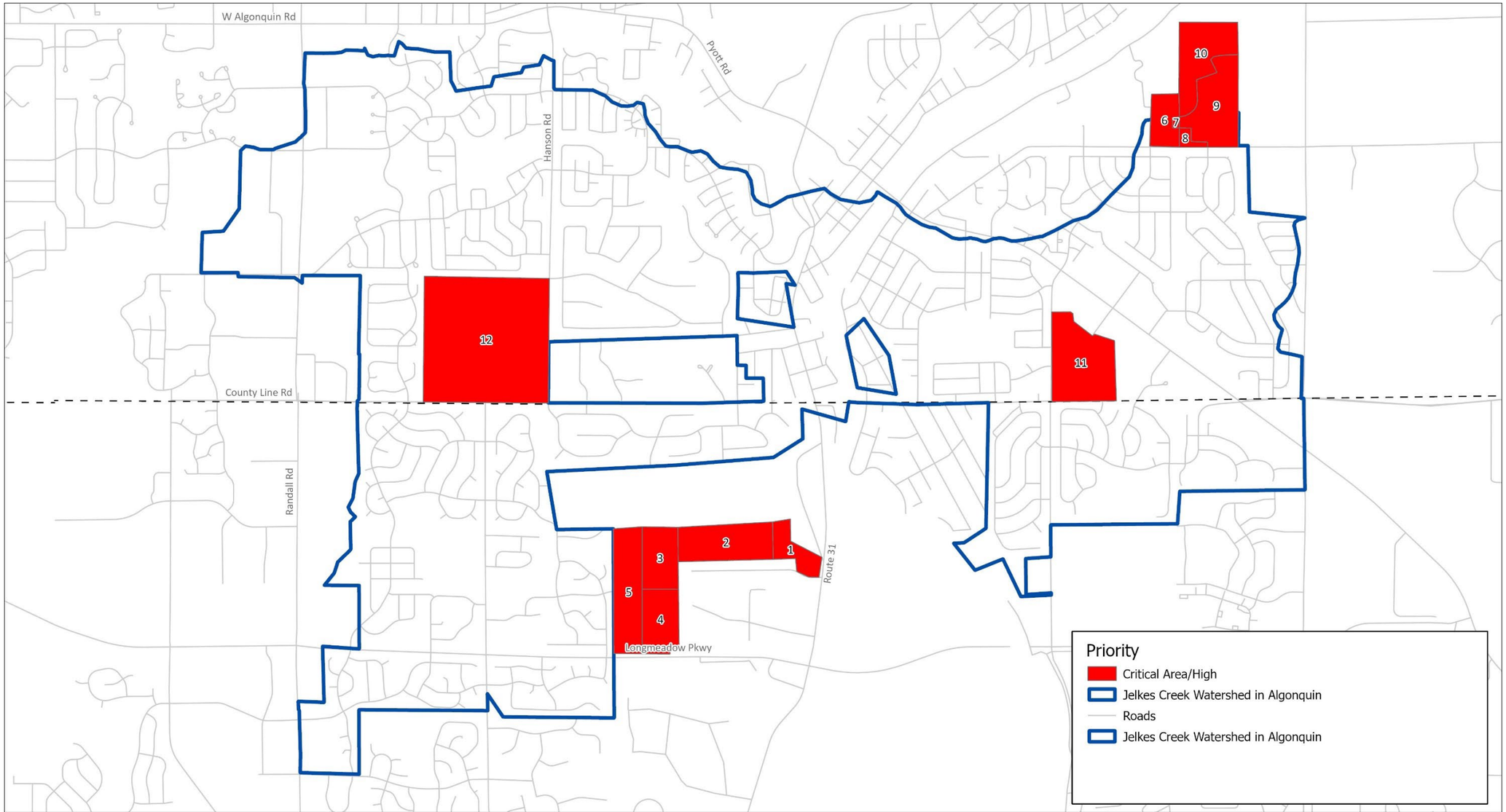

FIGURE 8. Priority Green Infrastructure Protection Areas.

TABLE 5. New and Updated 2025 Project Recommendations.

ID #	Site Name/ Location	Acres or Linear Feet	Existing Condition	Management Measure Recommendation	Pollutant Reduction Efficiency			Priority	Owner & Responsible Entity	Sources of Technical Assistance	Cost Estimate	Implementation Schedule (Years)
					TSS (tons/yr)	TP (lbs/yr)	TN (lbs/ yr)					
Detention Basin Retrofit Recommendations - See Figure 5 for project location												
01	Willoughby Farms South Townhomes Detention	1.4	Wet bottom detention with turf in poor ecological condition; mowed turf on side slopes.	Design and implement a project to continue maintenance.	1	1	8	Low	Private Owner	Ecological Consultant/ Contractor	$28.5K to design and construct. $5K to implement three-year M&M.	10-20+ Years
02	Willoughby Farms South Unit 3 Detention	4.4	Wet bottom detention in poor ecological condition with mowed turf base and bottom.	Design and implement a project to continue mowing.	1	2	15	Low	Private Owner	Ecological Consultant/ Contractor	$88.6K to design and construct. $15.5K to implement three-year M&M.	10-20+ Years
03	Willoughby Farms South Unit 2 Detention	2.0	Wet bottom detention in poor ecological condition with mowed turf side slopes	Design and implement a project to continue mowing.	0	1	7	Low	Private Owner	Ecological Consultant/ Contractor	$40.8K to design and construct. $7.1K to implement three-year M&M.	10-20+ Years
04	Willoughby Farms South Unit 1 Detentions	3.8	Dry bottom detention in poor ecological condition; with mowed turf base and bottom.	Design and implement a project for continued maintenance and mowing.	0	1	7	Low	Private Owner	Ecological Consultant/ Contractor	$75.7K to design and construct. $13.2K to implement three-year M&M.	10-20+ Years
05	Willoughby Farms South Unit 1 Detentions	3.0	Wet bottom detention in poor ecological condition with mowed turf side slopes	Design and implement a project for continued maintenance and mowing.	0	2	10	Low	Private Owner	Ecological Consultant/ Contractor	$59.3K to design and construct. $10.4K to implement three-year M&M.	10-20+ Years
06	Willoughby Farms South Unit 1 Detentions	1.2	Wet bottom detention in poor ecological condition with mowed turf side slopes	Design and implement a project for continued maintenance and mowing.	0	1	4	Low	Private Owner	Ecological Consultant/ Contractor	$23.8K to design and construct. $4.2K to implement three-year M&M.	10-20+ Years
07	Brittany Hills Detentions	1.5	Wet bottom detention in poor ecological condition with mowed turf side slopes	Design and implement a project to continue mowing.	0	1	5	Low	Private Owner	Ecological Consultant/ Contractor	$30K to design and construct. $5.2K to implement three-year M&M.	10-20+ Years
08	Brittany Hills Detentions	0.5	Wet bottom detention in poor ecological condition with mowed turf side slopes	Design and implement a project to continue mowing.	0	0	2	Low	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	10-20+ Years
09	Brittany Hills Detentions	0.5	Wet bottom detention in poor ecological condition with mowed turf side slopes	Design and implement a project to continue mowing.	0	0	2	Low	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	10-20+ Years
11	Light of Christ Church Detention	1.3	Previously restored with natives	Future Village acquisition	NA	NA	NA	Critical Maintenance	Private Owner	Ecological Consultant/ Contractor	Not Applicable	1-10 Years

ID #	Site Name/ Location	Acres or Linear Feet	Existing Condition	Management Measure Recommendation	Pollutant Reduction Efficiency			Priority	Owner & Responsible Entity	Sources of Technical Assistance	Cost Estimate	Implementation Schedule (Years)
					TSS (tons/yr)	TP (lbs/yr)	TN (lbs/ yr)					
12	Longmeadow Pkwy Detentions	0.8	Wetland bottom detention with natural features in average ecological condition. Base and bottom dominated by emergent plants with some phragmites; buffer is seeded to prairie but struggling establishment.	Design and implement a project to incorporate into the green infrastructure network as part of future development; Potential Future Acquisition Opportunity	0	0	0	Medium	KDOT	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	5-15 Years
13	Longmeadow Pkwy Detentions	1.4	Wetland bottom detention with natural features in average ecological condition. Base and bottom dominated by emergent plants with some phragmites; buffer is seeded to prairie but struggling establishment.	Design and implement a project to incorporate into the green infrastructure network as part of future development; Potential Future Acquisition Opportunity	0	0	1	Medium	KDOT	Ecological Consultant/ Contractor	$28.9K to design and construct. $5.1K to implement three-year M&M.	5-15 Years
15	Waverly Lane Detention	3.0	Wetland bottom detention with natural features in poor ecological condition; dominated by second growth trees and shrubs.	Design and implement a project to remove all invasive species and install native seeds and wetland plant plugs; Potential Future Acquisition Opportunity	0	1	4	Critical Area/High	Private Owner	Ecological Consultant/ Contractor	$59K to design and construct. $10.3K to implement three-year M&M.	1-10 Years
16	Willoughby Farms Park Detention	1.8	Wet bottom detention with natural features in average ecological condition; previously restored side slopes currently dominated by invasive woody trees and brush.	Design and implement a project to remove all invasive species and install native seeds and emergent plant plugs.	0	1	6	Critical Area/High	Village of Algonquin	Ecological Consultant/ Contractor	$36.7K to design and construct. $6.4K to implement three-year M&M.	1-10 Years
17	Westfield School Detention	4.9	Dry bottom detention with mowed turf in poor ecological condition.	Design and implement a project to explore a large-scale detention retrofit opportunity at headwaters of Dixie Creek.	2	2	16	Medium	School District 300	Ecological Consultant/ Contractor	$97.2K to design and construct. $17K to implement three-year M&M.	5-15 Years
26	Ridgefield Detention	2.7	Wetland bottom detention with mowed turf side slopes and wetland bottom in poor ecological condition.	Design and implement a project to remove turf grass, plant native vegetation, and maintain existing vegetation; Potential Future Acquisition Opportunity	0	1	3	Critical Area/High	Private Owner	Ecological Consultant/ Contractor	$54.3K to design and construct. $9.5K to implement three-year M&M.	1-10 Years
27	Willoughby Farms Detentions	4.0	Wet bottom detention in poor ecological condition with mowed turf side slopes	Design and implement a project to continue turf maintenance.	1	2	13	Low	Private Owner	Ecological Consultant/ Contractor	$80.5K to design and construct. $14.1K to implement three-year M&M.	10-20+ Years
28	Willoughby Farms Detentions	3.1	Wet bottom detention in poor ecological condition with mowed turf side slopes	Design and implement a project to continue turf maintenance.	0	2	10	Low	Private Owner	Ecological Consultant/ Contractor	$62.3K to design and construct. $10.9K to implement three-year M&M.	10-20+ Years
29	Tunbridge Unit 1 Detentions	1.3	Wetland bottom detention with natural features in poor ecological condition; dominated by phragmites and second growth woody species.	Design and implement a project to eradicate all vegetation present.	0	0	2	Medium	Private Owner	Ecological Consultant/ Contractor	$26.7K to design and construct. $4.7K to implement three-year M&M.	5-15 Years
30	Tunbridge Unit 1 Detentions	1.4	Wetland bottom detention with natural features in poor ecological condition; dominated by phragmites and second growth woody species.	Design and implement a project to eradicate all vegetation present.	0	0	2	Medium	Private Owner	Ecological Consultant/ Contractor	$28K to design and construct. $4.9K to implement three-year M&M.	5-15 Years

ID #	Site Name/ Location	Acres or Linear Feet	Existing Condition	Management Measure Recommendation	Pollutant Reduction Efficiency			Priority	Owner & Responsible Entity	Sources of Technical Assistance	Cost Estimate	Implementation Schedule (Years)
					TSS (tons/yr)	TP (lbs/yr)	TN (lbs/ yr)					
31	Tunbridge Unit 2 Detention	4.2	Wet bottom detention with turf side slopes in poor ecological condition.	Design and implement a project to continue turf maintenance.	1	2	14	Low	Private Owner	Ecological Consultant/ Contractor	$83.3K to design and construct. $14.6K to implement three-year M&M.	10-20+ Years
32	Golf Club Illinois Detention	0.5	Wet bottom detention with turf side slopes in poor ecological condition.	Design and implement a project to incorporate into future green infrastructure with new development; Potential Future Acquisition Opportunity	0	0	0	Medium	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	5-15 Years
33	Golf Club Illinois Detention	0.7	Wetland bottom detention with natural features in poor ecological condition; dominated by cattails and second growth woody species.	Design and implement a project to incorporate into future green infrastructure with new development; Potential Future Acquisition Opportunity	0	0	0	Medium	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	5-15 Years
34	Golf Club Illinois Detention	0.5	Wetland bottom detention with natural features in poor ecological condition; dominated by cattails and second growth woody species.	Design and implement a project to incorporate into future green infrastructure with new development; Potential Future Acquisition Opportunity	0	0	0	Medium	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	5-15 Years
36	Lake Braewood	3.6	Wet bottom detention with turf side slopes dominated by trees and shrubs in poor ecological condition.	Design and implement a project to remove the non-permitted inline dam structure from the creek, restore the area to wetland using native plants, and move detention off-line to an adjacent property.	0	2	12	Critical Area/High	Village of Algonquin	Ecological Consultant/ Contractor	$72.2K to design and construct. $12.6K to implement three-year M&M.	1-10 Years
37	Rosen Detention	1.0	Wetland bottom detention with average ecological condition; base populated with natives with side slopes dominated by invasives.	Design and implement a project to remove invasive species from side slopes and restore with native plants; Potential Future Acquisition Opportunity	0	1	4	Critical Area/High	Private Owner	Ecological Consultant/ Contractor	$21K to design and construct. $3.7K to implement three-year M&M.	1-10 Years
38	Target Detention	2.6	Wet bottom detention with poor ecological condition; spiraling Army Corp Engineer detention basin.	Design and implement a project to remove invasive trees and shrubs; Potential Future Acquisition Opportunity	1	1	16	Critical Area/High	Private Owner	Ecological Consultant/ Contractor	$51.2K to design and construct. $9K to implement three-year M&M.	1-10 Years
42	Advocate Sherman Health Detention	0.9	Wetland bottom detention with poor ecological condition; phragmites dominated bottom and side slopes.	Design and implement a project to irradiate the phragmites and plant turf along the side slopes.	0	1	4	Low	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	10-20+ Years
43	Coleman Hospitality Campus Detention	0.4	Wetland bottom detention with poor ecological condition; phragmites dominated bottom with second growth trees and shrubs along bottom and side slopes.	Design and implement a project to convert side slopes to turf and treat phragmites.	0	0	2	Low	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	10-20+ Years
44	Coleman Hospitality Campus Detention	0.4	Dry bottom detention mowed turf basin with poor ecological condition.	Design and implement a project to continue maintenance mowing.	0	0	3	Low	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	10-20+ Years

ID #	Site Name/ Location	Acres or Linear Feet	Existing Condition	Management Measure Recommendation	Pollutant Reduction Efficiency			Priority	Owner & Responsible Entity	Sources of Technical Assistance	Cost Estimate	Implementation Schedule (Years)
					TSS (tons/yr)	TP (lbs/yr)	TN (lbs/ yr)					
48	Arbor Hills Detention Private	0.5	Wet bottom detention mowed turf basin with poor ecological condition.	Design and implement a project to continue maintenance.	0	0	2	Low	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	10-20+ Years
53	Hill Climb Park Detentions	0.3	Dry bottom mowed turf detention with poor ecological condition.	Design and implement a project to convert turf to prairie.	0	0	1	Low	Village of Algonquin	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	10-20+ Years
54	Hill Climb Park Detentions	0.4	Dry bottom mowed turf detention with poor ecological condition.	Design and implement a project to convert turf to prairie.	0	0	1	Low	Village of Algonquin	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	10-20+ Years
55	Eastgate Court Detention	0.5	Dry bottom mowed turf detention with poor ecological condition.	Design and implement a project to continue maintenance.	0	0	3	Low	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	10-20+ Years
57	Walgreens Detention	0.3	Wetland bottom detention with poor ecological condition; basin bottom and buffer dominated by invasive woody and herbaceous species.	Design and implement a project to remove all vegetation and install native vegetation.	0	0	1	Low	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	10-20+ Years
66	Cumberland Pkwy Detention	1.4	Dry bottom detention with poor ecological condition.	Design and implement a project to continue maintenance.	0	0	3	Low	Private Owner	Ecological Consultant/ Contractor	$27.8K to design and construct. $4.9K to implement three-year M&M.	10-20+ Years
69	Glen Oaks Detention	0.3	Dry bottom detention with poor ecological condition; basin buffers dominated by woody invasives and second growth shrubs.	Design and implement a project to irradiate all invasives and reseed with native vegetation.	0	0	1	Low	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	10-20+ Years
70	Ryan Pkwy Detention	0.4	Dry bottom detention with poor ecological condition. Characterized by mowed turf grass and sand bar willow.	Design and implement a project to continue maintenance mowing and irradiate willows.	0	0	3	Low	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	10-20+ Years
71	Chase St Detentions	0.1	Dry bottom mowed turf detention with poor ecological condition	Design and implement a project to continue maintenance.	0	0	1	Low	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	10-20+ Years
72	Chase St Detentions	0.6	Wetland bottom detention with poor ecological condition; basin dominated by second growth trees and invasive species.	Design and implement a project to irradiate all invasives and reseed with native vegetation.	0	0	3	Low	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	10-20+ Years
73	2241 Route 62 Detention	1.4	Wet bottom detention with mowed turf side slopes in poor ecological condition.	Design and implement a project to continue maintenance mowing.	0	1	5	Low	Private Owner	Ecological Consultant/ Contractor	$28.3K to design and construct. $5K to implement three-year M&M.	10-20+ Years

ID #	Site Name/ Location	Acres or Linear Feet	Existing Condition	Management Measure Recommendation	Pollutant Reduction Efficiency			Priority	Owner & Responsible Entity	Sources of Technical Assistance	Cost Estimate	Implementation Schedule (Years)
					TSS (tons/yr)	TP (lbs/yr)	TN (lbs/ yr)					
74	Thorntons Detention	0.5	Dry bottom mowed turf grass detention basin with poor ecological condition.	Design and implement a project to maintain as is.	0	0	3	Low	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	10-20+ Years
75	Glenloch Detentions	10.3	Wet bottom detention with average ecological condition; restored with natives.	Design and implement a project to ensure the site remains successful with continued maintenance.	1	6	34	Medium	Private Owner	Ecological Consultant/ Contractor	$164.9K to design and construct. $25.8K to implement three-year M&M.	5-15 Years
76	Glenloch Detentions	3.6	Wet bottom detention with average ecological condition; previously restored with natives in need of ongoing maintenance.	Design and implement a project to ensure the site needs continued maintenance to be successful.	0	2	12	Medium	Private Owner	Ecological Consultant/ Contractor	$72.3K to design and construct. $12.6K to implement three-year M&M.	5-15 Years
77	Algonquin Lakes Detentions	1.3	Dry bottom detention with poor ecological condition; previously restored but failed due to lack of maintenance.	Design and implement a project to remove all existing vegetation and restore with native vegetation.	0	0	2	Low	Private Owner	Ecological Consultant/ Contractor	$25.3K to design and construct. $4.4K to implement three-year M&M.	10-20+ Years
78	Algonquin Lakes Detentions	0.9	Dry bottom detention with poor ecological condition; previously restored but failed due to lack of maintenance.	Design and implement a project to remove all existing vegetation and restore with native vegetation.	0	0	2	Low	Private Owner	Ecological Consultant/ Contractor	$20K to design and construct. $3.5K to implement three-year M&M.	10-20+ Years
79	Algonquin Lakes Detentions	4.6	Dry bottom detention with poor ecological condition; previously restored but failed due to lack of maintenance.	Design and implement a project to remove all existing vegetation and restore with native vegetation.	0	1	8	Low	Private Owner	Ecological Consultant/ Contractor	$91K to design and construct. $15.9K to implement three-year M&M.	10-20+ Years
80	Algonquin Lakes Detentions	10.6	Wet bottom detention with poor ecological condition; former gravel quarry converted to detention with some native restoration done but becoming overgrown by second growth trees, shrubs, and other native species.	Design and implement a project to remove invasive species and naturalize with native plants.	1	2	19	Low	Private Owner	Ecological Consultant/ Contractor	$169.2K to design and construct. $26.4K to implement three-year M&M.	10-20+ Years
81	Algonquin Lakes Detentions	3.7	Wet bottom detention with poor ecological condition; former gravel quarry converted to detention with some native restoration done but becoming overgrown by second growth trees, shrubs, and other native species.	Design and implement a project to remove invasive species and naturalize with native plants.	0	1	7	Low	Private Owner	Ecological Consultant/ Contractor	$74.7K to design and construct. $13.1K to implement three-year M&M.	10-20+ Years
82	Algonquin Lakes Detentions	22.6	Wet bottom detention with poor ecological condition; former gravel quarry converted to detention with some native restoration done but becoming overgrown by second growth trees, shrubs, and other native species.	Design and implement a project to remove invasive species and naturalize with native plants.	2	5	41	Low	Private Owner	Ecological Consultant/ Contractor	$361.2K to design and construct. $56.4K to implement three-year M&M.	10-20+ Years
83	Jewel Detention	2.8	Wet bottom detention with poor ecological condition; previously restored overrun by second growth woody and herbaceous species.	Design and implement a project to remove invasive species; Potential Future Acquisition Opportunity	0	1	5	Critical Area/High	Private Owner	Ecological Consultant/ Contractor	$55.6K to design and construct. $9.7K to implement three-year M&M.	1-10 Years

ID #	Site Name/ Location	Acres or Linear Feet	Existing Condition	Management Measure Recommendation	Pollutant Reduction Efficiency			Priority	Owner & Responsible Entity	Sources of Technical Assistance	Cost Estimate	Implementation Schedule (Years)
					TSS (tons/yr)	TP (lbs/yr)	TN (lbs/ yr)					
84	Eastgate School Detention	3.1	Dry bottom detention with poor ecological condition; turf grass side slopes and basin bottom.	Design and implement a project to remove turf and install native vegetation.	0	6	1	Medium	Private Owner	Ecological Consultant/ Contractor	$62.8K to design and construct. $11K to implement three-year M&M.	5-15 Years
85	Riverwoods Detention	2.2	Wetland bottom detention with poor ecological condition; dominated by phragmites and woody invasives.	Design and implement a project to irradiate phragmites, install emergent plants, remove second growth, and seed with native vegetation.	0	0	4	Low	Kane County Forest Preserve District	Ecological Consultant/ Contractor	$44.1K to design and construct. $7.7K to implement three-year M&M.	10-20+ Years
Stream & Riparian Area Restoration Recommendations - See Figure 6 for project location												
DCR06	Dixie Creek Reach 6 - Fields Property South of Edgewood Dr	2,018.6	The stream riparian area is characterized by old field with severe stream bank and bed erosion. The adjacent land features some degraded oak woodland mixed with old field at the downstream end.	Design, permit, and implement a project to regrade stream banks with benches, install rock toes on outside bends, and stabilize existing riffles. Plant native vegetation and remove invasive species from the woodland to naturalize the area.	404	404	808	Critical Area/High	Village of Algonquin	Environmental Consultant/ Contractor, McHenry County, MCSWCD	$908.4K to design and construct. $69.5K to implement three-year M&M.	1-10 Years
RCR02	Ratt Creek Reach 2 - Stonegate Rd to Kirkland Dr	665.0	The stream riparian area is characterized by prairie and has been previously restored with rock toe riffles, benches, and native vegetation on banks.	Design, permit, and implement a project to regrade stream banks with benches, install rock toes on outside bends, enhance existing riffles, and plant native vegetation. Remove invasive trees and shrubs, seed with native vegetation, and install native trees.	74	75	149	Critical Area/High	Private Owner w/Village of Algonquin Drainage Easement	Environmental Consultant/ Contractor, McHenry County, MCSWCD	$299.2K to design and construct. $22.9K to implement three-year M&M.	1-10 Years
RCR03	Ratt Creek Reach 3 - Kirkland Dr to Hanson Rd	1,082.6	The stream riparian area is characterized by marsh/wetland with a meandering, low-gradient stream. It flows through cattail and phragmites and is bordered by second-growth trees and shrubs.	Design, permit, and implement a project to irradiate phragmites from the marsh, remove invasive trees and shrubs from the buffer, and seed with native vegetation.	11	12	23	Critical Area/High	Private Owner w/Village of Algonquin Drainage Easement	Environmental Consultant/ Contractor, McHenry County, MCSWCD	$487.2K to design and construct. $37.3K to implement three-year M&M.	5-15 Years
RCR04	Ratt Creek Reach 4 - Hanson Rd to Jaycee Field	443.8	The stream riparian area is characterized by a channelized stream flowing between residential homes. The residential area closely borders the stream and consists primarily of turf grass and second-growth trees and shrubs.	Design, permit, and implement a project to armor eroded banks, install riffles throughout, and plant native vegetation. Remove invasive trees and shrubs, and seed with native vegetation.	94	94	191	Critical Area/High	Private Owner w/Village of Algonquin Drainage Easement	Environmental Consultant/ Contractor, McHenry County, MCSWCD	$199.7K to design and construct. $15.3K to implement three-year M&M.	1-10 Years
RCR06	Ratt Creek Reach 6 - High Hill Dam to Harper Ct	2,021.3	The stream riparian area is characterized by a high-gradient cobble-bottom stream. The adjacent woodland is mesic and located in a valley, somewhat invaded by second-growth trees and shrubs.	Design, permit, and implement a project to armor eroded areas and enhance existing riffles. Thin second-growth trees, remove all invasive shrubs, and seed with a woodland mixture.	204	205	409	Low	Private Owner w/Village of Algonquin Drainage Easement	Environmental Consultant/ Contractor, McHenry County, MCSWCD	$909.6K to design and construct. $69.6K to implement three-year M&M.	10-20+ Years

ID #	Site Name/ Location	Acres or Linear Feet	Existing Condition	Management Measure Recommendation	Pollutant Reduction Efficiency			Priority	Owner & Responsible Entity	Sources of Technical Assistance	Cost Estimate	Implementation Schedule (Years)
					TSS (tons/yr)	TP (lbs/yr)	TN (lbs/ yr)					
RCR07	Ratt Creek Reach 7 - Harper Ct to Harper Dr	2,330.2	The stream riparian area is characterized by a high-gradient cobble-bottom stream. The adjacent woodland is mesic and located in a valley, somewhat invaded by second-growth trees and shrubs.	Design and implement a project to thin second-growth trees and invasive shrubs, and seed with a woodland mixture.	212	213	425	Low	Private Owner w/Village of Algonquin Drainage Easement	Environmental Consultant/ Contractor, McHenry County, MCSWCD	$1.05M to design and construct. $80.2K to implement three-year M&M.	10-20+ Years
RCR08	Ratt Creek Reach 8 - Harper Dr to Edgewood Dr	973.1	The stream riparian area is characterized by a high-gradient valley with a cobble substrate. The adjacent woodland consists of bottomland forest with second-growth trees and shrubs.	Design and implement a project to remove invasive trees and shrubs and seed with a woodland seed mix.	88	88	176	Low	Private Owner	Environmental Consultant/ Contractor, McHenry County, MCSWCD	$437.9K to design and construct. $33.5K to implement three-year M&M.	10-20+ Years
RCR09	Ratt Creek Reach 9 - Edgewood Dr to Route 31	2,066.6	The stream riparian area is characterized by a highly channelized stream flowing through residential and business areas. The adjacent residential land features a mix of residential use, including turf grass and invasive species.	Design, permit, and implement a project to stabilize eroded stream banks with heavy armoring. Remove invasive species and install a native seed mix.	229	229	461	Low	Private Owner	Environmental Consultant/ Contractor, McHenry County, MCSWCD	$930K to design and construct. $71.2K to implement three-year M&M.	10-20+ Years
RCR10	Ratt Creek Reach 10 - Route 31 to Fox River	1,575.7	The stream riparian area is characterized by a channelized stream flowing through a residential area. The adjacent residential land features bottomland forest with second-growth trees and shrubs.	Design, permit, and implement a project to armor eroded stream banks. Remove invasive species and install a native seed mix.	21	21	48	Low	Private Owner	Environmental Consultant/ Contractor, McHenry County, MCSWCD	$709.1K to design and construct. $54.3K to implement three-year M&M.	10-20+ Years
SCR01	Surrey Creek Reach 1 - Surrey Ln to Surrey Ln Preserve	1,638.1	The stream riparian area is characterized by scrub/shrub with severe head cutting with some areas moderately stable. The adjacent area is dominated by second-growth trees and shrubs.	Design, permit, and implement a project to stabilize head cuts with head armoring, restore the remainder of the stream using rock toes, grading, and native vegetation. Remove second-growth trees and shrubs, seed with native vegetation, and install native trees.	254	254	511	Critical Area/High	Private Owner w/Village of Algonquin Drainage Easement	Environmental Consultant/ Contractor, McHenry County, MCSWCD	$737.2K to design and construct. $56.4K to implement three-year M&M.	1-10 Years
SOCR01	Souwanas Creek Reach 1 - East of Sandbloom Rd behind Jewel	724.1	The stream riparian area is characterized by agricultural land. The stream is moderately eroding with the adjacent woodland dominated by second-growth woody and herbaceous species.	Design, permit, and implement a project to armor eroded stream banks, install riffles as needed. Remove invasive, weedy trees and shrubs and install a native seed mix.	31	30	66	Critical Area/High	Private Owner	Environmental Consultant/ Contractor, McHenry County, MCSWCD	$325.9K to design and construct. $24.9K to implement three-year M&M.	1-10 Years
SOCR04	Souwanas Creek Reach 4 - Algonquin Shores to Fox River	2,644.9	The stream riparian area is characterized by somewhat natural channels with pools, riffles, and a cobble substrate. The adjacent residential area includes various land uses, such as second-growth woodland and mowed turf.	Design, permit, and implement a project to stabilize eroded stream banks, enhance existing riffle pools, and shape banks in some areas. Remove invasive trees and shrubs, replace turf grass, and seed with native vegetation.	256	257	518	Low	Private Owner	Environmental Consultant/ Contractor, Kane County, KDSWCD	$1.19M to design and construct. $91.1K to implement three-year M&M.	10-20+ Years
Other Management Measure Recommendations - See Figure 7 for project location												
3	Huntington Dr N Agriculture Parcel	11.3	Agricultural parcel at southwest corner of Hunting Dr N and Stonegate Rd	Future Acquisition for restoration to combine with Randall Rd Wetland Complex and CarMax Natural Area	18	29	167	Medium	Private	Environmental Consultant/ Contractor, McHenry County, MCSWCD	Not Applicable	10-20+ Years

ID #	Site Name/ Location	Acres or Linear Feet	Existing Condition	Management Measure Recommendation	Pollutant Reduction Efficiency			Priority	Owner & Responsible Entity	Sources of Technical Assistance	Cost Estimate	Implementation Schedule (Years)
					TSS (tons/yr)	TP (lbs/yr)	TN (lbs/ yr)					
7	Empty Lot at Algonquin Rd & Hanson Rd	3.1	Empty lot at southwest corner of Algonquin Rd and Hanson Rd	Future acquisition for restoration to combine with Arquilla detention	1	4	24	Low	Private	Ecological Consultant/ Contractor	Not Applicable	10-20+ Years
10	Hill Climb Park Woodlands	12.5	Hill Climb Park woodlands north and south of Huntington Dr hill	Restore woodland to prevent erosion	17	28	190	Critical Area/High	Algonquin	Ecological Consultant/ Contractor	Not Applicable	1-10 Years
13	Old Transportation Corridor	23.1	Old Transportation Center behind houses on Yosemite Pkwy and Glacier Pkwy	Future restoration site	7	22	144	Medium	Algonquin	Ecological Consultant/ Contractor	Not Applicable	10-20+ Years
Green Infrastructure Priority Protection Areas - See Figure 8 for project location												
1-5	Lundstrom Properties	131.7	Lundstrom properties at Route 31 west to existing Village limit	Incorporate Conservation Design standards into future development with an emphasis on promoting groundwater/ aquifer recharge and reducing impervious surfaces.	Not Applicable			Critical Area/High	Future Developer; Algonquin	Ecological Consultant; USACE; NRCS/ SWCD; IEPA; Kane County	Not Applicable	1-10 Years
6-10	Terra Cotta Parcels	90.2	Terra Cotta parcels east of Presidential Park	Incorporate Conservation Design standards into future development with an emphasis on promoting groundwater/ aquifer recharge and reducing impervious surfaces.	Not Applicable			Critical Area/High	Future Developer; Algonquin	Ecological Consultant; USACE; NRCS/ SWCD; IEPA; Kane County	Not Applicable	1-10 Years
11	Christensen Property	48.6	Christensen property south of Jewel on east side of Village	Incorporate Conservation Design standards into future development with an emphasis on promoting groundwater/ aquifer recharge and reducing impervious surfaces.	Not Applicable			Critical Area/High	Future Developer; Algonquin	Ecological Consultant; USACE; NRCS/ SWCD; IEPA; Kane County	Not Applicable	1-10 Years
12	Golf Club of Illinois Property	158.9	Golf Club of Illinois property at northwest corner of Hanson Rd and County Line Rd	Incorporate Conservation Design standards into future development with an emphasis on promoting groundwater/ aquifer recharge and reducing impervious surfaces.	Not Applicable			Critical Area/High	Future Developer; Algonquin	Ecological Consultant; USACE; NRCS/ SWCD; IEPA; Kane County	Not Applicable	1-10 Years

TABLE 6. Completed Jelkes Creek-Fox River Watershed-Based Plan Projects within the Village of Algonquin.

ID #	Site Name Location	Acres or Linear Feet	Existing Condition	Management Measure Recommendation	Priority
Detention Basin Retrofit - See Figure 5 for project location					
10	Wynnfield Detention	4.2	Dry bottom detention previously restored with natives in good ecological condition.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
11	Light of Christ Church Detention	1.3	Wetland bottom detention previously restored with natives in good ecological condition.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
14	Longmeadow Pkwy Detention now part of Meadows Sub	2.7	Wetland bottom detention previously restored with natives in good ecological condition.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
18	Dixie Creek Riparian Corridor Reach 1&2 Detentions	0.2	Wetland bottom detention previously restored with natives in good ecological condition.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
19	Dixie Creek Riparian Corridor Reach 1&2 Detentions	0.6	Wetland bottom detention previously restored with natives in good ecological condition.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
20	Dixie Creek Riparian Corridor Reach 1&2 Detentions	1.0	Wetland bottom detention previously restored with natives in good ecological condition.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
21	Dixie Creek Riparian Corridor Reach 1&2 Detentions	1.1	Wetland bottom detention previously restored with natives in good ecological condition.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
22	Dixie Creek Riparian Corridor Reach 1&2 Detentions	0.7	Wetland bottom detention previously restored with natives in good ecological condition.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
23	Dixie Creek Riparian Corridor Reach 3 Detentions	1.1	Wetland bottom detention previously restored with natives in good ecological condition.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
24	Dixie Creek Riparian Corridor Reach 3 Detentions	0.4	Wetland bottom detention previously restored with natives in good ecological condition.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
25	Dixie Creek Riparian Corridor Reach 3 Detentions	0.1	Wetland bottom detention previously restored with natives in good ecological condition.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
35	Lawndale Park Detention	1.8	Wetland bottom detention recently restored with natives in good ecological condition.	Continue ongoing site maintenance.	Completed/ Critical Maintenance

ID #	Site Name Location	Acres or Linear Feet	Existing Condition	Management Measure Recommendation	Priority
39	Randall Road Wetland Detentions	1.8	Wetland bottom detention with good ecological condition; recently restored with natives.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
40	Randall Road Wetland Detentions	0.7	Wetland bottom detention with good ecological condition; recently restored with natives.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
41	Carmax Detention	0.1	Wetland bottom detention with good ecological condition; recently restored with natives.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
45	Huntington Dr N Detention	2.0	Wetland bottom detention with good ecological condition; recently restored with natives.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
46	Arbor Hills Detention Village	6.7	Wet bottom detention with good ecological condition; recently restored with natives.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
47	Arbor Hills Detention Village	4.1	Wetland bottom detention with good ecological condition; recently restored with natives.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
49	Falcon Ridge Detention	2.4	Wetland bottom detention with good ecological condition; recently restored with natives.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
50	Gaslight Park Detention	0.9	Wetland bottom detention with good ecological condition; recently restored with natives.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
51	High Hill Dam Detention	1.2	Wet bottom detention with good ecological condition; recently restored with natives.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
52	Surrey Ln Detention	0.7	Wetland bottom detention with good ecological condition; recently restored with natives.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
56	Countryside Detention	0.8	Wetland bottom detention previously restored with native plants in with good ecological condition.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
58	Highland Ave Detentions	0.4	Wetland bottom detention with good ecological condition; previously restored with native plants.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
59	Highland Ave Detentions	0.2	Wetland bottom detention with good ecological condition; previously restored with native plants.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
60	Highland Ave Detentions	0.3	Wetland bottom detention with good ecological condition; previously restored with native plants.	Continue ongoing site maintenance.	Completed/ Critical Maintenance

ID #	Site Name Location	Acres or Linear Feet	Existing Condition	Management Measure Recommendation	Priority
61	Highland Ave Detentions	0.4	Wetland bottom detention with good ecological condition; previously restored with native plants.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
62	Highland Ave Detentions	0.3	Wetland bottom detention with good ecological condition; previously restored with native plants.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
63	Presidential Park Detentions	0.1	Wetland bottom detention with good ecological condition; previously restored with native plants.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
64	Presidential Park Detentions	0.1	Wetland bottom detention with good ecological condition; previously restored with native plants.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
65	Holder Park Detention	1.4	Wetland bottom detention with average ecological condition; previously restored with native plants.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
67	Blue Ridge Detention	3.5	Dry bottom detention with good ecological condition; previously restored with native plants.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
68	Yellowstone Detention	3.4	Dry bottom detention with good ecological condition; previously restored with native plants.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
86	Meadows Detentions	4.7	Wetland bottom detention with good ecological condition; previously restored with native plants.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
87	Meadows Detentions	3.5	Wetland bottom detention with good ecological condition; previously restored with native plants.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
88	Meadows Detentions	2.7	Wetland bottom detention with good ecological condition; previously restored with native plants.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
Streambank & Riparian Area Restoration - See Figure 6 for project location					
DCR01	Dixie Creek Reach 1 - East of Sleepy Hollow Rd	1,502.3	The stream riparian area is characterized by prairie and has been previously restored with rock toe riffles, benches, and native vegetation on banks.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
DCR02	Dixie Creek Reach 2 - West of Wynnfield Dr	1,067.1	The stream riparian area is characterized by prairie and has been previously restored with rock toe riffles, benches, and native vegetation on banks.	Continue ongoing site maintenance.	Completed/ Critical Maintenance

ID #	Site Name Location	Acres or Linear Feet	Existing Condition	Management Measure Recommendation	Priority
DCR03	Dixie Creek Reach 3 - Wynnfield Dr to Dixie Briggs Fromm	1,327.7	The stream riparian area is characterized by prairie and has been previously restored with rock toe riffles, benches, and native vegetation on banks.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
DCR04	Dixie Creek Reach 4 - In Dixie Briggs Fromm	824.2	The stream riparian area is characterized by prairie, with previously restored rock toe riffles and native vegetation on the banks. The adjacent prairie area has been previously restored with native vegetation, including some remnant vegetation and ongoing maintenance.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
DCR05	Dixie Creek Reach 5 - Dixie Briggs Fromm to Gaslight Dr	783.3	The stream riparian area is characterized by prairie and has been previously restored with rock toe riffles, benches, and native vegetation on banks.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
DCR07	Dixie Creek Reach 7 - North of Edgewood to West of Harper Dr	2,079.9	The stream riparian area is characterized by prairie and has been previously restored with rock toe riffles, benches, and native vegetation on banks.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
DCR08	Dixie Creek Reach 8 - North of Edgewood to East of Harper Dr	726.4	The stream riparian area is characterized by prairie and has been previously restored with rock toe riffles, benches, and native vegetation on banks.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
LPCR01	Lawndale Park Creek Reach 1 - Behind 1499 to 1465 Spring Hill Dr	398.2	The stream riparian area is characterized by prairie and has been previously restored with rock toe riffles, benches, and native vegetation on banks.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
RCR01	Ratt Creek Reach 1 - From Randall Rd Wetland weir to Stonegate Rd	1,311.9	The stream riparian area is characterized by prairie and has been previously restored with rock toe riffles, benches, and native vegetation on banks.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
RCR05	Ratt Creek Reach 5 - Jaycee Field to High Hill Dam	236.2	The stream riparian area is characterized by a previously restored prairie, with restored stream banks and channel.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
SCTR01	Surrey Creak Tributary Reach 1 - Behind 1310 to 1210 Surrey Ln	656.2	The stream riparian area is characterized by previously restored prairie with bank shaping and rock check dams. The area shows signs of continued maintained.	Continue ongoing site maintenance.	Completed/ Critical Maintenance

ID #	Site Name Location	Acres or Linear Feet	Existing Condition	Management Measure Recommendation	Priority
SCR02	Surrey Creek Reach 2 - Surrey Ln Preserve to Surrey Ln	683.1	The stream riparian area is characterized by previously restored prairie with bank shaping and rock check dams.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
SCR03	Surrey Creek Reach 3 - Surrey Ln to confluence with Dixie Creek	1,183.6	The stream riparian area is characterized by previously restored prairie with rock toe grading and native vegetation.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
SOCR02	Souwanas Creek Reach 2 - Sandbloom Rd to Souwanas Trl	1,023.9	The stream riparian area is characterized by previously restored prairie with armored protection, cross veins and native vegetation.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
SOCR03	Souwanas Creek Reach 3 - Souwanas Trl to Algonquin Shores	671.1	The stream riparian area is characterized by previously restored banks and channel. The adjacent woodland features previously restored mesic oak woodland.	Continue ongoing site maintenance.	Completed/ Critical Maintenance
Other Management Measures - See Figure 7 for project location					
1	Randall Rd Wetland Complex	25.2	Randall Rd wetland complex	Continue long-term maintenance.	Completed/ Critical Maintenance
2	CarMax Natural Area	2.5	CarMax natural area	Continue long-term maintenance.	Completed/ Critical Maintenance
4	Huntington Dr N Agriculture Parcel	15.5	Arbor Hill Nature Preserve	Continue long-term maintenance.	Completed/ Critical Maintenance
5	Arbor Hills Nature Preserve	6.5	Falcon Ridge Nature Preserve	Continue long-term maintenance.	Completed/ Critical Maintenance
6	Falcon Ridge Nature Preserve	4.3	Lake Dr South Nature Preserve	Continue long-term maintenance.	Completed/ Critical Maintenance
8	Gaslight Park Bird & Butterfly Sanctuary	2.4	Gaslight Park Bird & Butterfly Sanctuary	Continue long-term maintenance.	Completed/ Critical Maintenance
9	Surrey Lane Preserve	6.2	Surrey Lane Preserve	Continue long-term maintenance.	Completed/ Critical Maintenance
11	WWTP Naturalization	3.8	WWTP naturalization	Continue long-term maintenance.	Completed/ Critical Maintenance
12	Yellowstone Woodland	2.5	Yellowstone woodland	Continue long-term maintenance.	Completed/ Critical Maintenance

VILLAGE OF ALGONQUIN

PUBLIC WORKS DEPARTMENT

– M E M O R A N D U M –

DATE: February 17, 2026

TO: Tim Schloneger, Village Manager
Committee of the Whole

FROM: Nadim Badran, Deputy Village Manager/Public Works Director;
Cliff Ganek, PE, Deputy Director of PW/Village Engineer

SUBJECT: Consider Resolutions Approving the 2023 Wastewater Master Plan and the 2024 Water System Master Plan

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Purpose and Background

Public Works maintains long-range master plans for the Village's wastewater and water systems to guide infrastructure planning, capital investment, and policy decisions. These plans serve as essential management tools to ensure that the Village:

- Continues to meet community service needs
- Complies with evolving regulatory requirements
- Supports future development in a cost-effective and sustainable manner

The Village updates these master plans approximately every ten years. The previous Wastewater Facility Plan was completed in 2014, and the previous Water Master Plan was completed in 2012. Given the significant development activity, system use, and capital investment since those dates, staff determined that updated plans were necessary to maintain an accurate, forward-looking planning framework.

System Condition and Key Assessments

Both master plans include a comprehensive assessment of existing infrastructure to identify system deficiencies, operational risks, and long-term maintenance needs.

Wastewater System

The wastewater treatment facility is designed for an average flow of 5.0 million gallons per day (MGD). While the plant is currently operating effectively, the projected build-out of the Village's corporate limits and growth areas will require additional treatment capacity. Portions of the collection system also include aging infrastructure that requires rehabilitation to reduce groundwater infiltration, improve reliability, and extend asset life.

Water System
The Village maintains approximately 180 miles of water main with an estimated total asset value of $580 million. The assessment identified water mains installed in the 1950s and 1960s that are approaching the end of their useful lives, as well as treatment plant and booster station equipment requiring rehabilitation or replacement.

Major Capital Improvements and Long-term Planning
The master plans identify major capital improvement projects needed over the next 10 to 20 years to maintain service levels and accommodate anticipated growth.

Wastewater Capital Projects
The Wastewater Master Plan outlines a phased approach to system improvements:

- Phase 7 Wastewater Treatment Plant Expansion
  - Estimated cost: $52 million in 2024 costs
  - Required to accommodate future flows at full Village build-out
- Lift Station and Force Main Capacity Improvements (Braewood – complete, Algonquin Shores – ongoing, and Grand Reserve – programmed)
  - Estimated cost: $7 million
- Sewer Capacity Improvements
  - Interceptor sewer upgrades to support growth
  - Estimated cost: $29 million

Water Capital Projects
The Water Master Plan identifies approximately $46 million in projects over the next 10 years, including:

- Neighborhood Water Main Improvements
  - Targeted replacements in areas such as the Janaks and Wecks Subdivisions, Neubert Elementary area, and Fox River crossing replacements
  - Improves fire protection, system reliability, and service continuity
- Facility Rehabilitation
  - Major equipment upgrades at Water Treatment Plants #1, #2, and #3
  - Rehabilitation of the Cary and Countryside Booster Stations (Complete)
- System Redundancy Improvements
  - Addition of secondary feeds to Pressure Zones 3 and 4 to improve system reliability during emergencies.

Budget and Funding Strategy
Implementation of the recommended improvements will require significant long-term capital investment. The master plans evaluate funding strategies intended to balance system needs with financial sustainability and ratepayer impacts.
Funding Sources Considered

- Connection fees to fund system expansions associated with new development
- User rates to support operations, maintenance, and debt service
- Low-interest loans through the Illinois EPA State Revolving Fund
- Potential use of General Obligation Bonds or grant funding for eligible projects

Financial Modeling and Rate Impacts

- Wastewater System
  - Recommended annual reinvestment of ~$2.73 million to maintain and rehabilitate the existing collection system
- Water System
  - Recommended annual reinvestment of ~$7.7 million to maintain a sustainable 75-year asset replacement cycle
- Wastewater and Water Systems
  - Recommended incremental connection fee increases of 25 percent in 2031 and 2041 to address projected capital shortfalls

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Staff recommends acceptance of the 2023 Wastewater Master Plan and the 2024 Water Master Plan as planning documents. While acceptance of these plans does not authorize funding of specific projects, it is critical in establishing comprehensive planning that will guide future budget development, capital improvement programming, and infrastructure decisions. Furthermore, these plans provide a strategic basis for aligning resource allocation, ensuring regulatory compliance, and promoting sustainable infrastructure management in response to anticipated development and service needs.

Staff recommends that the Committee of the Whole accept both Master Plans as separate Resolutions and forward the item to the Village Board for formal approval.

Summary Videos for each plan can be viewed by clicking the link below.

Wastewater Master Plan – Completed July 2024

Water Master Plan – Completed May 2025

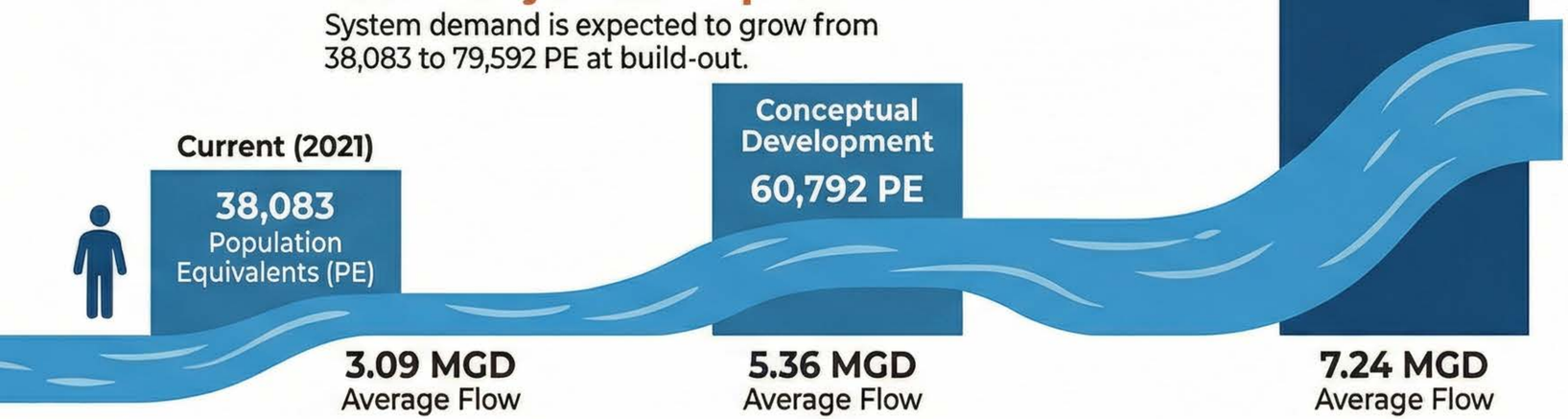
Village of Algonquin: Planning for Wastewater Growth & Reliability

With significant population growth projected, the Village of Algonquin operates a wastewater system serving over 38,000 residents. The 2023 Facility Plan update ensures the collection system and treatment plant can handle future demand.

THE GROWTH CHALLENGE

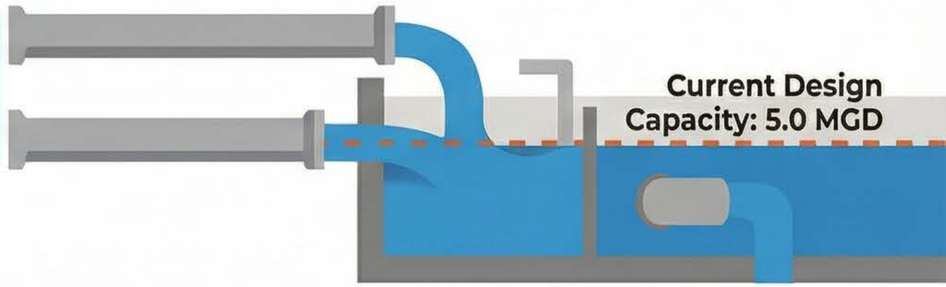
109% Projected Population Increase

System demand is expected to grow from 38,083 to 79,592 PE at build-out.



Future Demand Exceeds Current Capacity

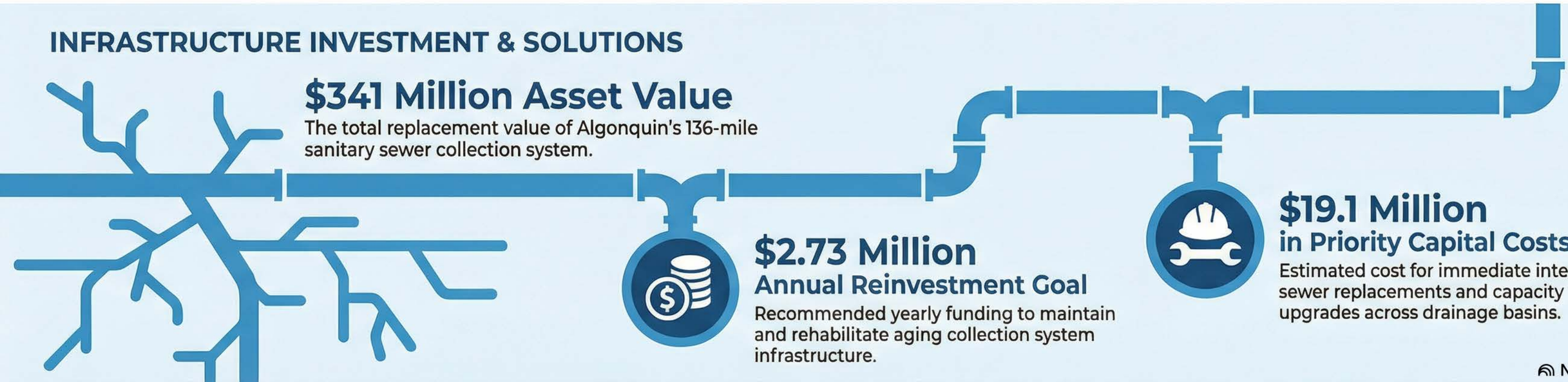
Ultimate flows of 7.24 MGD will far surpass the plant's current 5.0 MGD design.



Expansion Threshold Approaching

Flows reaching 80% capacity may trigger mandatory IEPA hydraulic expansion measures.

INFRASTRUCTURE INVESTMENT & SOLUTIONS



$341 Million Asset Value

The total replacement value of Algonquin's 136-mile sanitary sewer collection system.

$2.73 Million
Annual Reinvestment Goal

Recommended yearly funding to maintain and rehabilitate aging collection system infrastructure.

$19.1 Million
in Priority Capital Costs

Estimated cost for immediate interceptor sewer replacements and capacity upgrades across drainage basins.

NotebookLM

Village of Algonquin: 2024 Water Master Plan Roadmap

Current scale of water infrastructure and financial roadmap for sustainable growth and aging systems

Current System Footprint & Demand

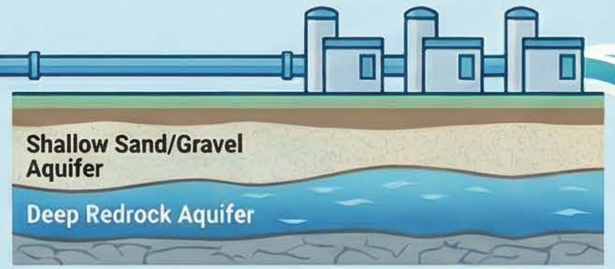
180 Miles

Miles of Distribution Infrastructure

Includes **2,242** valves and **2,435** fire hydrants.

Dual-Aquifer Water Supply

Three treatment facilities extract water from both shallow sand/gravel and deep bedrock aquifers.



2.5 Million Gallons Pumped Daily

Nine groundwater wells supply the system, exceeding the average daily demand of 2.0 million gallons.

Residential	1,532,000 Gallons Per Day
Non-Residential	453,000 Gallons Per Day
Total Average Demand	~2,000,000 Gallons Per Day

Strategic Planning & Financial Roadmap

Proactive Growth Management

Utilizing data-driven hydraulic modeling to address a population that has grown nearly **160%** since 1990.

$7.7 Million

Annual Reinvestment Goal

Targeting a sustainable replacement cycle for the distribution system based on a 75-year lifespan.

$37 Million

in Priority Capital Costs

Designated funding required for critical infrastructure projects over the next 10 years.

NotebookLM

VILLAGE OF ALGONQUIN

PUBLIC WORKS DEPARTMENT

– M E M O R A N D U M –

DATE: February 17, 2026

TO: Tim Schloneger, Village Manager
Committee of the Whole

FROM: Cliff Ganek, PE, Deputy Director of PW/Village Engineer

SUBJECT: Consider a Resolution Approving the 2025 Village-wide Pavement Assessment Report as a Guide for Pavement Improvement Planning

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Progress and Background

In July 2025, the Village engaged Infrastructure Management Services (IMS) to complete a comprehensive condition assessment of approximately 137 centerline miles of Village roadways. This effort supports the Village's ongoing, data-driven approach to managing roadway infrastructure.

As a result of consistent investment and planned rehabilitation, the overall condition of the Village's roadway network has improved from an average Pavement Condition Index (PCI) of 51 in 2020 to 61 in 2025, demonstrating that the current roadway program is producing measurable results. Additionally, the backlog (percentage of streets with PCIs under 40) has reduced from 48% to 37%, respectively.

Data Collection Overview

IMS used a specialized survey vehicle equipped with cameras and laser-based sensors to evaluate pavement condition and roadway smoothness. The data was analyzed using nationally recognized standards to assign a PCI score to each street segment, with scores ranging from 0 (worst) to 100 (best). Subsurface assessments were also performed to determine the structural condition of the base and subbase by using a Fast-Falling Weight Deflectometer (FFWD), providing a more comprehensive pavement condition score.

Current Network Condition

The 2025 results show the Village's roadway system is generally in fair condition, with an average PCI of 61. Best management practices recommend an overall PCI score of 70, which would be considered a well-managed roadway network.

- Approximately 49% of Village roads are in good to excellent condition, making them ideal candidates for lower-cost preventive maintenance.
- Approximately 37% of the network falls into poor or very poor condition, representing the Village's remaining rehabilitation and reconstruction backlog.

Funding Strategy and Outlook

The report evaluates how different funding levels affect future roadway conditions. The recommended annual roadway investment of **$6.5 million** reflects construction costs only and does not include engineering services, retaining wall improvements, or preventive maintenance such as Reclamite. Historically, roadway construction has accounted for approximately 70% of total Street Improvement Fund expenditures, meaning an overall annual budget of approximately **$9.3 million** is needed to support the full roadway program. Continuing the annual investment into the roadway network is expected to

- Increase the network average PCI to 70 by FY 2030/31.
    - Target PCI of 70 meets best pavement management practices.
- Reduce the backlog from 37% to under 20% (streets in poor/very poor condition).
- Shift the program from reactive repairs to proactive, cost-effective maintenance.

Recommendation

Adopting the 2025 Pavement Management Report establishes a clear, data-driven framework for the Village's Capital Improvement Plan, confirms that current funding levels are effective, and supports continued improvement of the Village's roadway network. Adoption of this report does not approve specific construction projects or costs. Rather, it accepts the data, analysis, and long-term strategies used by Staff to prioritize roadway improvements cost-effectively.

Staff requests that the Committee of the Whole forward the 2025 Pavement Management Report to the Village Board for approval and adoption as a guidance document for future roadway maintenance and rehabilitation planning.

Links and Attachments

2025 Pavement Assessment Report - Summary Video

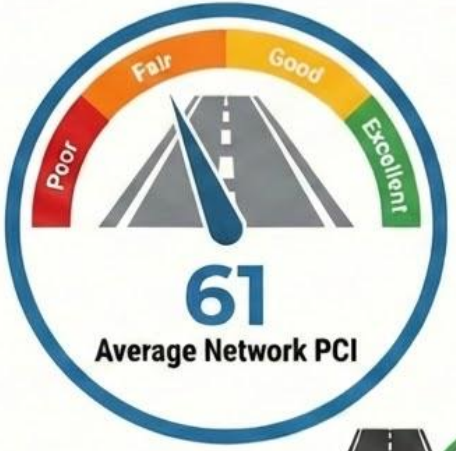
Pavement Assessment Snapshot

INFORM - Interactive PCI Map

Algonquin Roadway Health: 2025 Status & 2030 Vision

Based on a 2025 survey of 137 miles of Village-maintained roads, this overview highlights current Pavement Condition Index (PCI) scores and illustrates how different funding levels will impact road quality over the next five years.

2025 CURRENT NETWORK HEALTH



37%

Current Maintenance Backlog

Over one-third of the network requires extensive rehabilitation or full reconstruction.

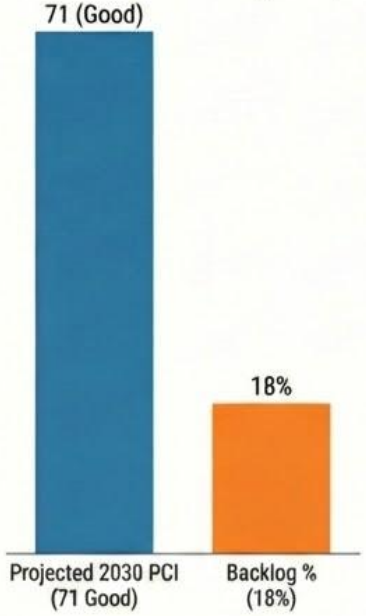
35%

35% of Roads Rated "Excellent"

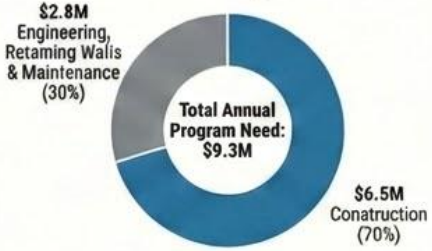
These segments are ideal candidates for cost-effective preventive maintenance to extend their lifespan.

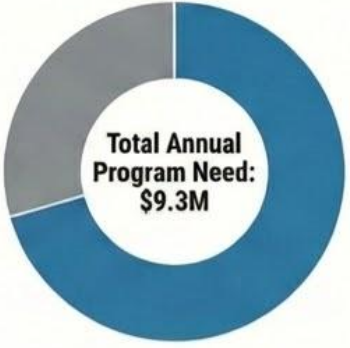
2030 INVESTMENT OUTLOOK

$6.5M Construction Budget Impact



$9.3M Total Program Need





FUNDING STRATEGY & NARRATIVE

The recommended $6.5M annual investment covers construction only. Historically, construction represents 70% of expenditures; an overall budget of $9.3M is required to support engineering, retaining walls, and preventive maintenance.

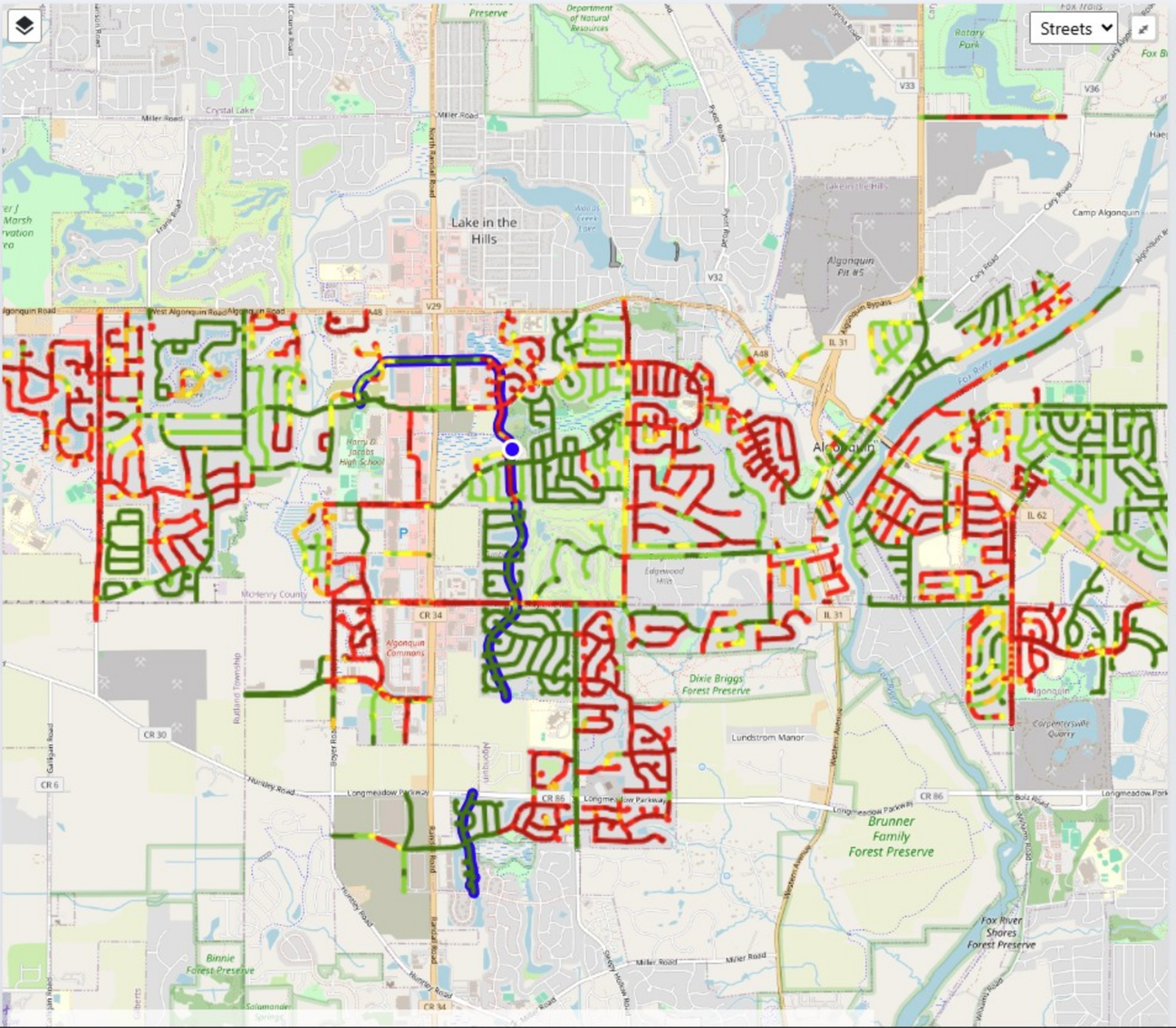
NotebookLM

INFORM

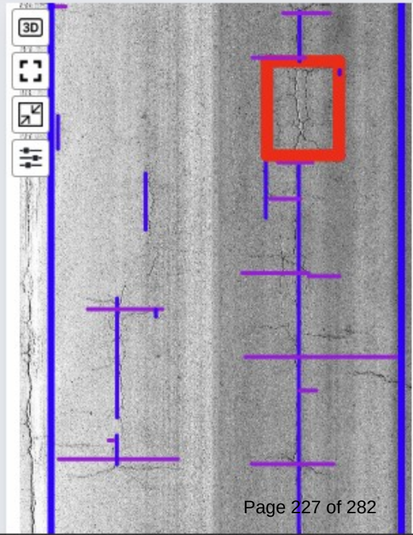
AlgonquinIL

Collection Date: Jul 16 2025

2025 | * Major Collector | * Stonegate Rd | * Dawson Ln | * Huntington Dr N | * 234-23



SegmentID	GISID	Road	Road ID	SequenceID	From Stree
234-23	14710	Stonegate Rd	6250	24	Dawson
234-23	14710	Stonegate Rd	6250	24	Dawson
234-23	14710	Stonegate Rd	6250	24	Dawson
234-23	14710	Stonegate Rd	6250	24	Dawson
234-23	14710	Stonegate Rd	6250	24	Dawson
234-21	14700	Stonegate Rd	6250	23	Harnish
234-20	14690	Stonegate Rd	6250	22	Sawmill
234-20	14690	Stonegate Rd	6250	22	Sawmill
234-20	14690	Stonegate Rd	6250	22	Sawmill
234-20	14690	Stonegate Rd	6250	22	Sawmill
234-20	14690	Stonegate Rd	6250	22	Sawmill
234-16	14680	Stonegate Rd	6250	21	Tunbrid



VILLAGE OF ALGONQUIN

GENERAL SERVICES ADMINISTRATION

– M E M O R A N D U M –

DATE: February 12, 2026

TO: Tim Schloneger, Village Manager

FROM: Michael Kumbera, Deputy Village Manager/Chief Financial Officer

SUBJECT: *FY 26/27 - FY 30/31 Capital Improvement Plan*

The FY27–FY31 Capital Improvement Plan (CIP) outlines approximately $145.2 million in proposed infrastructure investment over the next five fiscal years. The plan reflects updated asset condition assessments, departmental priorities, project readiness, and long-range financial planning.

Key Investment Areas

- **Street Improvement Program – $63.0 million**
  - Pavement management, subdivision reconstruction, Old Town Algonquin enhancements, and multi-modal connectivity improvements.
- **Water & Sewer Infrastructure – $45.7 million**
  - Treatment facility, lift station, storage, and distribution system upgrades to maintain compliance, reliability, and capacity.
- **Parks & Recreation – $18.6 million**
  - Modernization of neighborhood parks, playgrounds, courts, and recreational amenities.
- **Natural Areas & Drainage – $10.0 million**
  - Stormwater management and environmental restoration initiatives.
- **Motor Fuel Tax Program – $7.9 million**
  - Annual resurfacing and concrete replacement programs.

Overall, the FY27–FY31 CIP reflects an approximate $26 million increase over the prior five-year plan, primarily driven by the expanded Street Improvement Program and updated cost estimates.

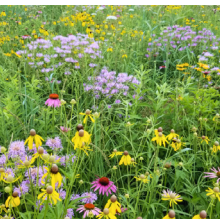
Annual capital expenditures are projected to range between approximately $25 million and $35 million, reflecting project phasing and funding coordination. **Based on current projections, the Village anticipates issuing debt in FY31 to support outer-year capital investments, subject to final project timing, revenue performance, and Village Board direction.** The CIP will continue to be reviewed annually and adjusted based on revenue trends, reserves, debt capacity, and grant opportunities to ensure long-term fiscal sustainability.

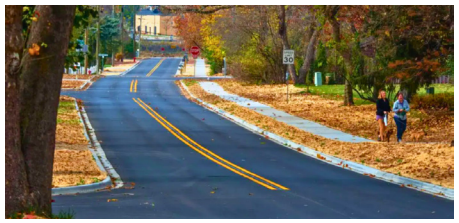
Recommendation
Staff recommends acceptance of the FY27–FY31 Capital Improvement Plan as presented. Please contact the appropriate staff with any questions or for additional details regarding specific projects or funding components.

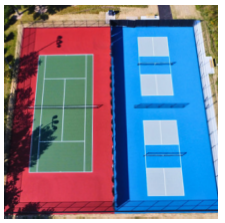
C: Nadim Badran, Public Works Director
Matthew Bajor, Assistant to the Village Manager
Cliff Ganek, Village Engineer

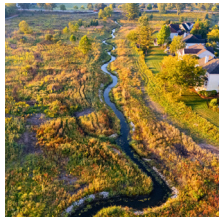
2026 - 2031
VILLAGE OF ALGONQUIN
ADOPTED FIVE-YEAR
CAPITAL IMPROVEMENT
PLAN

ADOPTED MARCH 3, 2026









Introduction

The Five-Year Capital Improvement Plan (CIP) serves as a strategic guide for the planning, funding, and execution of major capital projects within the Village of Algonquin. The CIP outlines the necessary infrastructure improvements, facility enhancements, and equipment acquisitions to support the community's growth, maintain public assets, and enhance residents' quality of life.

The CIP is a multi-year planning document that identifies and prioritizes capital investments, ensuring a proactive and fiscally responsible approach to municipal development. It is reviewed and updated annually to reflect evolving needs, funding availability, and emerging priorities.

Purpose of the Capital Improvement Plan

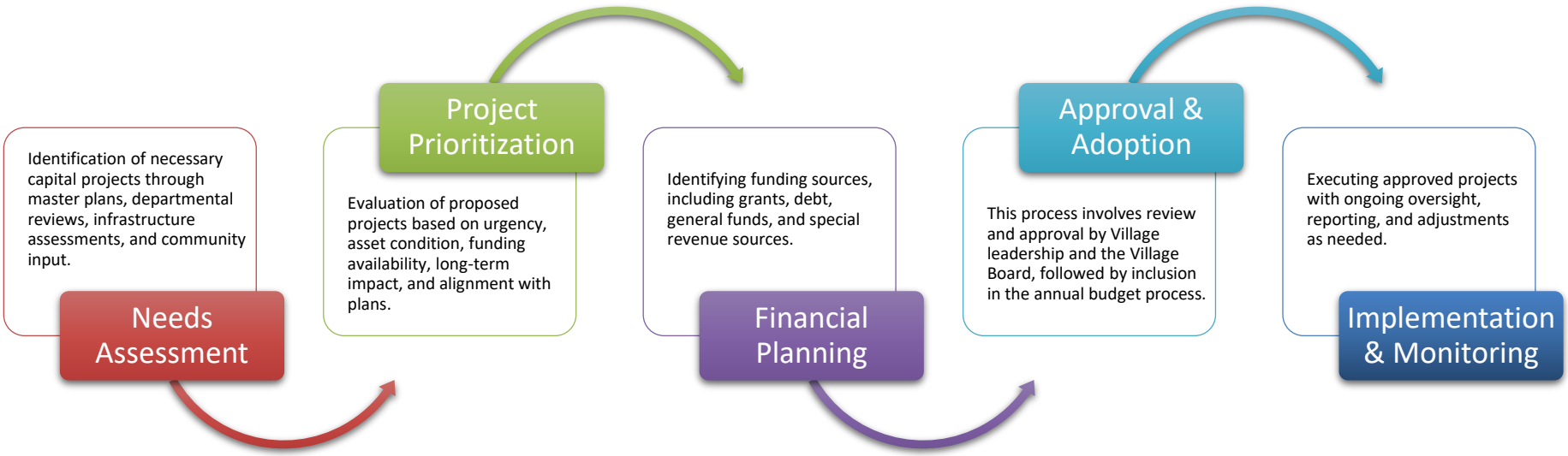
The primary objectives of this plan include:

1. **Strategic Planning**: Establishing a structured framework for evaluating and prioritizing capital projects.
2. **Fiscal Responsibility**: Ensuring long-term financial sustainability through responsible budgeting and funding strategies.
3. **Infrastructure Maintenance & Enhancement**: Maintaining and improving essential village assets, including roads, utilities, parks, and public facilities.
4. **Service Delivery & Public Safety**: Supporting high-quality village services and enhancing community safety.
5. **Community Growth & Economic Development**: Investing in infrastructure that supports growth, attracts businesses, and enhances the local economy.

Overview of the Planning Process

The development of the CIP involves a collaborative and data-driven approach, incorporating input from elected officials, municipal departments, stakeholders, and residents.

The Village of Algonquin Five-Year CIP reflects the community's commitment to maintaining a high standard of public services while ensuring efficient use of financial resources. Through thoughtful planning and investment, the CIP helps shape a sustainable and well-prepared future for Algonquin and its residents.



Summary of Capital Needs and Funding Sources

The Village of Algonquin's Five-Year CIP outlines key infrastructure and facility investments to support long-term growth, maintain public assets, and enhance municipal services. The capital needs addressed in this plan reflect strategic priorities, regulatory requirements, and resident input. The Village of Algonquin's Five-Year CIP reflects a proactive approach to addressing infrastructure challenges while ensuring fiscal responsibility and efficient service delivery.

	Fund	Description	Funding Sources
	Motor Fuel Tax (MFT) Fund	Supports road maintenance and improvements, including the annual concrete replacement and repair program. A portion of these funds is allocated to capital improvement projects.	State motor fuel tax allocations, transportation renewal programs
	Street Improvement Fund	Funds major roadway improvements, infrastructure maintenance, and pedestrian access enhancements. Covers engineering services, land acquisition, and capital projects.	Sales taxes, utility taxes, grants, transfers
	Park Improvement Fund	Supports capital improvements in parks and open spaces, including land acquisition, reconstruction, and facility upgrades.	Sales taxes, video gaming taxes, grants, transfers
	Water & Sewer Improvement and Construction Fund	Funds major upgrades and expansions of water and sewer infrastructure, including treatment plants and distribution systems. Focuses on system reliability and expansion.	Connection fees, user fees, infrastructure fees, operating fund transfers
	Natural Area & Drainage Fund	Supports restoration and drainage projects, covering capital improvements, engineering, and maintenance for environmental conservation and stormwater management.	Sales taxes, donations, grants, transfers

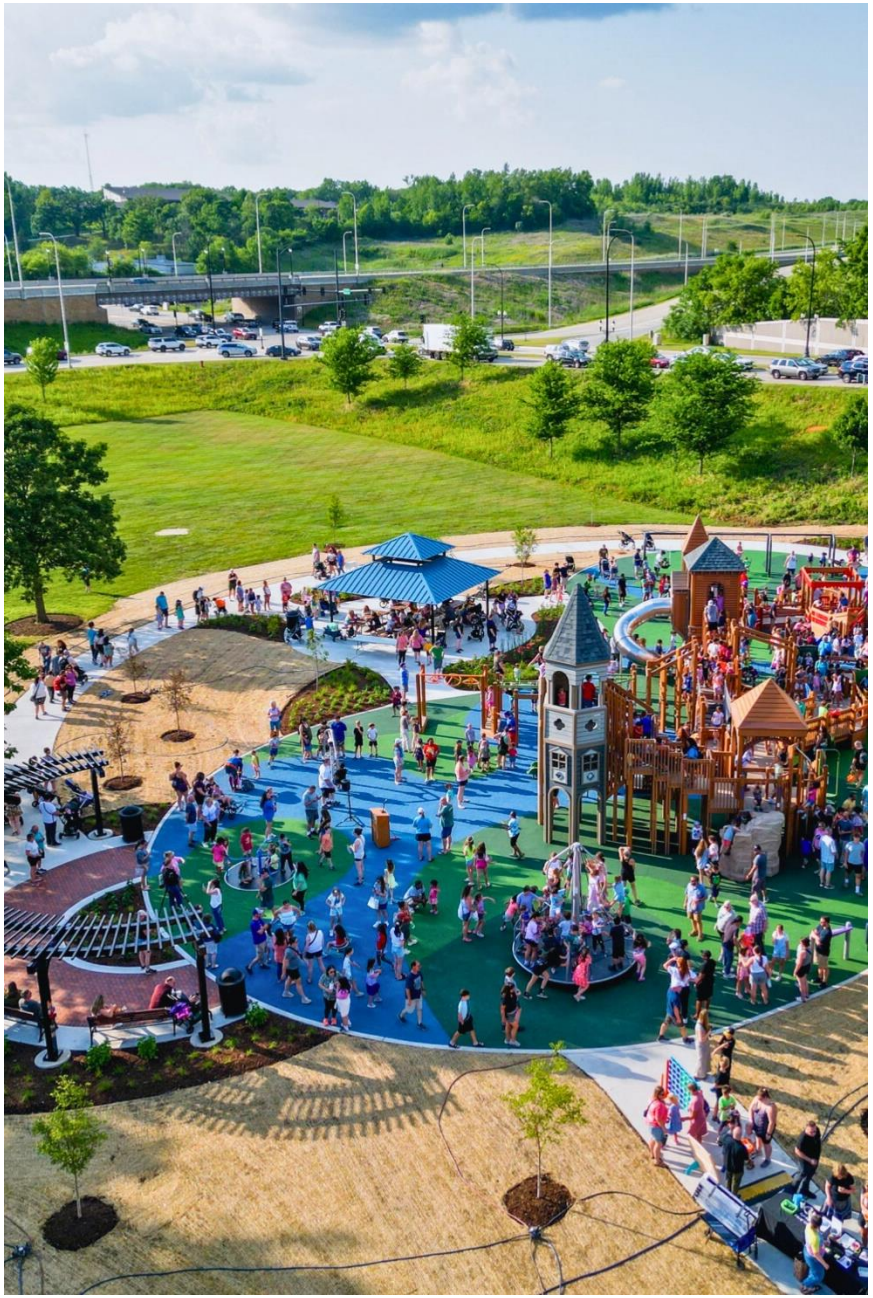
Annual Review & Adjustments

The CIP is intended to be a flexible document that adapts to changing circumstances, such as economic conditions, funding availability, or unforeseen infrastructure failures. Each year, the Village of Algonquin will:

- Evaluate project priorities based on updated needs and funding sources.
- Incorporate new projects as needed to address emerging issues.
- Adjust timelines and budgets to reflect cost changes or delays.
- Engage with the community to ensure public input is considered in decision-making.

Conclusion

The Village of Algonquin's Five-Year CIP is a strategic, transparent, and accountable infrastructure investment and community development roadmap. By implementing effective oversight, sound financial management, and adaptive planning, the village can ensure the successful delivery of essential projects that enhance public services, promote sustainability, and improve residents' overall quality of life. The CIP remains a dynamic tool that aligns with the village's long-term goals and evolving needs through ongoing monitoring and adjustments.



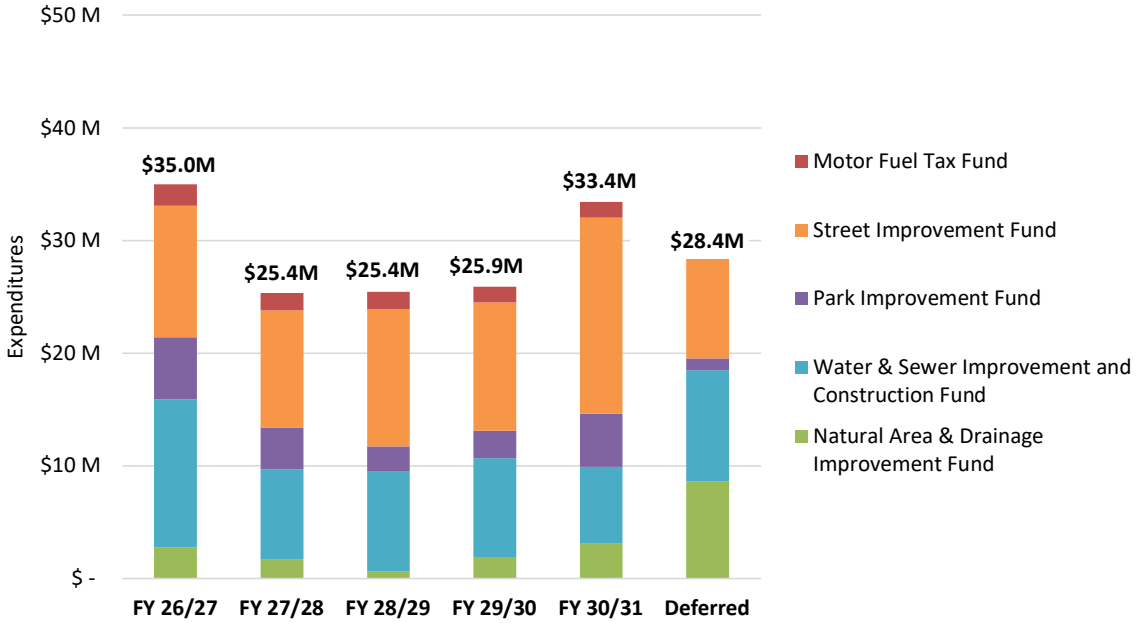
Five-Year Summary

Capital Improvement Plan

Over the next five years, the Village anticipates investing approximately $150 million in capital improvements. The majority of planned spending is focused on Street Improvements and Water & Sewer Improvements, with remaining investments allocated across other capital funds. Project selection reflects strategic priorities such as infrastructure condition, urgency, long-term impact, alignment with adopted plans, and the availability of funding. Deferred projects, while not currently included in the five-year capital plan, reflect recognized needs within the same planning horizon. These projects remain under consideration and may be advanced if priorities shift, external conditions evolve, or additional funding becomes available.

	FY 26/27 Budget	FY 27/28 Projected	FY 28/29 Projected	FY 29/30 Projected	FY 30/31 Projected	5-Year Trend
Expenditures						
Motor Fuel Tax Fund	$ 1,900,000	$ 1,600,000	$ 1,550,000	$ 1,400,000	$ 1,400,000	
Street Improvement Fund	11,664,000	10,419,500	12,154,500	11,387,000	17,414,500	
Park Improvement Fund	5,503,200	3,718,200	2,253,200	2,423,200	4,723,200	
Water & Sewer Improvement and Construction Fund	13,180,000	8,000,000	8,850,000	8,845,000	6,805,000	
Natural Area & Drainage Improvement Fund	2,745,000	1,682,000	655,000	1,855,000	3,105,000	
Total Expenditures	**$ 34,992,200**	**$ 25,419,700**	**$ 25,462,700**	**$ 25,910,200**	**$ 33,447,700**	
Total Cumulative Capital Improvement Plan	**$ 34,992,200**	**$ 60,411,900**	**$ 85,874,600**	**$ 111,784,800**	**$ 145,232,500**	

Five-Year Capital Improvement Plan Expenditure Summary

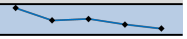
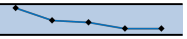


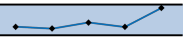
Five-Year Spending Totals by Fund

Fund	Amount
Motor Fuel Tax Fund	$ 7,850,000
Street Improvement Fund	63,039,500
Park Improvement Fund	18,621,000
Water & Sewer Improvement Fund	45,680,000
Natural Area Improvement Fund	10,042,000
	$ 145,232,500

Five-Year Spending Percentage by Fund

Fund	Percentage
Motor Fuel Tax Fund	5.4%
Street Improvement Fund	43.4%
Park Improvement Fund	12.8%
Water & Sewer Improvement Fund	31.5%
Natural Area Improvement Fund	6.9%
	100.0%

	FY 26/27 Budget	FY 27/28 Projected	FY 28/29 Projected	FY 29/30 Projected	FY 30/31 Projected	5-Year Trend
Starting Cash Position	**$ 1,255,865**	**$ 755,865**	**$ 546,865**	**$ 388,865**	**$ 376,865**	
Revenues						
Current Period	$ 1,400,000	$ 1,391,000	$ 1,392,000	$ 1,388,000	$ 1,385,000	
Transfers In	-	-	-	-	-	
Total Revenues	**$ 1,400,000**	**$ 1,391,000**	**$ 1,392,000**	**$ 1,388,000**	**$ 1,385,000**	
Expenditures						
Concrete Replacement Program	$ 400,000	$ 350,000	$ 400,000	$ 300,000	$ 300,000	
Pavement Management Program[1]						
Square Barn Road	1,500,000	-	-	-	-	
Gaslight Terrace Subdivision	-	1,250,000	-	-	-	
Willoughby Farms South Subdivision	-	-	1,150,000	-	-	
Algonquin Lakes Subdivision	-	-	-	1,100,000	-	
Algonquin Lakes Subdivision	-	-	-	-	1,100,000	
Total Expenditures	**$ 1,900,000**	**$ 1,600,000**	**$ 1,550,000**	**$ 1,400,000**	**$ 1,400,000**	
Ending Cash Position	**$ 755,865**	**$ 546,865**	**$ 388,865**	**$ 376,865**	**$ 361,865**	

	FY 26/27 Budget	FY 27/28 Projected	FY 28/29 Projected	FY 29/30 Projected	FY 30/31 Projected	5-Year Trend
Starting Cash Position	**$ 2,061,029**	**$ 997,029**	**$ 207,529**	**$ 853,029**	**$ 11,029**	
Revenues						
Current Period[1,2]	$ 7,600,000	$ 6,530,000	$ 6,190,000	$ 6,620,000	$ 6,440,000	
Grants[3,4,5,6,7,8]	1,550,000	-	2,600,000	-	3,000,000	
TIF Reimbursement	1,450,000	1,600,000	1,760,000	1,925,000	2,000,000	
Bond Proceeds[9]	-	-	-	-	7,000,000	
Transfers In	-	1,500,000	2,250,000	2,000,000	2,000,000	
Total Revenues	**$ 10,600,000**	**$ 9,630,000**	**$ 12,800,000**	**$ 10,545,000**	**$ 20,440,000**	
Expenditures						
Algonquin Lakes Subdivision						
Pedestrian Improvements	$ 28,000	$ 135,000	$ -	$ -	$ -	
Sections 2 & 3 Improvements	-	-	225,000	-	1,200,000	
Alta Vista Subdivision	-	-	-	-	125,000	
Arbor Hills Subdivision	215,000	2,575,000	60,000	-	-	
Boyer Road (County Line to Longmeadow)	2,900,000	15,000	-	-	-	
Brittany Hills Subdivision	44,000	-	-	-	-	
Clarendale Multi-Use Path	412,000	-	-	-	-	
County Line Road (Boyer to Stonegate)	95,000	2,740,000	1,090,000	-	-	
Downtown Streetscape						
Illinois Route 62 to Edward Street	100,000	75,000	3,350,000	10,000	-	
Main Street & Harrison Street Bike Path & Roundabout	-	-	1,400,000	-	-	
Secondary & Tertiary Street Resurfacing	-	-	150,000	1,500,000	-	
Gaslight Terrace Subdivision						
Section 1	155,000	-	-	-	-	
South	-	-	100,000	80,000	-	
Huntington Drive (Hanson to Circle)	160,000	135,000	2,600,000	-	-	
Illinois Route 62 Bridge Deck	50,000	-	-	-	-	
Janeks Subdivision	130,000	200,000	1,415,000	100,000	1,625,000	
Main Street Building Demolition	325,000	-	-	-	-	
Manchester Lakes Subdivision						
Section 1	-	175,000	200,000	3,820,000	-	
Section 2	-	-	140,000	140,000	3,550,000	
Prestwicke Subdivision & Bunker Hill Court	-	-	150,000	140,000	2,450,000	
Public Works Facility Yard Expansion	2,700,000	30,000	-	-	-	

Retaining Wall Maintenance	100,000	325,000	100,000	100,000	-
Spella Park Retaining Wall	5,000	-	-	-	-
Riverwoods Subdivision	-	150,000	200,000	1,910,000	-
Sandbloom Road	210,000	150,000	10,000	-	5,480,000
Souwanas Trail & Schuett Street	-	-	-	850,000	-
Square Barn Road (Illinois Route 62 to Huntley)	220,000	2,535,000	-	-	-
Wecks Subdivision	75,000	150,000	-	200,000	2,190,000
Willoughby Farms South Subdivision (Sections 1 & 2)	-	180,000	170,000	1,650,000	-
Willoughby Farms Subdivision					
Section 2	50,000	-	-	-	-
Section 3	2,900,000	55,000	-	-	-
Other Expenses	253,000	257,500	257,500	350,000	257,500
Transfers Out[10]	537,000	537,000	537,000	537,000	537,000
Total Expenditures	**$ 11,664,000**	**$ 10,419,500**	**$ 12,154,500**	**$ 11,387,000**	**$ 17,414,500**
Ending Cash Position	**$ 997,029**	**$ 207,529**	**$ 853,029**	**$ 11,029**	**$ 3,036,529**

Notes:

1 - McHenry County Division of Transportation (McDOT) reimbursement of $1,620,500 for Public Works Facility Yard Expansion project.
2 - Development agreement of $440,000 for Westview Crossing improvement on Square Barn Road project.
3 - Surface Transportation Program (STP) Grant of $1,450,000 for Boyer Road project.
4 - Department of Commerce and Economic Opportunity (DCEO) Grant of $100,000 for Broadsmore & Stonegate project.
5 - STP Grant of $1,500,000 for North Main Street project.
6 - Illinois Transportation Enhancement Program (ITEP) Grant of $1,100,000 for Huntington Drive project.
7 - ITEP Grant of $1,200,000 for Sandbloom Road project.
8 - STP $1,800,000 for Sandbloom Road project.
9 - Bond Issuance for Janaks Subdivision (Phase 1), Manchester Lakes Subdivision (Section 2), and Prestwicke Subdivision & Bunker Hill Court projects.
10 - Transfer to Debt Service for Bond Series 2024.

	FY 26/27 Budget	FY 27/28 Projected	FY 28/29 Projected	FY 29/30 Projected	FY 30/31 Projected	5-Year Trend
Starting Cash Position	**$ 2,133,619**	**$ 848,419**	**$ 260,219**	**$ 67,019**	**$ 28,819**	
Revenues						
Current Period	$ 1,518,000	$ 1,530,000	$ 1,560,000	$ 1,585,000	$ 1,620,000	
Grants[1,2]	200,000	600,000	-	-	-	
Bond Proceeds[3]	-	-	-	-	3,500,000	
Transfers In	2,500,000	1,000,000	500,000	800,000	-	
Total Revenues	**$ 4,218,000**	**$ 3,130,000**	**$ 2,060,000**	**$ 2,385,000**	**$ 5,120,000**	
Expenditures						
Algonquin Lakes Park Reconstruction	$ -	$ -	$ 30,000	$ 350,000	$ 3,500,000	
Cornish Park Boat Pad	-	75,000	-	-	-	
Court Resurfacing Program	-	-	50,000	100,000	50,000	
High Hill Park Reconstruction	180,000	1,625,000	-	-	-	
Playground Replacement Program	-	-	825,000	800,000	-	
Presidential & Towne Park Dumpster Enclosures & Storage	125,000	-	-	-	-	
Riverfront Park Basketball Court Reconstruction	-	25,000	175,000	-	-	
Willoughby Farms Park Reconstruction	3,925,000	820,000	-	-	-	
Other Expenses	100,000	-	-	-	-	
Transfers Out[4]	1,173,200	1,173,200	1,173,200	1,173,200	1,173,200	
Total Expenditures	**$ 5,503,200**	**$ 3,718,200**	**$ 2,253,200**	**$ 2,423,200**	**$ 4,723,200**	
Ending Cash Position	**$ 848,419**	**$ 260,219**	**$ 67,019**	**$ 28,819**	**$ 425,619**	

Notes:

1 - Department of Commerce and Economic Opportunity (DCEO) Grant of $200,000 for James B. Wood Park project.

2 - Open Space and Land Acquisition and Development (OSLAD) Grant of $600,000 for Willoughby Farms Park project.

3 - Bond Issuance for Algonquin Lakes Park project.

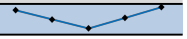
4 - Transfer to Debt Service for Bond Series 2024.

	FY 26/27 Budget	FY 27/28 Projected	FY 28/29 Projected	FY 29/30 Projected	FY 30/31 Projected	5-Year Trend
Starting Cash Position	**$ 6,698,574**	**$ 2,813,574**	**$ 54,574**	**$ 174,574**	**$ 19,574**	
Revenues						
Current Period[1]	$ 2,845,000	$ 1,041,000	$ 1,020,000	$ 1,240,000	$ 975,000	
IEPA Low Interest Loan	-	-	-	-	4,500,000	
Transfers In[2]	6,450,000	4,200,000	7,950,000	7,450,000	1,450,000	
Total Revenues	**$ 9,295,000**	**$ 5,241,000**	**$ 8,970,000**	**$ 8,690,000**	**$ 6,925,000**	
Expenditures						
Algonquin Shores Lift Station & Forcemain	$ 610,000	$ -	$ -	$ -	$ -	
Boyer Road (County Line to Longmeadow)	1,960,000	-	-	-	-	
Grand Reserve Lift Station	-	-	-	-	65,000	
High Hill Sanitary Sewer Relocation	2,325,000	10,000	2,940,000	-	-	
Huntington to Countryside Watermain (West)	-	-	-	175,000	200,000	
Janeks Subdivision	160,000	465,000	3,190,000	20,000	2,685,000	
Lowe Lift Station	-	-	-	-	45,000	
Neubert Water Main Replacement	35,000	1,670,000	60,000	-	-	
Public Works Facility Yard Expansion	2,700,000	-	-	-	-	
River Road to La Fox Drive Water Main River Crossing	-	90,000	955,000	-	-	
Riverwoods Subdivision	-	-	-	-	150,000	
Secondary Water Main Feed to Zone 3	-	-	60,000	120,000	2,450,000	
Souwanas Trail & Schuett Street	-	-	-	850,000	-	
Waste Water Treatment Facility						
Biosolids Handling	2,910,000	-	-	-	-	
Generator	-	710,000	-	-	-	
Water Main Replacement Program	95,000	975,000	1,030,000	-	925,000	
Water Tower Repair & Maintenance Program	-	800,000	-	800,000	-	
Lakewood Water Tower	1,100,000	-	-	-	-	
Water Treatment Plant #1	-	-	250,000	3,590,000	-	
Wecks Subdivision	120,000	200,000	100,000	2,825,000	20,000	
Willoughby Farms Subdivision						
Section 3	*730,000*	-	-	-	-	
Woods Creek Force Main Replacement	225,000	2,615,000	-	-	-	
Other Expenses	210,000	465,000	265,000	465,000	265,000	
Total Expenditures	**$ 13,180,000**	**$ 8,000,000**	**$ 8,850,000**	**$ 8,845,000**	**$ 6,805,000**	
Ending Cash Position	**$ 2,813,574**	**$ 54,574**	**$ 174,574**	**$ 19,574**	**$ 139,574**	

Notes:

1 - McHenry County Division of Transportation (McDOT) reimbursement cost-share for Public Works Facility Yard Expansion project.

2 - Transfers In include infrastructure fee revenue and the use of existing fund balance.

	FY 26/27 Budget	FY 27/28 Projected	FY 28/29 Projected	FY 29/30 Projected	FY 30/31 Projected	5-Year Trend
Starting Cash Position	**$ 2,046,888**	**$ 296,888**	**$ 124,888**	**$ 509,888**	**$ 4,888**	
Revenues						
Current Period	$ 995,000	$ 1,010,000	$ 1,040,000	$ 1,100,000	$ 1,080,000	
Grants[1]	-	300,000	-	-	-	
Bond Proceeds	-	-	-	-	2,500,000	
Transfers In	-	200,000	-	250,000	-	
Total Revenues	**$ 995,000**	**$ 1,510,000**	**$ 1,040,000**	**$ 1,350,000**	**$ 3,580,000**	
Expenditures						
Algonquin Lakes East Drainage (Phase 1)	$ -	$ -	$ 250,000	$ 30,000	$ 2,750,000	
Coves Detention Basin	$ 125,000	$ -	$ -	$ -	$ -	
Natural Area Maintenance Program	260,000	155,000	140,000	90,000	90,000	
Ratt Creek Creek Restoration[3]						
Reach 1	-	-	160,000	1,630,000	-	
Reach 2	-	-	-	-	160,000	
Surrey Lane Creek Reach 2	10,000	815,000	-	-	-	
Terrace Hill & Lakes Detention Basin	-	20,000	-	-	-	
Woods Creek Restoration[3]						
Headwaters	655,000	162,000	-	-	-	
Reach 8	1,590,000	425,000	-	-	-	
Other Expenses	105,000	105,000	105,000	105,000	105,000	
Total Expenditures	**$ 2,745,000**	**$ 1,682,000**	**$ 655,000**	**$ 1,855,000**	**$ 3,105,000**	
Ending Cash Position	**$ 296,888**	**$ 124,888**	**$ 509,888**	**$ 4,888**	**$ 479,888**	

Notes:

1 - Department of Commerce and Economic Opportunity (DCEO) Grant of $300,000 for Woods Creek Headwaters project.

2 - Bond Issuance for Algonquin Lakes East Drainage project.

Deferred Projects

Deferred projects, while not currently included in the five-year capital plan, reflect recognized needs within the same planning horizon. These projects remain under consideration and may be advanced if priorities shift, external conditions evolve, or additional funding becomes available.

		Project Cost Estimate
Street Improvement Fund		
Alta Vista Subdivision	$	125,000
North River Road		5,500,000
Riverwoods Subdivision		3,200,000
Total Street Improvement Fund Deferred	**$**	**8,825,000**
Park Improvement Fund		
Broadsmore Park Playground	$	800,000
Snapper Park Playground Resurfacing		200,000
Stoneybrook Park Court Resurfacing		50,000
Total Park Improvement Fund Deferred	**$**	**1,050,000**
Water & Sewer Improvement and Construction Fund		
Grand Reserve Lift Station Rehabiliation	$	900,000
Huntington to Countryside Watermain (East)		3,500,000
Lowe Lift Station Rehabilitation		500,000
Riverwoods Water Main Replacement		5,000,000
Total Water & Sewer Improvement Fund Deferred	**$**	**9,900,000**
Natural Area & Drainage Improvement Fund		
Ratt Creek Reach 2 Creek Restoration	$	2,000,000
Ratt Creek Reach 3 Restoration		1,750,000
Windy Knoll, Oakview & Twisted Oak Ravines		4,000,000
Woods Creek Reach 14 Restoration		850,000
Total Water & Sewer Improvement Fund Deferred	**$**	**8,600,000**
Total Deferred Projects	**$**	**28,375,000**

VILLAGE OF ALGONQUIN

PUBLIC WORKS DEPARTMENT

– M E M O R A N D U M –

DATE: February 10, 2026

TO: Tim Schloneger, Village Manager
Committee of the Whole

FROM: Jason Schutz, Utilities Superintendent

SUBJECT: Water Distribution Leak Detection Program - M.E. Simpson Co., Inc.

This memo announces the launch of our annual Leak Detection Program, which will include the inspection of approximately 160 miles of water main within the Village of Algonquin's water distribution system. The program will be conducted by M.E. Simpson, a specialty contractor that works closely with the Village on other initiatives, including our valve turning and water meter testing programs. This proactive effort is designed to improve overall system efficiency, reduce water loss, and help ensure the continued delivery of reliable water service to all residents.

In line with our ongoing efforts to maintain the integrity and performance of the Village's water distribution system, there is a pressing need to identify and address both potential and existing leaks that may compromise water quality and supply reliability. M.E. Simpson will take a systematic approach, beginning on the east side of the Village and progressing west over a three-week period. Detecting and repairing leaks is essential to conserving water and reducing unnecessary costs associated with water production.

The survey will encompass all residential and commercial areas within the Village, focusing on:

- Main lines
- Service connections
- Valves and hydrants
- Storage facilities

Currently, the Water and Sewer Operating Fund (Professional Services) has budgeted $36,800.00 specifically for the Water Distribution Leak Detection Program. Therefore, it is our recommendation that the Committee of the Whole take action to move this matter forward to the Village Board for approval of the Leak Detection Program in the amount of $36,800.00 to the Villages preferred contractor M.E. Simpson Co., Inc.

February 10, 2026

Mr. Jason Schutz
Utilities Superintendent
Village of Algonquin
110 Meyer Drive
Algonquin, IL 60102

RE: PROPOSAL FOR A WATER DISTRIBUTION SYSTEM LEAK SURVEY

Dear Mr. Schutz,

M.E. Simpson Co., Inc. is pleased to present the Village of Algonquin, Illinois our proposal for a Water Distribution System Leak Detection Survey Program. We are honored to be considered for this work and are confident our team will help make the project a success.

M.E. Simpson Co., Inc. is a Professional Services Firm dedicated to developing and providing programs and services designed to maximize peak performance for our clients' water distribution systems. Many of these programs are universally recognized as a part of "Best Management Practices" (BMPs) for utilities. We pride ourselves on delivering solid solutions using the highest quality technical and professional services by way of state-of-the-art technology and a skilled and well-trained staff of professionals. Our highly educated engineers and technical team are committed to the success of this project. They will be ready at a moment's notice to relieve your staff's burden and ensure a seamless continuation of your services.

Our services were developed and refined to provide utilities with programs that can be customized to meet their needs. From complete "Turn-Key" services to assisting with the development of "in-house" programs for utilities, M.E. Simpson Co., Inc. serves our clients with this ultimate goal: to deliver to the public the implicit faith that **"the water is always safe to drink"**.

Thank you for your consideration and this opportunity to acquaint you with our Water Distribution System Leak Detection Services and offer this response. We are committed to exceeding your expectations.

Sincerely,

Joe Nepras
Regional Manager

Joe Nepras
Regional Manager

3406 Enterprise Avenue
Valparaiso, IN 46383

800.255.1521 P
888.531.2444 F

Joen@mesimpson.com

SCOPE OF WORK

Water Distribution System Leak Survey

The Field Scope of Service for the Leak Survey is understood to be the following:

M.E. Simpson Co., Inc. will furnish all labor, material, transportation, tools, and equipment necessary to survey the water distribution system areas selected by the City. M.E. Simpson Co., Inc. shall be required to provide such skilled and trained personnel and equipment necessary to complete the work herein specified. **There will be a minimum of Two Persons per team working on the survey at all times.**

- Work in an orderly and **safe** manner to insure protection of the local residents, Utility employees, and the Field Staff so that no **avoidable** accidents occur.
- All Field Staff will have readily observable identification badges worn while in the field.
- The leak detection equipment to be used will be that which was described in the "Equipment to be used" section.
- Initially listen to **all fire hydrants, all accessible main line valves**, and when necessary, selected service connections in the entire distribution system by making physical contact with the valve, hydrant, pipe, or B-box. (Listening points that are not accessible will be given to the Utility and when corrected they will be listened to.)
- Listening points of contact will be: valves, hydrants, service valves or meter settings. The preference of listening points in order as follows; direct contact with the pipe, main line valves, hydrant valves, hydrants, then service valves or meter settings.
- Specific listening distances will be determined by pipe material. Metallic type pipes; no greater than 500' between listening points. Non-Metallic AC/Concrete type pipes; no greater than 300' between listening points. Non-Metallic PVC/HDPE type pipes; no greater than 150' between listening points.
- A "suspected leak" log shall be maintained indicating all areas where suspected leak noise was heard. This log will be reviewed when the Project Team is verifying the suspected leak area for confirmation of the actual existence of a leak. This log will be a part of the periodic reports turned into the Utility regardless of an actual leak located in the area or not, with an explanation of the noise source.
- When leak noise has been detected and or suspected, the Project Team will verify the suspected area a second time to confirm the noise. At least four hours will pass between the initial listening of the area before a second listen and confirmation is attempted.
- The Project Team will line locate the water main and service lines in the immediate area so the correct pipe distances can be input into the leak correlator and also so that the Water Utility will have an idea of where the water main is located prior to excavation. Non-metallic pipe locations will be "interpolated" as best that can be identified, given the line location of metallic services, Utility knowledge of the area, or other information regarding the actual location of the main.

- The Project Team will use "State of the Art" Electronic Leak Correlators to determine if a leak is present and use the same equipment to pinpoint the leak.
- For PVC water mains only the Echologics LeakFinder-ST w/hydrophones leak correlator or Fluid Conservation Systems (FCS) TriCorr Touch leak correlator, will be used for correlations because of the ability for these correlators to be able to analyze the particular sound frequencies inherent to PVC pipe.
- The leak location will be marked in the field (on the surface) using environmentally formulated Precautionary Blue paint.
- The Project Team will document all leak locations with a diagram indicating the location of the leak. Other information related to that correlation will be included as part of the field sheet such as the filters used for the correlation, line locations, distances between sensors, etc.
- The locations of leaks requiring immediate attention (immediate threat to life, injury or traffic) will be turned in as quickly as possible to facilitate the repair process.
- The Project Team will report daily or per request of the Utility, to assigned Utility Professional and go over the progress of the previous day, as well as cover what will be surveyed the current day.
- It may be necessary to conduct parts of the Leak Survey during "off hours" such as at night. This may be required in areas of high traffic volume where traffic noise may affect the ability to detect leak noise, and traffic volume may affect the ability of the Project Team to be able to safely access main line valves in the middle of the street. The Project Team will give 24-hour advanced notice of intent to survey a particular area that may require after hours surveying or nighttime surveying. This is so the Utility can plan for the area to be surveyed, give notification to the Police department, as well as other Public Works Divisions as to the activity that will take place.
- As a part of the leak program, mapping discrepancies found, distribution assets found in disrepair will be noted and turned into the utility.
- Leaks verified on the customer's side of a service shut-off will not be located beyond the shut-off. If a leak appears to be on the Customers' side, the Utility will be notified first, then the customer notified and permission granted prior to the water being shut off even for short periods of time where possible and as time allows, as well as the ability for the customer to respond.
- If the Utility requests leak locations beyond the service shut off on the customer's side of the service line, this will result in an additional charge to the leak survey based on an hourly rate and this service must be agreed upon between the Utility and M.E. Simpson Co., Inc. prior to the start of the survey.
- Valves and hydrants will not be operated without Utility permission. Valves and hydrants that break during this type of operation are the sole responsibility of the Utility. M.E. Simpson Co., Inc. cannot be responsible for valves and hydrants that break due to pre-existing conditions.

- The Utility is encouraged to dig up and repair the leaks located as soon as possible so that the area may be re-surveyed while the Project Team is still working on the survey in that general geographical location to ensure no other leaks are present in that area.

Equipment List

- FCS **S30** Gutermann **AquaScope** electronically enhanced listening device.
- Echologics **LeakFinder-ST w/hydrophones**; FCS **AC Digital**, **TriCorr Touch** or Vivax-Metrotech **HL6000X** leak correlator systems.
- **RADIO Detection** Line Locators.
- **Chicago Tape**, **Fisher M-Scope** or **Schonstedt** magnetic locators.
- **All necessary valve keys and hand tools**
- Truck mounted arrow board/signage and warning lights.
- Traffic control equipment, including properly sized traffic cones with reflective stripes.

Quality Control and Accuracy of Leak Locations

The level of accuracy of leak detection is a matter of taking in all the above considerations and applying those considerations to each individual potential leak location as it is being evaluated. Any statement made as to the level of accuracy of leak locations must be considered based on the individual conditions of each leak.

Locating leaks on a distribution system can be very challenging. It is not a perfect science. Pipes and fittings can leak for a variety of reasons (age, poor installation, material failures, bad soils, etc.), and the ability to locate leaks is dependent on the stated variables listed in the “Project Approach”. By employing a strict methodology in the field for conducting a leak survey, these variables can be accounted for and mitigated. The depth of experience of the Project Team is extremely important to maintaining the ability to have accurate locations of leaks. Additionally, crews work as Two-Person Teams in the field, double checking the progress of the work as the survey progresses. The systematic procedure for leak confirmation has been stated in the Scope of Field Service and is restated here.

“Suspected leak areas are always listened to a second time, preferably at a different time of day than originally listened to. The mains and services will be line located to insure correct pipe distances are used for the correlations. Correlations may need to be performed several times with several configurations to insure all the possible scenarios have been covered. Sewer manholes may need to be opened and flows observed. If there is any doubt as to the existence of a leak, the area may be checked and correlated at different times to rule out water usage or other factors. The progress of the survey will be monitored by the use of daily logs and a progression map with suspected leak noise indications marked and possible leak locations will be maintained. Field leak location forms will be turned into the Utility according to the agreed schedule. The Project Team will follow up on leak locations by monitoring the repair schedule of the Utility. That way in case a potential leak location is wrong, the Project Team can return to the site and determine why the leak location was incorrect, and correct it. This means maintaining a good level of communication between the Project Team in the field, and the Utility.

As a matter of Quality Control for leaks in the field, our Correlators, FCS TriCorr Touch and Echologics LeakFinder-ST have the distinct ability to be able to detect and pinpoint more than one leak in the same relative area, thus allowing better leak coverage and insuring that one leak is not "masking" another leak in the same area. The use of progress reports and meetings will allow for open discussions of problems encountered so solutions can be examined."

Utility Observations

The M.E. Simpson Co., Inc. Project Team will welcome having staff of the Utility observe field procedures while the Leak Survey is in progress. They will be happy to explain and demonstrate the equipment and techniques that are employed by M.E. Simpson Co., Inc. for detecting and locating leaks on the Water System.

Final Reports, Documentations & Communications

M.E. Simpson Co, Inc. will perform the following:

- Project Team will **meet daily** with assigned Utility personnel to go over areas of survey for prior workday and plan current day and area to survey.
- The field technicians will be readily available by cellular phone. This will facilitate communications between the Utility and the field technicians. A **24-hour toll-free 800 number** is available for direct contact with M.E. Simpson Co., Inc. for emergencies.
- **Diagram all leak locations**, date of location, and classify according to severity and an estimate of loss.
- **The Project Manager will** meet with the Utility regularly for a progress report.
- **Prepare a progress report** at monthly intervals for the Utility if requested.
- Develop a **Leak Survey log** of activity which will also have confirmed leaks listed and this list will be turned in weekly (in Excel format). The list will also be included with the final report that will include the following;
    1. Mechanical deficiencies discovered
    2. Mapping errors on the water atlas
    3. Type of monitored appurtenances
    4. Location of same for leaks discovered
    5. Total estimated loss

Effective communication…
accurate documentation…
Insuring the success for the leak survey

- **Prepare the final report** at the completion of the project which will include all leak location reports with drawings, total of estimated water loss, total pipe distance investigated, a description of the area surveyed, and other problems found in the system during the course of the survey that need the attention of the Water Utility. The leak summary will list leak types such as main leaks, service line leaks, valve leaks, or hydrant leaks.

  A cost benefit analysis of the survey based on the "cost to produce" water will also be included that describes the financial impact to the Utility for water loss. Recommendations for system maintenance will be a part of this report based on field observations made during the survey. **This final report shall be made available for submission to the Utility within thirty (30) working days of the completion of the fieldwork.**

Assumptions & Services Provided by the Utility

- The Utility will furnish all maps in an electronic format or paper atlases (two copies), and records necessary to properly conduct the survey.
- The Utility will assist as necessary to clean out service valves, meter pits and valve-boxes needed for listening.
- The Utility will provide a Primary Contact Person and/or secondary contact person for the Field Staff to report to on a periodic basis. This person shall act as the official liaison for the duration of the Leak Survey. This person shall have a working knowledge of the water system and will be helpful in attempting to locate particularly hard-to-find water valves for listening and for general information about the water system. *This person will not need to assist the Project Team on a full time basis*, but only on an "as needed" basis.
- The Utility will assist, if needed, to help gain entry into sites that may be difficult to get into due to security issues or other concerns.
- The Utility will assist, if needed, to locate all nonmetallic pipe within the service area. This would include all Concrete Cylinder pipe, Asbestos Cement Pipe, PVC pipe and HDPE pipe.
- We will encourage the immediate digging of major leaks (main breaks) so that if there are problems with the leak location, the problems can be corrected while the Project Team is close by and can verify the site.

PROJECT SAFETY PLAN

M.E. Simpson Co., Inc.'s Safety Programs cover all aspects of the work performed by M.E. Simpson Co., Inc. We take great pride in our safety plan/policy/program and that is evident in our EMR scores over the last five years. The safety of our employees, the utilities employees and that of the general public is our #1 priority.

Our Safety Plan/Policy/Program, with all of its parts, is 60 pages in length. In an effort to be more efficient and less wasteful we do not print copies of the safety program for RFPs. There is nothing secretive or proprietary contained within our plan/policy/program and we are happy to share its contents. If you would like a PDF copy of our plan/policy/program please contact Terrence Williams, Operations Manager, at 800.255.1521 and a copy of our program will be sent via email to you.

Below is an overview of our plan/policy/program:

Safety is a major part of any project. M.E. Simpson Co., Inc. always provides a safe work environment for its employees. **Our staff is trained in General Industry OSHA rules, Confined Space Entry & Self-Rescue, First Responder First Aid, CPR, and Traffic Control.** While in the field on your project, M.E. Simpson Co., Inc. and its employees will follow all of the necessary safety procedures to protect themselves, your staff and the general public.

M.E. Simpson Co., Inc. uses Two-Man Teams for Safety and Quality Assurance.

The use of a "one-person" leak detection team is dangerous and impractical where water mains run under roadways. It would be a dangerous precedent to allow a "one-person" team to access main line valves located in the roadway, attempt to listen to the valve with headphones on, and at the same time try to control traffic flow at that person's location in the street.

Therefore M.E. Simpson Co., Inc. adheres to the following:

- The Project Manager and the Field Manager will be trained in accordance with OSHA Standard 1910 (General Industry) and be in possession of an OSHA 10 Hour or 30 Hour Card.
- Any listening points located in a **"confined space"** such as pit and vault installations that **require entry** will be treated in accordance with the safety rules regarding **Confined Space Entry, designated by the Utility, The Department of Labor and OSHA**.
  - All personnel are **trained and certified** in Confined Space Entry & Self-Rescue.
- We will follow all safety rules regarding **First Responder First Aid & CPR, designated by the Utility, The Department of Labor and OSHA**.
  - All personnel are **trained and certified** in First Responder First Aid & CPR.
- We will follow all **traffic safety rules, designated by the Utility, The Department of Labor, OSHA, and the Illinois Department of Transportation (per MUTCD).**
  - All personnel are **trained and certified**, by the **AMERICAN TRAFFIC SAFTEY SERVICES ASSOCIATION (ATSSA)** in Traffic Control and Safety.

Current documentations of safety training and certifications can be provided for all project personnel for the Utility. These certifications are current and up to date for all project personnel.

INVESTMENT

A commitment to improving and maximizing the Village of Algonquin's water distribution system for future generations.

M.E. Simpson Co., Inc. is pleased to present our "Proposal" for a Water Distribution System Leak Detection program for the Village of Algonquin, Illinois. M.E. Simpson Co., Inc. will perform our leak detection services on approximately **160** miles of watermain within the Village of Algonquin's water distribution system. The survey will be completed by listening on the accessible main line valves, fire hydrants and as needed services by one of our two-man teams with all necessary equipment furnished by M.E. Simpson Co., Inc. as described within this document. The project will also include complete reporting of all issues found, with a final comprehensive report.

2024 Leak Survey

Water Distribution System Leak Survey Program Fee (lump sum) ---------- **$36,800.00****

2025/2026 Leak Survey

Water Distribution System Leak Survey Program Fee (lump sum) ---------- **$36,800.00****

2026/2027 Leak Survey

Water Distribution System Leak Survey Program Fee (lump sum) ---------- **$37,600.00****

****Any water main surveyed in addition to the above **160** original miles of watermain will be surveyed at the rate of **$230.00** per mile of pipe for 2024 and 2025/2026. That fee raises to **$235.00** in 2026/2027.

We thank you for this opportunity to acquaint you with our Water Distribution System Leak Detection services and offer this proposal. If you have further inquiries or you wish to discuss our service in more detail, do not hesitate to call us.

VILLAGE OF ALGONQUIN PURCHASE AGREEMENT - VENDOR (Services)

Effective Date: February 10 **, 20** 26 **Purchase Order No.**

Project: Water Distribution System Leak Survey	**Location:** VOA
Originating Department:	

Owner	Consultant/Vendor	Developer
Village of Algonquin Address: 110 Mitchard Way Algonquin, IL 60102 **Phone:** (847) 658-2754 Ext. 4422 **Fax:** (847) 658-2759 **Contact:** Jason Miller	Name: M.E. Simpson Address: 3406 Enterprise Ave. Valparaiso, IN 46383 **Phone:** (800) 255-1521 **Fax:** (888) 531-2444 **Contact:** Joe Nepras	**(where applicable)** **Phone:** **Fax:** **Contact:**

COST OF WORK

The Contract Price of the Work under this Purchase Agreement is: $ 36,800.00

SCOPE OF WORK:

Furnish the Work/items described below in accordance with the following plans and specifications:

- ⊬ **General Contract, dated** February 10 **, 20** 26
- ⊬ **Specification No(s): _____, dated _____, 20__**
- ⊬ **Plans dated : _____**
- ⊬ **Addendum No(s): _____**
- ⊬ **Other: _____**

The Scope of the Work and prices under this Purchase Agreement are for the duration of project:

QUANTITY	UNIT OF MEASURE	DESCRIPTION/ITEMS	CONTRACT SUM	EXTENSION
1		Water distribution leak survey	$ 36,800.00 NOT TO EXCEED	$ 36,800.00
			TOTAL	$ 36,800.00

NOTES:

1) The SCOPE OF WORK shall not be changed without written agreement between the Consultant/Vendor and the Owner. Payment is based upon the attached Schedule of values and reimbursables.
2) No work beyond the SCOPE OF WORK shall be undertaken until written authorization is received from the Owner. Consultant/Vendor shall notify the Owner when the value of the Services performed equals eighty percent (80%) of the Contract Sum, at which point the Owner, Developer and Consultant/Vendor shall determine the time remaining on the Project for which Consultant/Vendor Services are or may be required, and the sufficiency of the Developer escrow account regarding payment for such Services.

WARRANTIES and INDEMNIFICATION

Consultant/Vendor agrees to employ the skill and efforts of a professional engineer in this area. CONSULTANT/VENDOR SHALL FULLY INDEMNIFY AND SAVE THE OWNER HARMLESS FROM ALL CLAIMS, LIENS, FEES, AND CHARGES, AND THE PAYMENT OF ANY OBLIGATIONS ARISING THEREUNDER, pursuant to the provisions in the Supplemental Conditions attached hereto.

THE TERMS OF THIS PURCHASE AGREEMENT AND THE ATTACHED SUPPLEMENTAL CONDITIONS ARE THE ENTIRE AGREEMENT BETWEEN THE OWNER AND CONSULTANT/VENDOR. No payment will be issued unless a copy of this Purchase Agreement is signed, and dated and returned to the Owner. Material certifications/test reports required.

ACCEPTANCE OF PURCHASE AGREEMENT

The parties, for themselves, their heirs, executors, administrators, successors and assigns, do hereby agree to the full performance of all terms and provisions herein contained. IN WITNESS WHEREOF, the parties hereto have executed this Purchase Agreement the day and year written below.

CONSULTANT/VENDOR:

_____

By: _____

Representative of Vendor authorized to execute Purchase Agreement

OWNER:
Village of Algonquin

By: _____

Title: _____

Dated: _____

SUPPLEMENTAL CONDITIONS

1. Acceptance of Purchase Agreement: The Purchase Agreement is an offer to contract, buy or rent and not an acceptance of an offer to contract, sell or rent. Acceptance of this Purchase Agreement is expressly limited to the terms hereof, and in the event that Consultant/Vendor's acknowledgment or other response hereto states terms additional to or different from those set forth herein, this Purchase Agreement shall be deemed a notice of objection to such additional or different terms and rejection thereof. This Purchase Agreement may be accepted by the commencement of any Work hereunder, and in any event, shall be deemed accepted in its entirety by Consultant/Vendor unless the Owner is notified to the contrary within ten (10) days from its date of issue.

2. Amendment, Modification or Substitution: This Purchase Agreement contains the entire agreement between the parties. Any modification or rescission thereof must be in writing and signed by the Owner. No proposals or prior dealings of the parties or trade custom not embodied herein shall alter the interpretation or enforcement of this Purchase Agreement.

3. Familiarity With Plans; Qualifications: Consultant/Vendor acknowledges that it (a) has examined the site of the proposed Work and is familiar with the conditions surrounding same; and (b) has examined the plans and drawings, and has studied and is aware of, and satisfied with, the requirements of the Contract Documents as they relate to Consultant/Vendor's Services under this Purchase Agreement. Consultant/Vendor represents to the Owner that it is fully experienced and properly qualified as an expert to perform the class of work provided for herein, and that it is properly equipped, organized and financed to handle such work. Consultant/Vendor shall finance its own operations hereunder, shall operate as an independent contractor and not as the agent of the Owner, and shall hold the Owner free and harmless from all liability, costs and charges by reason of any act or representations of Consultant/Vendor, its agents or employees.

4. Safety: Insofar as jobsite safety is concerned, the Consultant/Vendor is responsible solely for its own and its employees' activities on the jobsite, but this shall not be construed to relieve the Owner or any construction contractors from their responsibilities for maintaining a safe jobsite. Neither the professional activities of the Consultant/Vendor, nor the presence of the Consultant/Vendor or its employees and subcontractors, shall be construed to imply the Consultant/Vendor has any responsibility for the methods of work performance, superintendence, sequencing of construction, or safety in, on or about the jobsite by others.

5. Extra's and Change Orders: No claim by Consultant/Vendor that any instructions, by drawing or otherwise, constitute a change in Consultant/Vendor's performance hereunder, for which Consultant/Vendor should be paid additional compensation shall be valid, unless prior to commencing such allegedly extra or changed performance, Consultant/Vendor shall have received a written supplement to this Purchase Agreement authorizing such performance signed on behalf of the Owner by a person have actual authority to do so.

6. Inspection and Acceptance: The Owner shall have the right at all reasonable times to inspect all Work performed or furnished by Consultant/Vendor. Notwithstanding any prior inspection or payment, all Work is subject to final acceptance by the Owner.

7. Taxes: This project is tax exempt. The Owner's tax-exempt number is **E 9995 0855 05.**

8. Payment: The Owner will make partial payments to the Consultant/Vendor from time to time for Services performed by the Consultant/Vendor. Provided, however, in no event shall the Owner be obligated to pay Consultant/Vendor any sum that exceeds the Contract Price absent a written change order executed by the Owner. Consultant/Vendor shall invoice Owner monthly on a time and materials basis in the amount(s) and at the rate(s) set forth in the attached Schedule. Each invoice shall detail the dates worked, Services performed, and, where applicable, reimbursable expenses reasonably and directly incurred for such Services. Consultant/Vendor shall only be reimbursed for expenses shown on the attached Schedule. Reimbursement shall be at the amount shown on the attached Schedule, or if no amount is shown, at cost. Consultant/Vendor shall invoice Owner for all Reimbursable Expenses, where applicable, due and owing together with an itemization of such (including receipts). Invoices in compliance with this Purchase Agreement shall be paid by the Owner to Consultant/Vendor within 60 days after Owner's receipt of the invoice. The amount(s) and rate(s) set forth on the attached Schedule include all anticipated costs of providing the Services. No additional costs of any kind may be incurred without the prior written consent of Owner.

9. Consultant/Vendor Warranty: Consultant/Vendor warrants to perform the Services to the best of its ability and in a diligent and conscientious manner and to devote appropriate time, energies and skill to those duties called for hereunder during the term of this Purchase Agreement and in connection with the performance of such duties. All Services performed by Consultant/Vendor pursuant to this Purchase Agreement shall be performed in accordance with all applicable federal, state and local laws, rules and regulations, and shall conform to the *Village's 2006 Contractual Inspection Services Guide* and any specifications and drawings applicable to this Purchase Agreement.

10. Insurance:

10.1 Consultant/Vendor shall at all times maintain business automobile, commercial liability and workers compensation insurance covering its work and all obligations under this Purchase Order, and shall name the Owner as an additional insured on its commercial liability insurance policies for Consultant/Vendor operations under this Purchase Agreement. Liability insurance limits shall be in an such amounts and include such coverages as set forth in the VILLAGE OF ALGONQUIN PURCHASE ORDER INSURANCE REQUIREMENTS attached to this Agreement. Consultant/Vendor shall furnish the Owner with a certificate of insurance and such other documentation (including a copy of all or part of the policy) at the time of execution of this Agreement and thereafter on an annual basis on the anniversary date of this Agreement or at any other time as the Owner deems necessary to establish compliance with this provision.

10.2 Consultant/Vendor shall furnish and pay for surety bonds and with surety or sureties satisfactory to Owner, guaranteeing the full performance of all of the conditions and terms hereof and guaranteeing that Consultant/Vendor shall promptly pay for all labor, materials, supplies, tools, equipment and other charges or costs of Consultant/Vendor in connection with the Work. Such performance and payment bond shall be in an amount determined by Owner.

10.3 Breach of this paragraph is a material breach subject to immediate termination.

11. Indemnity: Consultant/Vendor hereby agrees to indemnify, and hold the Owner directors, officers, employees, agents, successors and assigns (the "Indemnitees") harmless from any and all claims, demands, liability, loss, damage, fines, penalties, attorney's fees and litigation expenses (collectively "Loss") arising out of injury to, including the death of, persons and/or damage to property, to the extent caused by the negligent acts or omissions of Consultant/Vendor, its agents, employees, subcontractors, successors and assigns. In any and all claims against the Owner or any of its agents or employees, by any employee of Consultant/Vendor, the indemnification obligation under this paragraph shall not be limited by any limitation on the amount or type of damages, compensation or benefits payable by or for Consultant/Vendor under workers compensation acts, disability benefits acts or employee benefit acts, or other applicable law. Consultant/Vendor assumes the entire liability for its own negligence, and as part of this Purchase Agreement waives all defenses available to Consultant/Vendor as an employer which limit the amount of Consultant/Vendor's liability to the Owner to the amount of Consultant/Vendor's liability under any workers compensation, disability benefits or employee benefit acts.

12. Term and Termination: The term of this Purchase Agreement shall commence as of the Effective Date and shall continue until the Project is completed or the Purchase Agreement is terminated by either party, or the value of the service provided by Consultant/Vendor has reached 100% of the Contract Sum. Notwithstanding the foregoing, either party may terminate this Purchase Agreement with or without cause at any time by providing written notice within a reasonable period of time prior to termination. In the event of a termination, Consultant/Vendor shall be paid for all services performed through the date of termination, based on the percentage of services completed. In no event shall the Consultant/Vendor be entitled to any additional compensation or damages in connection with a termination hereunder.

13. Remedies: Consultant/Vendor shall, for the duration of this Purchase Agreement, at the discretion of the Owner and at the expense of Consultant/Vendor, undertake or re-do any and all faulty or imperfect Services furnished or performed by Consultant/Vendor thereunder. In the event Consultant/Vendor fails to perform under this Purchase Agreement, it will be in default and the Owner may furnish or perform the same and recover from Consultant/Vendor the cost and expense directly or indirectly resulting there from, including all consequential damages but not limited to the cost or expense of providing such services, inspections, testings and reasonable attorneys fees as a result of a default. The foregoing remedies shall be available in addition to all other remedies available to the Owner.

14. Compliance With Laws:. During the performance hereunder, Consultant/Vendor agrees to give all notices and comply with all Laws and Regulations of the United States and/or the State of Illinois applicable to the performance of the Work, including but not limited to those Laws and Regulations regarding the payment of prevailing wages, non-discrimination laws, employment of Illinois workers, labor, wage and collective bargaining. Except where otherwise expressly required by applicable Laws and Regulations, the Owner shall not be responsible for monitoring Consultant/Vendor's compliance with any Laws or Regulations.

15. Notices: All notices, demands, requests or other communications which may be or are required to be given, served, or sent by any party to any other party pursuant to this Purchase Agreement shall be in writing and shall be hand delivered, or sent by courier, or via facsimile with confirmation to the addresses shown on the Purchase Agreement.

16. Records, Reports and Information: Consultant/Vendor agrees to furnish Owner with reports and information regarding the Services performed under this Purchase Agreement, at such times as Owner may reasonably request, making full disclosure of efforts made by Consultant/Vendor and the results thereof. Consultant/Vendor agrees to maintain records, documents, and other evidence which will accurately show the time spent and Services performed under this Purchase Agreement for a minimum period of five (5) years after completion of the Services, and such records shall be subject to audit by Owner upon reasonable advance notice to Consultant/Vendor on a mutually agreed date and time.

17. Assignment: Neither party shall assign this Purchase Agreement without written consent of the other, which consent shall not be unreasonably withheld, except that Owner may unilaterally assign its rights under this Purchase Agreement upon reasonable notice to Consultant/Vendor to the Developer/Owner (if any) identified in this Purchase Agreement.

18. Limitation Of Liability: In no event shall the Owner by liable for special, incidental or consequential damages (including without limitation loss of use, time or data, inconvenience, commercial loss, lost profits or savings) to the full extent such may be disclaimed by law.

19. Waiver: Either party's failure to insist in any one or more instances, upon the strict performance of any provision hereof or to exercise any right hereunder shall not be deemed to be a waiver or relinquishment of the future performance of any such provision or the future exercise of such right, but the obligation of Consultant/Vendor and Owner with respect to such future performance shall continue in full force and effect.

20. Controlling Law, Severability: The validly of this Purchase Agreement or any of its provisions and the sufficiency of any performance thereunder shall be determined under the laws of Illinois. Venue shall be in McHenry County, Illinois. The Owner is entitled recover its reasonable attorneys fees incurred in enforcing the terms of this Purchase Agreement. If any provision or requirement of this Purchase Agreement is declared or found to be unenforceable that balance of this Purchase Agreement shall be interpreted and enforced as if the unenforceable provision or requirement was never a part hereof.

CONSULTANT/VENDOR:

_____ _____

Date

VILLAGE OF ALGONQUIN
PURCHASE ORDER INSURANCE REQUIREMENTS

A. At all times while providing, performing, or completing the Work, Contractor (Contractor/Vendor and Vendor/Consultant) shall maintain the following minimum insurance coverage in the form, and from companies, acceptable to Owner.

1. **Commercial General Liability Insurance**

Limits: Each Occurrence and in the Aggregate $1,000,000

Such insurance shall include completed operations, contractual liability and personal/advertising injury coverage. The policy will name the Village of Algonquin as an additional insured on a primary non-contributory basis.

2. **Commercial Automobile Liability Insurance**

Limits: Each Occurrence $1,000,000

3. **Workers Compensation/Employers Liability Insurance**

Limits: Coverage A Statutory
Limits: Coverage B $1,000,000

The policy will contain a waiver of subrogation clause in favor of the Village of Algonquin.

4. **Umbrella Excess Liability Coverage** ☐ ***Required if an "x"***

Limits: Each Occurrence and in the aggregate $2,000,000

The policy will name the Village of Algonquin as an additional insured on a primary non-contributory basis.

5. **Professional Liability Coverage** *(required if professional services are being provided)*

Limits: Each Occurrence $1,000,000

The Contractor shall provide the Village with a copy of the professional liability insurance policy and any endorsements.

B. All insurance required of the Contractor shall state that it is primary insurance as to additional insureds with respect to all claims arising out of the operations by or on their behalf. If additional insureds have other applicable insurance coverages, those coverages shall be regarded as on an excess or contingent basis.

C. All required coverage shall be placed with an insurance company licensed to conduct business in the State of Illinois and be rated at least A VI by A.M. Best Company.

D. Prior to commencing work under this Agreement, the Contractor shall furnish the Village with a copy of all certificates showing the minimum coverage in insurance companies acceptable to the Village. All Certificates of Insurance required to be obtained by the Contractor shall be provide coverages under the policies named shall not be canceled, modified, reduced or allowed to expire without at least thirty (30) days prior written notice given to the Village. All certificates evidencing coverage extended beyond the date of final payment shall be provided at the time of the final pay request. All Certificates of Insurance shall name the Village as additional insured as provided in these Requirements.

E. The Contractor agrees that the obligation to provide insurance as required is solely the Contractor's responsibility and cannot be waived by any act or omission of the Village, including, but not limited to:

1. allowing work by Contractor or any subcontractor of any tier to start before receipt of Certificates of Insurance; or

2. failure to examine, or to demand correction of any deficiency, of any Certificate of Insurance received.

F. The purchase of insurance by the Contractor under this Agreement shall not be deemed to limit the liability of the Contractor in any way, for damages suffered by the Village in excess of policy limits or not covered by the policies purchased.

G. Such insurance coverages and limits are minimums, and shall not be construed in any way as a limitation on the duty of the Contractor to carry adequate insurance or on Contractor’s liability for losses or damages under this Contract.

H. The Contractor shall notify the Village, in writing of any possible or potential claim for personal injury or property damage arising out of the work of this Agreement promptly whenever the occurrence giving rise to such a potential claim becomes known to the contractor.

I. The Contractor shall require every subcontractor of any tier, if any, not protected under the Contractor's policies, to maintain insurance of the same nature in amounts, and under the same terms, as required of the Contractor.

This is **SCHEDULE A**, consisting of _____ pages, referred to in and part of the **Village of Algonquin Purchase Agreement (Vendor/Services)** No. _____ effective _____, 20_____

Scope of Work/Services – Vendor/Services

VOA: _____

_____: _____

This is **SCHEDULE B**, consisting of _____ pages, referred to in and part of the **Village of Algonquin Purchase Agreement (Vendor/Services)** No. _____ effective _____, 20_____

Contract Price – Vendor/Services

Schedule C

Insurance Requirements – Vendor/Services

Required Insurance:

Limits of liability for the insurance required under the Agreement are as follows or as otherwise agreed to in writing by the Owner and the Vendor:

1. **Workers Compensation.** Vendor shall provide workers compensation insurance for all its employees providing services under this Agreement in accordance with applicable law.

2. **Commercial General Liability**. Vendor shall provide commercial general liability insurance to cover the liabilities of Vendor, its Affiliates, independent contractors, and subcontractors, arising out of the Vendor's performance of this Agreement with limits of one million dollars ($1,000,000) for each claim, one million dollars ($1,000,000) products aggregate and two million dollars ($2,000,000) general aggregate which may be provided through umbrella coverage. This insurance, including insurance provided under the commercial umbrella, if any, shall apply as primary insurance with respect to any other insurance or self-insurance programs afforded to, or maintained by, Owner

    a. Vendor shall provide evidence of said insurance, in the form of an insurance certificate, within thirty (30) days from the date hereof.

    b. Additional Insured. Such insurance shall name Owner as an additional insured and such coverage shall be primary and non-contributing with respect to the Owner's coverage.

    c. Waiver of Subrogation. Vendor waives all rights against Owner and its agents, officers, directors and employees for recovery of damages to the extent these damages are covered by the commercial general liability or commercial umbrella liability insurance maintained pursuant this Agreement.

    d. Continuing CGL Coverage. Vendor shall maintain commercial general liability insurance for at least 3 years following the earlier termination or the completion of this Agreement or the completion of the Work under this Agreement and all authorized extensions thereof.

3. **Business Automobile Insurance**. Vendor shall provide business auto liability insurance to cover the liabilities of Vendor, its Affiliates, independent contractors, and subcontractors, arising out of Vendor's performance of this Agreement with limits of one million dollars ($1,000,000) for each claim, one million dollars ($1,000,000) products aggregate and two million dollars ($2,000,000) general aggregate which may be provided through umbrella coverage. Such insurance shall cover liability arising out of any auto (including owned, hired and non-owned autos). Vendor waives all rights against Owner and its agents, officers, directors and employees for recovery of damages to the extent these damages are covered by the business auto liability or commercial umbrella liability insurance obtained by Vendor this Agreement or under any applicable auto physical damage coverage.

Evidence of Insurance.

1. Vendor shall furnish Owner with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, stating compliance with the insurance requirements set forth above.

2. Failure of Owner to demand such certificate or other evidence of compliance with these insurance requirements or failure of Owner to identify a deficiency from evidence that is provided shall not be construed as a waiver of Vendor's obligation to maintain such insurance.

3. Owner shall have the right, but not the obligation, to prohibit Vendor or any of its independent contractors or subcontractors from entering the Project site or performing work required under this Agreement until such certificates or other evidence that insurance has been placed in complete compliance with these requirements is received and approved by Owner.

4. Failure to maintain the insurance required in this Schedule shall constitute an event of default under this Agreement and shall allow Owner to immediately terminate this Agreement at Owner's option.

5. If Vendor fails to maintain the insurance as set forth herein, Owner shall have the right, but not the obligation, to purchase said insurance at Vendor's expense.

6. With respect to insurance maintained after final payment in compliance with a requirement above, an additional certificate(s) evidencing such coverage shall be promptly provided to Owner when requested.

7. Vendor shall provide Owner with 30 days written notice prior to the cancellation or material change of any insurance required under this Agreement.

8. Vendor shall provide certified copies of all insurance policies required above within 10 days of Owner's written request for said copies.

General Insurance Provisions

1. No Representation of Coverage Adequacy. By requiring the insurance as set out in this Schedule, Owner does not represent that coverage and limits will necessarily be adequate to protect Vendor, and such coverage and limits shall not be deemed as a limitation on Vendor's liability under the indemnities provided to Owner in this Agreement, or any other provision of the Contract Documents.

2. Cross-Liability Coverage. If Vendor's liability policies do not contain the standard separation of insureds provision, or a substantially similar clause, they shall be endorsed to provide cross-liability coverage.

3. The insurance requirements set out in this Schedule are independent from other obligations of Vendor under this Agreement and apply whether or not required by any other provision of this Agreement.

4. Independent Contractor/Subcontractor's Insurance. Vendor shall cause each independent contractor and subcontractor employed by Vendor to purchase and maintain insurance of the type specified in this Schedule. When requested by Owner, Vendor shall furnish to Owner copies of certificates of insurance evidencing coverage for each independent contractor or subcontractor.

This is **SCHEDULE D**, consisting of _____ pages, referred to in and part of the **Village of Algonquin Purchase Agreement (Vendor/Services)** No. _____ effective _____, 20_____

Supplemental Terms and Conditions

VILLAGE OF ALGONQUIN

PUBLIC WORKS DEPARTMENT

– M E M O R A N D U M –

DATE: February 11, 2026

TO: Tim Schloneger, Village Manager
Committee of the Whole

FROM: Jason Schutz, Utilities Superintendent

SUBJECT: Well 15 Casing to Well Screen Transition Repair

Background

During recent inspection and operational review of Well 15, staff and our well contractor identified an unexpected structural failure at the transition point between the steel well casing and the stainless-steel well screen. This joint is a critical structural and hydraulic connection within the well column.

The failure is located at the casing-to-screen interface, where the change in material (carbon steel casing to stainless steel screen) creates a potential point of stress concentration and long-term corrosion vulnerability. Over time, differential corrosion rates and mechanical stress can weaken this transition. In this case, deterioration has resulted in a breach that presents risks including:

- Sand intrusion into the well column
- Reduced water quality
- Decreased production efficiency
- Potential cascading water within the annulus
- Risk of pump damage

If left unaddressed, the failure could expand and ultimately result in the need for more extensive rehabilitation or replacement.

Scope of Work

The proposed work includes:

- Removal of existing pumping equipment
- Brushing and preparation of the well casing
- Installation of the 20’ swage patch
- Reinstallation of pumping equipment
- Flow testing for production and pump sizing
- Final TV survey to verify placement

Water Well Solutions Illinois, LLC is the Village's preferred well contractor and is responsible for conducting all well evaluations and inspections, completing required annual testing, and performing repairs as needed for our water supply wells, including eight (8) shallow wells and one (1) deep well.

Recommendation:

Although this repair was not anticipated during the budget preparation process, sufficient funds are available within the Water & Sewer Operating Fund to cover this necessary and unplanned expense. Staff recommends that the Committee of the Whole advance this matter to the Village Board for approval of the Well 15 casing repair, in an amount not to exceed $76,500.00, to Water Well Solutions Illinois, LLC.

Water Well Solutions Illinois, LLC.

825 E North Street
Elburn, IL 60119
www.wwssg.com

Water Well Solutions
P: 630-365-9099

PROPOSAL TO:

Date: 1/13/2026

Company: Village of Algonquin

Job Name:

Address: 10 Meyer Dr.
City: Algonquin, IL 60102
Attention: Jason Meyer
Email:

Phone:
Fax:

Terms: 10 Days

Qty	Description	Unit Price	TOTAL
8	Hrs labor to brush the well casing with a 2-man crew	$470.00	$3,760.00
1	18"X20' Stainless steel swage patch with NSF compliant silicone backing	$22,000.00	$22,000.00
1	18" Test Patch	$3,000.00	$3,000.00
1	Swaging Equipment & 16" Packer Element to swage out to 20"	$17,000.00	$17,000.00
20	Hrs Labor and CasingGuard™ Equip. to install 20' Swage Patch w/2-man Crew	$470.00	$9,400.00
1	Install and Remove Test Pumping Equipment	$13,000.00	$13,000.00
8	Hrs flow Testing for Production and pump sizing	$580.00	$4,640.00
1	Test Pumping Equipment	$1,800.00	$1,800.00
1	Final TV survey to verify CasingGuard™ Placement	$1,900.00	$1,900.00

NOTE ON MATERIAL PRICES: The material pries noted above are based on current market prices. The price and other materials are volatile. Therefore, we must reserve the right to adjust the above material prices based on market pricing the date your order is signed and returned to us. In order to hold the current pricing, it will be necessary to immediately order the materials. Further, Water Well Solutions will bill for the materials so ordered at the same time, signature below constitutes agreement to be billed for those materials ordered and is your further agreement to pay, within 30 days of invoice date, for those materials ordered.

Total Amount Proposed $76,500.00

CLIENT	WATER WELL SOLUTIONS ILLINOIS, LLC
The above prices, specifications and conditions are satisfactory and are hereby accepted. Water Well Solutions is authorized to do the work as specified. Payment will be made within ten (10) days of invoice date,	All material is guaranteed to be specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra costs, will be executed only upon written orders and will become an extra charge over and above this proposal. All agreements are contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado, and other insurance.
BY: _____ DATE: _____	BY: _____ DATE: _____

INVOICES. Invoices will be submitted once a month with payment due within 10 days of the invoice date. A late charge at the rate of 1-1/2 % per month, or the highest rate allowed by applicable law, whichever is lowest, will be added to all amounts outstanding after 30 days. Purchaser agrees to pay any and all attorneys' fees and court costs should attorneys be utilized or court proceedings initiated to collect any past due amounts.

INFORMATION. It is recognized that Purchaser has superior knowledge of the job site, site history, access routes to the job site, known or suspected contaminants, surface and subsurface conditions, etc., and Purchaser is obligated to advise Water Well Solutions of all or any conditions that may affect Water Well Solutions performance hereunder. Purchaser agrees to provide Water Well Solutions with such specifications, plans, site history information, reports, studies or other information on surface and subsurface conditions as will be reasonably required by Water Well Solutions for safe, proper and timely performance of the work. Purchaser shall obtain all necessary permits and rights-of-way and indemnify and hold Water Well Solutions harmless for its failure to do so and for claims of trespass or damage to property, including underground utilities or structures; provided such claims of trespass or damage to property did not arise due to Water Well Solutions' negligence or intentional act which arise out of the work.

LIABILTY. Neither party shall be liable to the other party for any special, indirect, incidental or consequential damages, whether based on contract, tort (including negligence), strict liability or otherwise. Further, Purchaser agrees to indemnify and hold Water Well Solutions harmless from and against any and all claims, demands, causes of action (including third party claims for contribution or indemnification), liability and costs (including attorneys' fees and other costs of defense) which result from (I) any release or threatened release of any substance (whether hazardous of not); (ii) any claim that Water Well Solutions or any of its subcontractors was a "generator" or "transporter" of hazardous waste or an "operator" of the job site (as such terms are used or defined under local, state or federal laws or regulations); or (iii) any negligent or wrongful act or omission of Purchaser or others under Purchaser's control, except that this indemnification shall not apply to the extent any demand of cause of action results from Water Well Solutions negligence or intentional misconduct.

PERFORMANCE. Water Well Solutions will exercise reasonable skill and judgment in performing the work, EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO OTHER WARRANTIES (EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE) ARE GIVEN HEREUNDER. Water Well Solutions does not warrant specific results of any kind or provide any guarantee of water quality or quantity.

CHANGED CONDITIONS. The discovery of any hazardous waste, substance, pollutant, contaminant, underground obstruction, condition or utilities on or under the job site which were not brought to the attention of Water Well Solutions prior to the date of this Work Agreement will constitute a materially different site condition entitling Water Well Solutions, at its option, to terminate this Work Agreement (and to receive payment for all work performed up to and including the date of such termination) or to receive an equitable adjustment in the contract price and time for performance. Water Well Solutions, however, shall only have the right to terminate if such different site condition(s) creates additional health and safety risks or requires Water Well Solutions to perform work outside the original scope or beyond its capabilities. In any event, Water Well Solutions may terminate operations on a site which it believes presents an unreasonable health or safety risk.

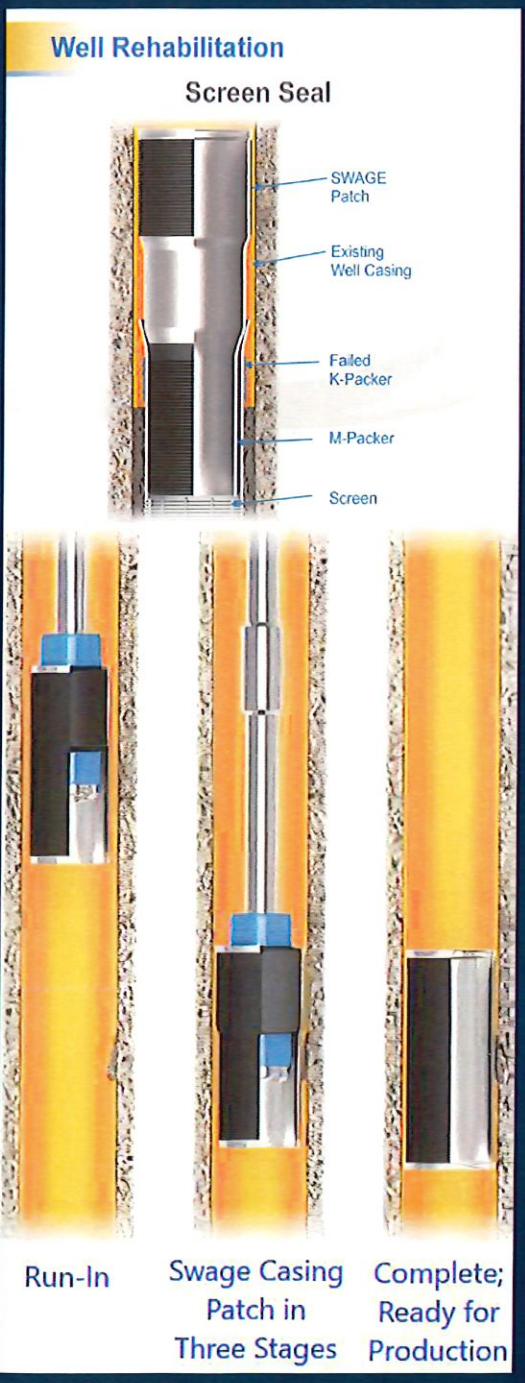
DELAYS. Water Well Solutions shall have no liability to Purchaser, or its clients, contractors or consultants for delays attributable to acts of God, acts of third parties, weather which is not reasonably anticipatable, intervention or public authorities, inability to obtain permits necessary to perform the work, work stoppages, changes in applicable laws or regulations after the date of commencement of performance hereunder and any other conditions or events which are beyond the reasonable control of Water Well Solutions shall be entitled to additional time to perform this Work Agreement equal to the time of any such delay.

MISCELLANEOUS. The terms and conditions set forth in the Work Agreement constitute the entire understanding of the parties relating to the work. All previous proposals, offers, and other communications relative to the work, oral or written, are hereby superseded. Any additional or conflicting provision(s) contained in any purchase order, acknowledgement, or other form of the Purchaser is hereby expressly objected to by Water Well Solutions and shall not modify this Work Agreement.

INTERPRETATION. This Work Agreement shall be governed and construed in accordance with the laws of the state of the job site location. If any term, provision or condition contained herein shall, to any extent, be invalid or unenforceable, pursuant to state law or otherwise, the remainder of the terms, provisions and conditions stated in the Work Agreement (or the application of such term, provision or condition to person or circumstances other than those in respect of which it is invalid or unenforceable) shall not be affected, and each term, provision and condition of this Work Agreement shall be valid and enforceable to the fullest extent permitted by law.

Water Well Solutions

Well Swaging: An Alternative Approach To Water Well Repair



"Extends Well Service Life and Improves Water Quality, While Minimizing Maintenance Costs and Service Downtime"

Repair Holes in Damaged & Deteriorating Casing:

- ❑ Our FDA approved Neoprene backing seals in damaged areas of the casing.
- ❑ It is effective in preventing sand intrusion & cascading water while improving water quality and production.

Minimum Interference:

- ❑ Our Swage patch is ¼" thick, meaning, the patch won't interfere with installation of the existing pumping equipment.
- ❑ Our lining repairs damaged casing without losing volume of the well.
- ❑ Well owners can keep existing pumping equipment.

Effective Alternative to Drilling a New Well:

- ❑ Swaging creates a long-lasting repair for Well Casing and Screens.
- ❑ Swaging is a cost effective and time efficient alternative to drilling a new well.

Improve Water Quality:

- ❑ Swage patches can be used in all types of well construction.
- ❑ The patch can line areas where there is undesirable water infiltration from holes in the well casing, to improve overall water quality.

Talk with an Expert Now! (888) 769-9009

Water Well Solutions Wisconsin, LLC.
N87 W36051 Mapleton Street
Oconomowoc, WI 53066

Water Well Solutions Illinois, LLC.
825 E. North Street
Elburn, IL 60119

VISIT US @ WWSSG.COM

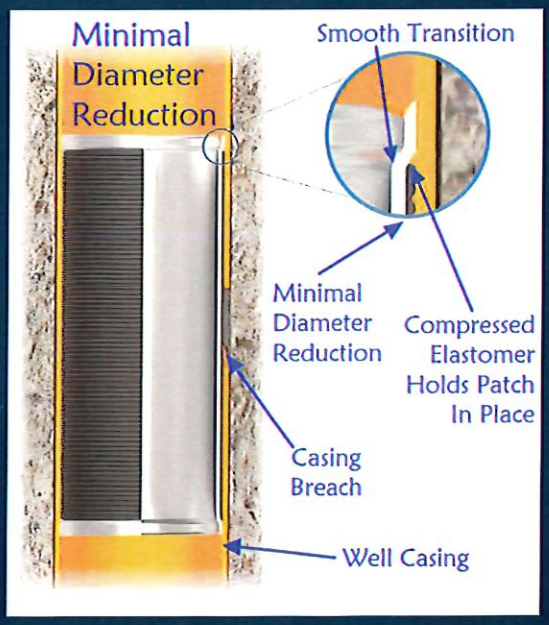
Water Well Solutions

Water Well Solutions

Well Swaging: An Alternative Approach To Water Well Repair

Patches are custom-designed for each specific well taking into consideration the minimum running diameter required, the necessary collapse resistance, the length needed as well as the well site characteristics. Patches are usually ¼-inch to ¾-inch thick and they can be up to 20ft.-long. They can also be welded in-line to form longer sections. The ends of a patch are uncoated to achieve a smooth tapered transition to the well casing to prevent hanging up on the patch when running pumps or other equipment.

In PVC and small diameter wells, short thin stainless-steel sleeves are used as patches to maintain needed clearance for passage below.



Water Well Solution's Swaging Well Casing Patch System is a cost-effective and long-lasting solution to repair and reline damaged areas of a well casing or well screen with minimal diameter loss and no cementing. This precision repair technology consists of inserting a patch - an expandable stainless-steel (SS) tube encased with a vulcanized FDA approved elastomer coating - into a well casing, running it to the desired depth and then applying it to the damaged area using a high-pressure inflatable packer. The inflatable packer is placed inside the patch at surface and once at depth, it inflates and exerts an outward force on the patch. Once the pressure exceeds the yield capacity of the SS tube, the patch expands in diameter until the neoprene backing is compressed between the steel patch and the well casing effectively sealing the damaged area. The patch creates a tight-fitting sleeve across the damaged area and works even on irregular surfaces thanks to its high-tolerance expansion.

This versatile technology can be used to solve many problems in both screen and rock wells, including broken casing, holes in casing or well screen, cascading water, sand pumping, contaminated water, or blocking areas of poor water quality.

"Cost-Effective Method to Permanently Repair and Re-Line Damaged Areas of a Well Casing or Screen"

Talk with an Expert Now! (888) 769-9009

Water Well Solutions Wisconsin, LLC.
N87 W36051 Mapleton Street
Oconomowoc, WI 53066

Water Well Solutions Illinois, LLC.
825 E. North Street
Elburn, IL 60119

VISIT US @ WWSSG.COM

Water Well Solutions

VILLAGE OF ALGONQUIN PURCHASE AGREEMENT - CONSTRUCTION (Small Projects – Labor & Materials)

Date: January, 19 2026 **Purchase Order No.**

Project:	**Location:**
Well number fifteen repairs	**39W180 Huntley Rd.**

Originating Department: Water Treatment

Owner	Contractor/Vendor	Architect/Engineer
Owner : Village of Algonquin **Address:** 2200 Harnish Dr Algonquin, IL 60102 **Phone:** 847-658-2754 **Fax:** 847-658-2759 **Contact:** Jason Meyer	Name: Water Well Solutions Illinois, LLC Address: 825 E North Street Elburn, IL 60119 **Phone:** 630-201-0749 **Fax:** 630-365-9069 **Contact: Todd Kerry**	Name: N/A Address: **Phone:** **Fax:** **Contact:**

PREVAILING WAGE NOTICE: This contract calls for the construction of a "public work," within the meaning of the Illinois Prevailing Wage Act, 820 ILCS 130/.01 *et seq.*, which requires contractors and subcontractors to pay laborers, workers and mechanics performing services on public works projects no less than the current "prevailing rate of wages" (hourly cash wages plus fringe benefits) in the county where the work is performed. The Department publishes the prevailing wage rates on its website at http://www.state.il.us/agency/idol/rates/rates.HTM. The Department revises the prevailing wage rates and the contractor/subcontractor has an obligation to check the Department's website for revisions to prevailing wage rates. All contractors and subcontractors rendering services under this contract must comply with all requirements of the Act, *including but not limited to*, all wage, notice and record keeping duties.

COST OF WORK: The Contract Price of the Work under this Purchase Agreement is $__76,500.00_____.

SCOPE OF WORK: Furnish the Work/items described below in accordance with the following plans and specifications:

Q General Contract, dated _____, 2026__ **Q Specification No(s): _____, dated _____, 2025__**

Q Plans dated : _____ **Q Addendum No(s): _____**

Q Other:_____

The following prices shall remain in effect for the duration of project:

QUANTITY	UNIT OF MEASURE	DESCRIPTION/ITEMS	LUMP SUM UNIT PRICE	EXTENSION
1	N/A	Labor and materials required to clean and repair the collapsed well casing at Well No. 15 due to well casing deterioration. The work includes removal of debris from the well and installation of a stainless-steel liner to reseal and restore the well.	$76,500.00	$_____
Project cost not to exceed $ 76,500.00			**TOTAL**	**$76,500.00**

NOTES:

1) _____

2) _____

WARRANTIES and INDEMNIFICATION: Contractor/Vendor agrees to provide the following warranties for the Work: (a) all workmanship to be warranted for a period of one (l) year - manufacturer warrants material; and (b) all other warranties contained elsewhere in the Contract Documents or Supplemental Conditions hereto. Further, **CONTRACTOR/VENDOR SHALL FULLY INDEMNIFY AND SAVE THE VILLAGE OF ALGONQUIN HARMLESS FROM ALL CLAIMS, LIENS, FEES, AND CHARGES, AND THE PAYMENT OF ANY OBLIGATIONS ARISING THEREUNDER, pursuant to the provisions in the Supplemental Conditions hereto.**

CONTRACT TIMES: Contractor/Vendor agrees to commence Work within forty-eight (48) hours of receipt of the Owner's Notice to Proceed, and to complete the Work no later than _____ (_____) days after commencing the Work. Time is of the essence.

THE TERMS OF THIS PURCHASE AGREEMENT AND THE ATTACHED SUPPLEMENTAL CONDITIONS ARE THE ENTIRE AGREEMENT BETWEEN THE VILLAGE/OWNER AND VENDOR. No payment will be issued unless a copy of this Purchase Agreement is signed, and dated and returned to the Owner. Material certifications/test reports required. All domestic material, unless otherwise specified. Purchase exempt from sales and/or use taxes.

ACCEPTANCE OF PURCHASE AGREEMENT: The parties, for themselves, their heirs, executors, administrators, successors and assigns, do hereby agree to the full performance of all terms and provisions herein contained. IN WITNESS WHEREOF, the parties hereto have executed this Purchase Agreement the day and year written below.

CONTRACTOR/VENDOR: **PURCHASER: Village of Algonquin**

_____

By: _____ Title:
Authorized Vendor Representative
Dated: _____

SUPPLEMENTAL CONDITIONS

1. **Acceptance of Purchase Agreement:** The Purchase Agreement is an offer to contract, buy or rent and not an acceptance of an offer to contract, sell or rent. Acceptance of this Purchase Agreement is expressly limited to the terms hereof, and in the event that Contractor/Vendor's acknowledgment or other response hereto states terms additional to or different from those set forth herein, this Purchase Agreement shall be deemed a notice of objection to such additional or different terms and rejection thereof. This Purchase Agreement may be accepted by the commencement of any Work hereunder or the delivery of any goods herein ordered, and, in any event, shall be deemed accepted in its entirety by Contractor/Vendor unless Owner is notified to the contrary within ten (10) days from its date of issue.

2. **Amendment, Modification or Substitution:** This Purchase Agreement contains the entire agreement between the parties. Any modification or rescission thereof must be in writing and signed by Owner. No proposals or prior dealings of the parties or trade custom not embodied herein shall alter the interpretation or enforcement of this Purchase Agreement.

3. **Familiarity With Plans; Qualifications:** Contractor/Vendor acknowledges that it (a) has examined the site of the proposed Work and is familiar with the conditions surrounding same; and (b) has examined the plans and drawings, and has studied and is aware of, and satisfied with, the requirements of the Contract Documents. Contractor/Vendor represents to Owner that it is fully experienced and properly qualified as an expert to perform the class of work provided for herein, and that it is properly equipped, organized and financed to handle such work. Contractor/Vendor shall finance its own operations hereunder, shall operate as an independent contractor and not as the agent of Owner, and shall hold Owner free and harmless from all liability, costs and charges by reason of any act or representations of Contractor/Vendor, its agents or employees.

4. **Workmanship; Safety:** All Work shall be performed by Contractor/Vendor in a neat, skillful and workmanlike manner, and all materials furnished by Contractor/Vendor shall be new and of the best description and quality of their respective kinds, unless otherwise specified and ordered by Owner in writing. All Work and/or materials shall be subject to the inspection and approval of the Owner, its engineers and representatives. Contractor/Vendor is responsible for its own and its employees' activities on the jobsite, including but not limited to, the methods of work performance, superintendence, sequencing of work, and safety in, on or about the jobsite area in which it is performing the Work under this Purchase Agreement. Owner and Contractor/Vendor shall not require any laborer or mechanic employed in performance of this Purchase Agreement to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous to his health or safety, as determined under applicable federal and Illinois construction safety and health standards

5. **Extra's and Change Orders:** No claim by Contractor/Vendor that any instructions, by drawing or otherwise, constitute a change in Contractor/Vendor's performance hereunder, for which Contractor/Vendor should be paid additional compensation shall be valid, unless prior to commencing such allegedly extra or changed performance, Contractor/Vendor shall have received a written supplement to this Purchase Agreement authorizing such performance signed on behalf of Owner by a person have actual authority to do so. No claim for additional compensation on the basis that Contractor/Vendor has incurred any expense by reason of any act or failure to act or Owner or its contractor, subcontractor, materialmen or any other party shall be valid unless made in writing within 30 days of the alleged act or failure to act and approved by Owner, provided, however, that if the Contractor/Vendor should be delayed in furnishing the articles, items, equipment or materials (hereinafter sometimes referred to as "goods") or services or Work (hereinafter sometimes referred to as "Work") ordered herein, by the omission, neglect or default of Owner, its agents or employees, Contractor/Vendor shall be entitled to no additional compensation or damages for such delay, and shall be entitled only to an extension of time for a period equal to the time lost as a result of the aforesaid causes, determined by Owner. Any charges for extra not so authorized will not be paid.

6. **Inspection and Acceptance:** Owner shall have the right at all reasonable times to inspect and test all goods, materials or Work furnished by Contractor/Vendor and all Work performed or furnished by Contractor/Vendor. Notwithstanding any prior inspection, the passage of title or any prior payment, all goods, material and Work furnished thereunder are subject to final inspection and acceptance by Owner at its job site. If, after inspection, Owner rejects any goods furnish by Contractor/Vendor thereunder, Owner may, at its election, return those goods to Contractor/Vendor at Contractor/Vendor's expense, including the cost of any inspection and testing thereof. If Contractor/Vendor fails to proceed promptly with the correction or replacement of any rejected goods or Work, Owner may replace or correct such items or Work by purchase or manufacture and charge the cost incurred thereby to Contractor/Vendor or terminate this Purchase Agreement for default in accordance with paragraph 12 herein. By inspecting and not rejecting any goods and Work furnished thereunder, Owner shall not be precluded thereby from subsequently revoking its acceptance thereof it the goods or Work are later discovered to be nonconforming with this Purchase Agreement or the specifications and drawings applicable hereto, even if the defect does not substantially impair value to Owner.

7. **Taxes, Delivery, Risk of Loss:** Unless indicated to the contrary on the face hereof, it shall be the responsibility of Contractor/Vendor to arrange for and complete delivery of all goods or materials. If the goods or materials furnished thereunder are equipment, Contractor/Vendor shall give Owner two (2) working days' advance notice of delivery. All goods or materials furnished by Contractor/Vendor should be shipped in the manner and at the times indicated on the face hereof at the expense of Contractor/Vendor,

it being understood that the risk of loss with respect to such goods is with Contractor/Vendor until such goods come into the actual possession of Owner, regardless of the mode of delivery or earlier passage of title. This project is tax exempt. The Owner's tax-exempt number is **E 9995 0855 05**.

8. Payment: Owner will make partial payments to the Contractor/Vendor from time to time for the Work performed and the materials furnished by the Contractor/Vendor. Provided, however, in no event shall Owner be obligated to pay Contractor/Vendor any sum that exceeds the Contract Price absent a written change order executed by Owner.

8.1 Prior to issuance of any payments by the Owner to the Contractor/Vendor, the Contractor/Vendor shall furnish to the Owner (in a form suitable to the Owner) an application for the payment then due, together with receipts, waivers of claim and other evidence showing the Contractor/Vendor's payments for materials, labor and other expense incurred in the Contractor/Vendor's Work hereunder. The Owner will, at all times, be entitled to retain ten percent (10%) of all monies due and owing to the Contractor/Vendor as a part security for the faithful performance of this Agreement. This ten percent (10%) so withheld will not be paid to the Contractor/Vendor until the Owner has issued to the Contractor/Vendor a final acceptance of the Project.

8.2 Owner may withhold the whole or any part of any payment due to the Contractor/Vendor to the extent necessary to protect and indemnify the Owner from loss on account of (a) defective Work not remedied; (b) claims filed or reasonable evidence indicating probable filing of claims; (c) failure of the Contractor/Vendor to make payments promptly for material or labor; or (d) Contractor/Vendor's failure to furnish Owner with all written warranties and operational manuals for the Work.

8.3 Contractor/Vendor hereby authorizes the OWNER (1) to deduct from any amount due or becoming due the Contractor/Vendor under this Agreement for all amounts owing from the Contractor/Vendor to (a) the Owner for back-charges or services furnished for the account of the Contractor/Vendor; (b) the Owner for damages sustained whether through negligence of the Contractor/Vendor or through failure of the Contractor/Vendor to act as may be otherwise detailed herein; (c) materialmen; (d) subcontractors; (e) laborers; and (f) others for services and materials furnished to the Contractor/Vendor for the Work performed under this Agreement, and (2) to apply the amount so deducted to the payment of said materials, services, damages or back-charges applying such monies so available in the Agreement hereinbefore set forth.

8.4 Owner, without invalidating this Agreement, may make changes by altering, adding to or deducting from the Work to be performed. The value of any such changes will be determined as follows: (a) by the unit prices named in this Agreement, if any; or (b) by agreement in writing between the Owner and the Contractor/Vendor as to the value of the time and materials for the changes in the Work. In any event, the Contractor/Vendor will keep and present, in any form as the Owner may direct, a correct account of the net cost of any extra labor and materials, together with vouchers referring to the same.

8.5 Notwithstanding the payment in full for the Work hereunder, the Contractor/Vendor will be liable to repair or replace any imperfect workmanship or other faults; and if the Contractor/Vendor fails to repair or replace the imperfect workmanship or other faults, the Owner may do the Work and recover from the Contractor/Vendor the cost and expense thereof. No payment on account will be construed or considered as an approval of the Work for which payment is made.

9. Contractor/Vendor Warranty: Contractor/Vendor warrants in addition to all warranties which are imposed or implied by law or equity that all materials and Work furnished thereunder (a) shall confirm to any specifications and drawings applicable to this Purchase Agreement; (b) shall be merchantable and of good quality and workmanship; (c) shall be fit for the purpose intended as well as the propose for which such goods, materials or Work are generally used; and (d) except for rented equipment, shall be free from defects for a period of one (1) year, or such longer period as is specified in the Scope of Work or Contract Documents, from the date such Work is performed or such materials are utilized or installed, and if installed as part of a structure or utilized equipment, for one (1) year or such longer period as is specified in the Contract Documents, from the date any such goods, materials or Work hereunder is accepted in writing by Owner. Contractor/Vendor expressly agrees that the statute of limitations with respect to Contractor/Vendor's warranties shall begin to run on the date of acceptance by Owner.

10. Insurance and Bonds:

10.1 Contractor/Vendor shall at all times maintain business automobile, commercial liability and workers compensation insurance covering its work and all obligations under this Purchase Agreement, and shall name the Owner as an additional insured on its commercial liability insurance policies for Contractor/Vendor operations under this Purchase Agreement. Liability insurance limits shall be in such amounts and include such coverages as set forth in the VILLAGE OF ALGONQUIN PURCHASE ORDER INSURANCE REQUIREMENTS attached to this Agreement. Contractor/Vendor shall furnish the Village with a certificate of insurance and such other documentation (including a copy of all or part of the policy) to the Village at the time of execution of this Agreement and thereafter on an annual basis on the anniversary date of this Agreement or at any other time as the Village deems necessary to establish compliance with this provision.

10.2 Contractor/Vendor shall furnish and pay for surety bonds and with surety or sureties satisfactory to Owner, guaranteeing the full performance of all of the conditions and terms hereof and guaranteeing that Contractor/Vendor shall promptly pay for all labor, materials, supplies, tools, equipment and other charges or costs of Contractor/Vendor in connection with the Work. Such performance and payment bond shall be in an amount determined by Owner.

10.3 Breach of this paragraph is a material breach subject to immediate termination.

11. Indemnity: Contractor/Vendor hereby agrees to indemnify, and hold the Owner, its directors, officers, employees, successors and assigns harmless from any and all claims, demands, liability, loss, damage, fines, penalties, attorney's fees and litigation expenses (collectively "Loss") arising out of injury to, including the death of, persons and/or damage to property, to the extent caused by the negligent acts or omissions of the Contractor/Vendor or those working at their direction.

Further:

11.1 Contractor/Vendor acknowledges that should any items or Work furnished hereunder prove defective, including damage to Owner supplied or constructed items, equipment or machinery, or if Contractor/Vendor is charged with any violation of any state or federal laws or regulations, the Owner shall be entitled to recover damages for breach of this Agreement, including but not limited to consequential damages, penalties, taxes or assessments (including punitive damages), costs and attorney's fees.

11.2 In any and all claims against Owner or any of its agents or employees, by any employee of Contractor/Vendor, the indemnification obligation under this paragraph shall not be limited by any limitation on the amount or type of damages, compensation or benefits payable by or for Contractor/Vendor under workers compensation acts, disability benefits acts or employee benefit acts, or other applicable law. Contractor/Vendor assumes the entire liability for its own negligence, and as part of this Agreement waives all defenses available to Contractor/Vendor as an employer which limit the amount of Contractor/Vendor's liability to Owner to the amount of Contractor/Vendor's liability under any workers compensation, disability benefits or employee benefit laws.

12. Patents: Contractor/Vendor warrants that (a) goods furnished thereunder, and the sale and use thereof, shall not infringe any valid United States patent or trademark; and (b) Contractor/Vendor shall indemnify Owner for its costs to defend any suit instituted against Owner, its agents or customers, charging infringement of any United States patent or trademark by virtue of the possession, use or sale of any goods furnished thereunder is enjoined because of patent infringement. Contractor/Vendor within a reasonable amount of time shall at Contractor/Vendor's expense procure for Owner its agents or customer, the right to continue using such goods with non-infringing goods or modify such goods so that they become non-infringing or remove such goods and refund to Owner any sums paid therefore, including transportation and installation charges.

13. Cancellation: Time of delivery of this Purchase Agreement is of the essence and Owner may, by written notice of default to Contractor/Vendor, cancel the whole or any part of this Purchase Agreement (a) if Contractor/Vendor fails to make delivery of the goods or perform the services within the time specified herein or any extensions thereof; or (b) if Contractor/Vendor fails to perform or so fails to make progress as to endanger performance thereunder, and in either circumstance does not cure such failure within a period of two (2) days after receipt of notice from Owner specifying such failure. Owner, by written notice to Contractor/Vendor, may cancel the whole or any part of this Purchase Agreement when it is in the best interest of Owner or when Owner has been notified of modification of the specifications pertaining thereto. If this Purchase Agreement is so canceled, the Contractor/Vendor shall be compensated as follows: (a) for materials delivered and services performed, the reasonable value as part of the Contract Price; (b) for materials not identified to this Purchase Agreement and service not performed, no compensation; and (c) for Contractor/Vendor's lost profits or incidental or consequential loss, no compensation.

14. Remedies: Contractor/Vendor shall, for the duration of its warranties under paragraph 9 herein, at the discretion of Owner and at the expense of Contractor/Vendor, replace, repair and insure any and all faulty or imperfect goods, materials or Work furnished or performed by Contractor/Vendor thereunder. In the event Contractor/Vendor fails to do so, Owner may furnish or perform the same, and may recover from Contractor/Vendor the cost and expense directly or indirectly resulting there from, including all consequential damages but not limited to the cost or expense of inspection, testing, removal, replacement, re-installation, destruction of other materials resulting there from, any increased cost or expense to Owner in its performance under contracts with others, and reasonable attorneys fees incurred by the Owner in connection with Vendor's default and Owner's enforcement of its rights under this Purchase Agreement. The foregoing remedies shall be available in addition to all other remedies available to Owner in equity or at law including the Uniform Commercial Code.

15. Compliance With Laws: During the performance hereunder, Contractor/Vendor agrees to give all notices and comply with all Laws and Regulations of the United States and/or the State of Illinois applicable to the performance of the Work, including but not limited to those Laws and Regulations regarding the payment of prevailing wages, non-discrimination laws, employment of Illinois workers, labor, wage and collective bargaining. Except where otherwise expressly required by applicable Laws and Regulations, Owner shall not be responsible for monitoring Contractor/Vendor's compliance with any Laws or Regulations.

16. Notices: All notices, demands, requests or other communications which may be or are required to be given, served, or sent by any party to any other party pursuant to this Purchase Agreement shall be in writing and shall be hand delivered, or sent by courier, or via facsimile with confirmation to the addresses shown on the Purchase Agreement.

17. Records, Reports and Information: Contractor/Vendor agrees to furnish Owner with reports and information regarding the Work performed under this Purchase Agreement, at such times as Owner may reasonably request, making full disclosure of efforts made by Contractor/Vendor and the results thereof. Contractor/Vendor agrees to maintain records, documents, and other evidence which will accurately show the time spent and Work performed under this Purchase Agreement for a minimum period of five (5) years after completion of the Work, and such records shall be subject to audit by the Owner upon reasonable advance notice to Contractor/Vendor on a mutually agreed date and time.

18. Tobacco Use: Contractor/Vendor, and its agents or employees, shall refrain from smoking, or the use of any tobacco, on designated Village campuses, both indoors and outdoors, in Village-owned vehicles and in privately-owned vehicles parked on campus property at any time, including non-working hours. Designated Village campuses consist of the William J. Ganek Municipal Center, Historic Village Hall, Public Works Facility, Wastewater Treatment Plant, Water Treatment Plants, and Pumping Stations. Leaving the remains of tobacco products or any other related waste product on Village property is further prohibited.

19. Assignment: Contractor/Vendor shall not assign this Purchase Agreement without written consent of Owner. Owner may unilaterally assign its rights under this Purchase Agreement upon reasonable notice to Contractor/Vendor.

20. Waiver: Either party's failure to insist in any one or more instances, upon the strict performance of any provision hereof or to exercise any right hereunder shall not be deemed to be a waiver or relinquishment of the future performance of any such provision or the future exercise of such right, but the obligation of Contractor/Vendor and Owner with respect to such future performance shall continue in full force and effect.

21. Controlling Law, Severability: The validly of this Purchase Agreement or any of its provisions and the sufficiency of any performance thereunder shall be determined under the laws of Illinois. Venue shall be in McHenry County, Illinois. The Owner is entitled to recover its reasonable attorneys' fees incurred in enforcing the terms of this Purchase Agreement. If any provision or requirement of this Purchase Agreement is declared or found to be unenforceable that balance of this Purchase Agreement shall be interpreted and enforced as if the unenforceable provision or requirement was never a part hereof.

22. Arbitration. Any controversy or claim arising out of or relating to this Purchase Order, or the breach thereof, shall be settled by binding arbitration administered by the American Arbitration Association under its Construction Industry Arbitration Rules or JAMS Dispute Resolution, as determined in the exclusive discretion of the Owner, at the Village of Algonquin Village Hall or Public Works Department, and judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. The parties agree that an arbitration award by default may be entered upon the party failing to appear or defend itself in any arbitration proceeding.

23. Recovery of Fees. In the event of arbitration of this Purchase Order between the parties, or litigation of this Purchase Order, the non-prevailing party, as determined by the arbiter or court, shall pay all expenses incurred by the prevailing party, including, but not limited to (a) attorneys' fees, (b) filing costs, (c) witness fees, and (d) other general expenses of arbitration or litigation.

CONTRACTOR/VENDOR:

_____ Date _____

VILLAGE OF ALGONQUIN
PUBLIC WORKS DEPARTMENT

– M E M O R A N D U M –

DATE: 02/10/2026

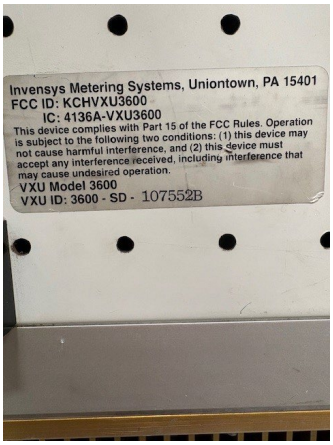
TO: Tim Schloneger, Village Manager
Michael Kumbera, Assistant Village Manager, CFO

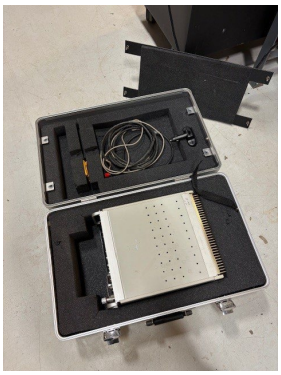
CC: Nadim Badran, Public Works Director

FROM: Michael Reif, Internal Services Supervisor

SUBJECT: Items to Be Deemed Surplus

Make: Invensys Metering System
Model: 3600
ID/VIN: 3600-SD-107552B
Description:

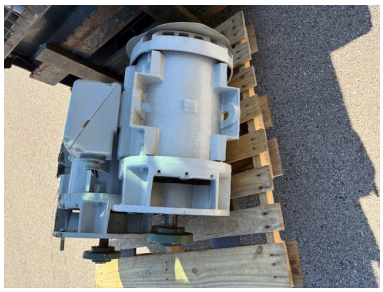




Description: Old Couch from Tim's Office

Make: Ultra Mag.
Model: UM06-10-R6
ID/VIN: UM20040163
Description: Old flowmeter from WWTP

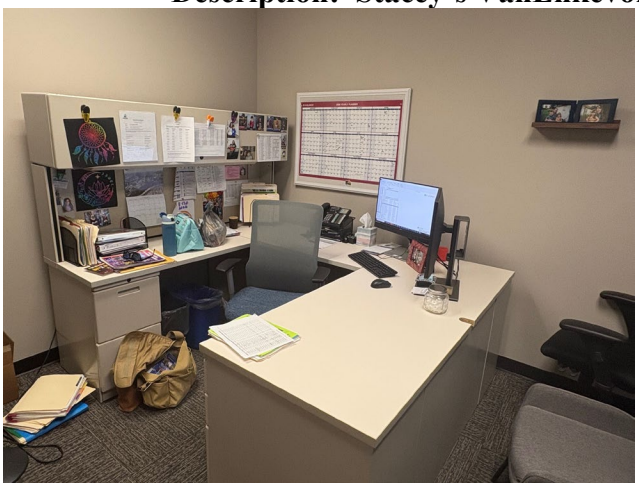
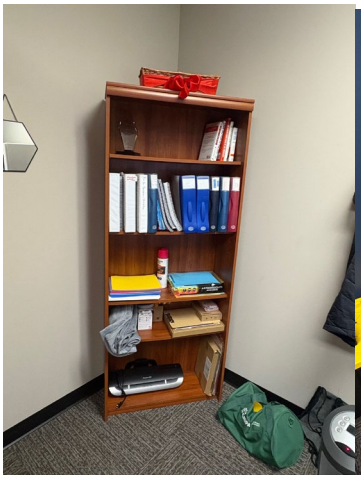
Description: Miscellaneous Motors, motors left over from upgrades at the WWTP.



Description: Tim's Old Desk and office furniture.

Description: Michelle's old Desk and office furniture.

Unit #:
Year:
Make:
Model:
ID/VIN:
Description: Stacey's VanEnkevort's old desk and office furniture.

Description: Old pump flowmeter and pipe left over from WWTP upgrades.

Description: Dewatering pumps left over from WWTP upgrades.

Description:3 motors and flow tubes left over from WWTP upgrades.

Description: 3 rotating assemblies and chemical injector old parts after WWTP upgrades.

Description: Plastic hose and chain (in the box), left over from WWTP upgrades.

Description: MCC cabinet removed during upgrades at WWTP.

Description: Mixer shroud replaced during WWTP upgrades.

Description: Pump volute replaced during WWTP upgrades.

Description: Rotating assembly replaced during WWTP upgrades.

Description: Old trash pump parts and submersible pump all inoperable (scrap).