2023 Progress Report City of Grand Rapids

General information

Were any new municipal facilities added to your jurisdiction in 2023 that have stormwater infrastructure?

No new municipal facilities have been added.

Did you identify or construct any new outfalls or points of discharge?

No new outfalls or points of discharge have been added.

Enforcement Actions

The enforcement response procedure and form to be filled out in case of an unauthorized discharge can be found in your Stormwater Management Plan (SWMP). SWMPs are saved under your community name on LGROW's website.

Were there any enforcement actions taken in 2023? This includes fines, citations, stop work orders.

Yes.

If yes, please explain:

Inspectors issued 37 "Notice of Violations" and 6 "Corrective Action Orders." The violations were issued for standard soil erosion infractions (lack of erosion controls like silt sacks or silt fence, or for offsite tracking). Corrective Action Orders are for when they fail to address notice of violations in a timely fashion or if the initial violation is egregious. No instances of violations with any direct discharges to waters of the state occurred.

Specific records for violations are kept with ESD staff and available upon request.

Illicit Discharges

How many illicit discharges were detected in 2023?

One (1) reportable Illicit Discharge

Explain each illicit discharge and action taken to investigate/clean up each discharge:

Personal Vehicle Oil Changes in the Street – Unknown Perpetrator. Mailings were sent to homes in the area about proper vehicle maintenance. City crews cleaned small level of oil on street and in sump of catch basin.

Were all illicit discharges detected eliminated?

Yes

How many illicit discharges led to enforcement action?

0

Soil Erosion and Sedimentation Control (Part 91)

Were there any changes made to your SESC program in 2023? (ex. change in Part 91 status as an APA or MEA):

Were there any issues identified in 2023 under the SESC program on construction sites under your jurisdiction? If so, please explain:

No significant changes were made to the SESC program. Overall, 2,494 soil erosion inspections were completed by 3 full-time inspectors. The inspectors are certified as construction stormwater operators and have soil erosion plan review and design certifications. There were a total of 570 Plan reviews completed with 121 Land Use Development Permits (LUDS) SESC permits issued.

Post Construction Control (Development and Redevelopment)

How many developments were approved under the new stormwater ordinance?

90

Were any maintenance agreements signed?

No projects were substantially complete in 2023 that required a maintenance agreement.

How are you tracking signed maintenance agreement requirements?

Maintenance agreements are tracked through our permitting processing software "Accela" and are part of the project closeout process.

Facilities

Were any new facilities that the municipality is responsible for added in 2023? You can view your facility inventory under your community name on LGROW's website (Appendix 6 Facility Inventory).

No new facilities were added in 2023.

Inspections are documented in cityworks/Accela and available upon request.

Street Sweeping

Did you perform street sweeping?

 \boxtimes Yes \square No

The Public Services Department for the City of Grand Rapids completed 5 total street sweeping cycles in 2023. An additional two cycles were completed on major streets for a total of 5 passes. There was 3,575 tons of material disposed of in 2023.

Catch Basin Cleaning

Please submit a log of catch basin inspections, cleaning, or invoices if you contracted this work out.

This work is completed by City of Grand Rapids Environmental Services staff, metrics are recorded monthly through CityWorks program and are reported out quarterly at Stormwater Oversight Commission.

Did you inspect catch basins?
⊠Yes □No
How many? 3,716 Catch Basins were cleaned in 2023

Road Work

During <u>road</u>, <u>parking lot</u>, <u>sidewalk and right-of-way maintenance</u> were BMPs implemented to prevent or reduce pollutant runoff during maintenance?

Yes.

Is the municipality responsible for any <u>bridge maintenance</u>? If so, were BMPs implemented to prevent or reduce pollutant runoff during maintenance?

Yes.

Is the municipality responsible for any <u>unpaved roads</u>? If so, were BMPs implemented to prevent or reduce pollutant runoff for unpaved roads?

No.

Is the municipality responsible for any <u>plowing and salting</u>? If so, were BMPs implemented to prevent or reduce pollutant runoff during winter operations? Please explain.

Yes, the City utilizes the following practices: de-icing, pre-wetting, truck calibration, and street prioritization. They are also piloting temperature sensors in some streets and are looking to order trucks with GIS tracking of salt usage.

Is the municipality responsible for <u>washing vehicles</u> (ex: trucks, police cars, school buses)? If so, were BMPs implemented to prevent or reduce pollutant runoff during washing? Please explain.

Yes-the City has an indoor carwash facility with the discharge connected to the sanitary sewer.

Industrial Program

Industrial inspections: 31 Industrial Inspections were completed in 2023 at the prescribed priority levels with no violations issued.

Link to City SW Ordinance that references industrial inspections:

https://library.municode.com/mi/grand_rapids/codes/code_of_ordinances?nodeId=TITISE_CH32CIST_DRSY_ART2STSYUS_S2.213PRDR Sec. 2.213(4)

Training

Was any training completed in 2023 that you would like to report on behalf of your staff to EGLE? (Conferences, seminars, or PDH's you wish to report for you or your staff.)

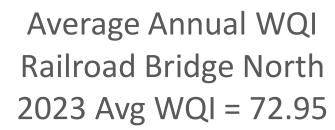
West Michigan Soil Erosion Network – Flocculants and other SESC Items – 3/2/23

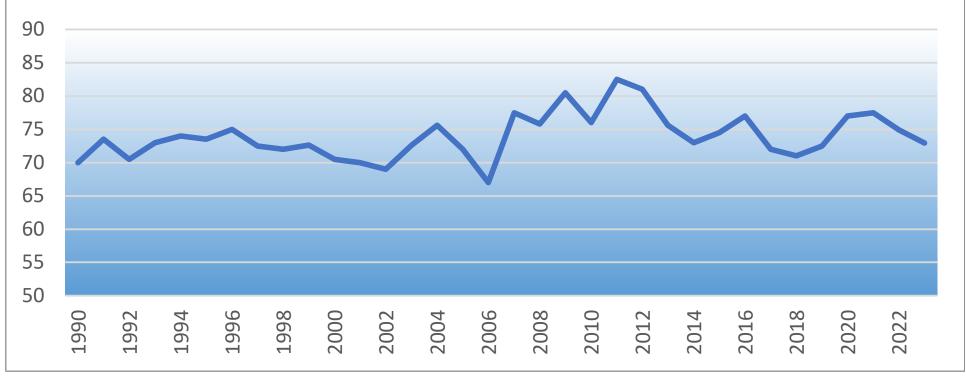
06/09/2023 MS4 Meeting at LGROW Spring Forum

EGLE Green Infrastructure Conference – Kalamazoo 9/20/23

WEFTEC - Chicago - October 1-4th

Healing Our Waters – Great Lakes – Cleveland Oct 11th -14th





QUARTERLY RIVER SURVEY F	REPOR	RT	March 14, 2023 CITY OF GRAND RAPIDS EPS							PSD						
Grand River	Time	Temp	DO	рН	BOD	TSS	FC	E	с с	nloride	Cond	TP	NH3-N	NO2-N	NO3-N	
2023-0390-01 Northland Drive Bridge (250120)	09:30	3.2	13.4	8.5	<2.0	6.1	15			61		< 0.05			4.39	
2023-0390-02 Wealthy Street Bridge (250090)	11:01	3.2	13.9	8.1	<2.0	6.5	28			66		< 0.05			4.02	
2023-0390-03 Railroad Bridge South (250070)	10:51	3.1	12.7	7.8	<2.0	6.7	29			82		0.08			4.34	
2023-0390-04 Railroad Bridge North (250071)	10:57	3.1	12.8	8.1	<2.0	6.3	25			69		<0.05			4.26	
2023-0390-05 M-11, Wilson Avenue (250062) Eastmanville (250040)	10:26	3.1	12.8	7.8	<2.0	6.7	27			72		0.06			4.25	
Streams	Time	Temp	DO	рН	BOD	TSS	FC	E	с с	nloride	Cond	TP	NH3-N	NO2-N	NO3-N	R
Rogue River at West River Drive																
2023-0390-08 Mill Creek at West River Drive	10:15	1.9	15.9	8.2	<2	3.7	4			52		<0.05			1.94	V
2023-0390-09 Indian Mill Creek at Turner Avenue Silver Creek at Croften/Roy	10:38	2.9	14.5	7.6	<2	<2.0	51			220		<0.05			1.55	er
2023-0390-11 Plaster 1 at Burton	08:45	2.2	12.6	8	<2	3.2	77			630		<0.05			0.91	
2023-0390-12 Plaster 2 at Market	11:17	2.4	14.1	7.7	<2	6.6	88			560		<0.05			0.98	S
2023-0390-13 Buck Creek at Chicago Drive	09:05	3.2	12.2	7.6	<2	3	47			530		< 0.05			1.07	
2023-0390-14 Deer Creek Coldbrook Storm Drain	09:55	1.1	12.7	8	<2.0	3.9	133			130		0.07			4.31	ľ
												Mis	scellaneous	Information		ve
							_				Field '	her Condit Technician				y
Grand River	Cr	Cu	Fe	Hg	Ni	4	Ag	Zn	Hard							
Northland Drive Bridge (250120)										76.0			_ Test Desc	riptions		${\mathcal R}$
Wealthy Street Bridge (250090)										76.4		(hh:mm)				e
Railroad Bridge South (250070) Railroad Bridge North (250071)										76.6 76.6		erature (°	'C) Oxygen (mg/	1.)		O
M-11, Wilson Avenue (250062)										76.6 77.2	pH (p	H units)	,, ,	,		0
Eastmanville (250040)										0.0	TSS: FC: F	Total Susp ecal Colife	ended Solid orm (#FC/100	sygen Deman s (mg/L) Oml)	d (mg/L)	port
Streams	Cr	Cu	Fe	Hg	Ni		Ag	Zn	Hard	WQI	Chlor	.coli (#EC ride (mg/L)			
Rogue River at West River Drive				9		•	9			0.0	Cona	l uctivity (เ otal Phosp	įS/cm) horous (mg/	L)		
Mill Creek at West River Drive										83.1	NH3-I	N: Ammon	ia as nitroge	n (mg/L)		
Indian Mill Creek at Turner Avenue										76.8			ıs nitrogen (r as nitrogen (
Silver Creek at Croften/Roy										59.6	Cr: To	otal Chrom	ium (ųg/L) `	9, = /		
Plaster 1 at Burton										70.4		otal Coppe otal Iron (u				
Plaster 2 at Market										70.4	Hg: To	otal Mercu	ry (ųg/L)			
Buck Creek at Chicago Drive										72.0		otal Nickel otal Silver				
Deer Creek										69.7	Zn: To	otal Zinc (ι	įg/L)			
Coldbrook Storm Drain										0.0		, ,	L as CaCO ₃)			
											wQI:	vvaler Qua	ality Index (p	ercent)		

QUARTERLY RIVER SURVEY	IVER SURVEY REPORT May 9, 2023								CITY OF GRAND RAPIDS EPSD							
Grand River	Time	Temp	DO	рН	BOD	TSS	FC	E	C Ch	oride	Cond	TP	NH3-N	NO2-N	NO3-N	
2023-0733-01 Northland Drive Bridge (250120)	09:00	15.8	9.75	8.6	<2.0	9.5	40			41		0.05			1.3	
2023-0733-02 Wealthy Street Bridge (250090)	11:07	15.8	10.9	8.6	<2.0	8.9	115			40		<0.05			1.2	
2023-0733-03 Railroad Bridge South (250070)	10:37	15.3	9.32	8.4	<2.0	11.4	140			49		0.07			1.3	
2023-0733-04 Railroad Bridge North (250071)	10:33	15.4	9.41	8.3	<2.0	11.6	140			46		0.12			1.5	
2023-0733-05 M-11, Wilson Avenue (250062) Eastmanville (250040)	10:13	15.4	9.3	8.6	<2.0	11.9	133			47		0.09			1.5	
Streams	Time	Temp	DO	рН	BOD	TSS	FC	E	C Ch	oride	Cond	TP	NH3-N	NO2-N	NO3-N	
Rogue River at West River Drive																
2023-0733-08 Mill Creek at West River Drive	09:50	12.3	11.3	8.4	<2	2	79			45		<0.05			1.1	
2023-0733-09 Indian Mill Creek at Turner Avenue Silver Creek at Croften/Roy	10:21	12.3	12.7	8.5	<2	<2.0	152		•	100		<0.05			1.4	
2023-0733-11 Plaster 1 at Burton	08:39	13.6	8.41	8	<2.0	5	365			150		<0.05			0.67	
2023-0733-12 Plaster 2 at Market	11:25	14.2	10.6	8	<2.0	3.2	461		•	150		<0.05			0.78	
2023-0733-13 Buck Creek at Chicago Drive	09:00	13.4	8.62	8.4	<2.0	4	517			140		<0.05			0.69	
2023-0733-14 Deer Creek Coldbrook Storm Drain	09:45	14.3	7.07	8.1	<2.0	3.9	249			41		0.1			2.8	
											_	Mi:	scellaneous	Information	·	
												her Condit				
Grand River	Cr	Cu	Fe	Hg	Ni		Ag	Zn	Hard	WQI	1 1014	roominoidi				
Northland Drive Bridge (250120)										78.0			_ Test Desc	riptions		
Wealthy Street Bridge (250090)										74.1	Time	(hh:mm)				
Railroad Bridge South (250070)										74.6		oerature (°				
Railroad Bridge North (250071)										74.7		Dissolved (oH units)	Oxygen (mg/	L)		
M-11, Wilson Avenue (250062)										73.5	BOD	: 5-day Bio		ygen Demar	d (mg/L)	
Eastmanville (250040)										0.0	TSS:	Total Susp	pended Solid orm (#FC/100	s (mg/L)		
											EC: E	E.coli (#EC	5/100ml)	Jiiii)		
Streams	Cr	Cu	Fe	Hg	Ni		Ag	Zn	Hard	WQI		ride (mg/L luctivity (u				
Rogue River at West River Drive				_			_			0.0			horous (mg/	L)		
Mill Creek at West River Drive										75.0			nia as nitroge as nitrogen (r			
Indian Mill Creek at Turner Avenue										70.8			as nitrogen (i as nitrogen (
Silver Creek at Croften/Roy										64.6	Cr: To	otal Chrom	nium (yg/L) 🗋	,		
Plaster 1 at Burton										71.0	Fe: T	Total Coppe otal Iron (u	er (ųg/L) ia/L)			
Plaster 2 at Market										71.3	Hg: T	Total Mercับ	iry (ųg/L)			
Buck Creek at Chicago Drive										68.6		otal Nickel 「otal Silver				
Deer Creek										67.7	Zn: T	otal Zinc (เ	ųg/L)			
Coldbrook Storm Drain										0.0		, ,	L as CaCO ₃)			
											WQI:	vvater Qu	ality Index (p	ercent)		

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-N	NO3-N	R
	1.25 0.93	ive
	0.6 0.44 0.46 1.31	r Sui
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mand	(mg/L)	Report
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Crand River Time Temp DO PH BOD TSS FC EC Chloride Cond TP NH3-N NO2-N NO3-N	QUARTERLY RIVER SURVEY REPORT August 15, 2023								CITY OF GRAND RAPIDS EPSD							
2023-1255-02 Wealthy Street Bridge (250090) 10-41 21.4 8.1 8.2 <2 3.9 649 46 <0.05 1.1	Grand River	Time	Temp	DO	рН	BOD	TSS	FC	EC	Cł	loride	Cond	TP	NH3-N	NO2-N	NO3-N
2023-1255-02 Wealthy Street Bridge (250090) 10-41 21.4 8.1 8.2 <2 3.9 649 46 <0.05 1.1	2023-1255-01 Northland Drive Bridge (250120)	10:05	21.9	7	8	<2	4.3	276			41		< 0.05			1.1
2023-1255-04 Railroad Bridge North (250071) 10.46 21.2 8.27 8.1 < 2.0 10.7 2420 51 0.08 1.16		10:41	21.4	8.1	8.2	<2	3.9	649			46		< 0.05			1.1
2023-1255-05 M-11, Wilson Avenue (250062) 10:30 21.2 8.38 8.1 <2.0 11.6 >2419.6 51 0.08 1.2	2023-1255-03 Railroad Bridge South (250070)	10:51	20.9	8.22	8.1	<2.0	22	>2419.6			47		0.09			1.01
Streams	2023-1255-04 Railroad Bridge North (250071)	10:46	21.2	8.27	8.1	<2.0	10.7	2420			51		80.0			1.16
Rogue River at West River Drive 2023-1255-08 Mill Creek at West River Drive 09:20 16.8 8.7 8.2 3.1 104 >2419.6 35 0.26 1.25 2023-1255-09 Indian Mill Creek at Turner Avenue 09:03 17.7 8.3 7.8 2.8 40.9 >2419.6 38 0.17 0.93	, ,	10:30	21.2	8.38	8.1	<2.0	11.6	>2419.6			51		0.08			1.2
2023-1255-08 Mill Creek at West River Drive 09:20 16.8 8.7 8.2 3.1 104 >2419.6 35 0.26 1.25	Streams	Time	Temp	DO	рН	BOD	TSS	FC	EC	Cł	loride	Cond	TP	NH3-N	NO2-N	NO3-N
2023-1255-09 Indian Mill Creek at Turner Avenue Silver Creek at Croften/Roy Silver Creek at Burton Silver Creek at Silver Creek Silver Creek at Silver Creek Silver Cree	Rogue River at West River Drive															
Silver Creek at Croften/Roy 2023-1255-11 Plaster 1 at Burton 08:26 19.6 7.46 7.8 3.9 127.2 >2419.6 52 0.29 0.6 2023-1255-12 Plaster 2 at Market 08:24 19.7 7.6 7.8 4.3 125.2 24070 39 0.28 0.44 2023-1255-13 Buck Creek at Chicago Drive 08:58 19.2 7 7.6 3 23.6 >2419.6 27 0.11 0.46 2023-1255-14 Deer Creek 09:56 18.8 7.5 8.1 2.5 51.5 >2419.6 44 0.28 1.31 0.46 2023-1255-14 Deer Creek 09:56 18.8 7.5 8.1 2.5 51.5 >2419.6 44 0.28 1.31 0.46 2023-1255-14 Deer Creek 09:56 18.8 7.5 8.1 2.5 51.5 >2419.6 44 0.28 1.31 0.46 2023-1255-14 Deer Creek 09:56 18.8 7.5 8.1 2.5 51.5 >2419.6 44 0.28 1.31 0.28 1.31 0.28 0.29 0.6 0	2023-1255-08 Mill Creek at West River Drive	09:20	16.8				104	>2419.6			35		0.26			1.25
2023-1255-12 Plaster 2 at Market		9 09:03	17.7	8.3	7.8	2.8	40.9	>2419.6			38		0.17			0.93
2023-1255-13 Buck Creek at Chicago Drive 08:58 19.2 7 7.6 3 23.6 >2419.6 27 0.11 0.46	2023-1255-11 Plaster 1 at Burton	08:26	19.6	7.46	7.8	3.9	127.2	>2419.6			52		0.29			0.6
2023-1255-14 Deer Creek	2023-1255-12 Plaster 2 at Market	08:24	19.7	7.6	7.8	4.3	125.2	24070			39		0.28			0.44
Coldbrook Storm Drain Miscellaneous Information	2023-1255-13 Buck Creek at Chicago Drive	08:58	19.2	7	7.6	3	23.6	>2419.6			27		0.11			0.46
Weather Conditions: Field Technicians: Weather Conditions: Field Technicians: Weather Conditions: Field Technicians: Weather Conditions: Field Technicians:		09:56	18.8	7.5	8.1	2.5	51.5	>2419.6			44		0.28			1.31
Field Technicians: Field T													Mi:	scellaneous	Information	1
Northland Drive Bridge (250120) Northland Drive Bridge (250120) Wealthy Street Bridge (250090) Railroad Bridge South (250070) Railroad Bridge North (250071) M-11, Wilson Avenue (250062) Eastmanville (250040) Streams												Weatl	her Condit	ions:		
Northland Drive Bridge (250120) Test Descriptions	Grand River	Cr	Cu	FΔ	На	Ni		Δα	7n	Hard	WO	Field	Techniciar	ns:		
Wealthy Street Bridge (250090) Railroad Bridge South (250070) Railroad Bridge North (250071) M-11, Wilson Avenue (250062) Eastmanville (250040) Streams Cr Cu Fe Hg Ni Ag Zn Hard Rogue River at West River Drive Mill Creek at West River Drive Railroad Bridge (250090) 65.5 Time (hh:mm) 65.1 Temperature (°C) DO: Dissolved Oxygen (mg/L) pH (pH units) BOD: 5-day Biochemical Oxygen Demand (mg/L) TSS: Total Suspended Solids (mg/L) FC: Fecal Coliform (#FC/100ml) EC: E.coli (#EC/100ml) Chloride (mg/L) Conductivity (us/cm) TP: Total Phosphorous (mg/L) NH3-N: Ammonia as nitrogen (mg/L)		O,	Ou		9			Ag .	- 11	Haia				Tost Dosc	rintione	
Railroad Bridge South (250070) Railroad Bridge North (250071) M-11, Wilson Avenue (250062) Eastmanville (250040) Streams Cr Cu Fe Hg Ni Ag Zn Hard Rogue River at West River Drive Mill Creek at West River Drive Mill Creek at West River Drive Mill Creek at West River Drive Railroad Bridge South (250070) 65.1 Temperature (°C) DD: Dissolved Oxygen (mg/L) Ph (pH units) BOD: 5-day Biochemical Oxygen Demand (mg/L) TSS: Total Suspended Solids (mg/L) FC: Fecal Coliform (#FC/100ml) EC: E.coli (#EC/100ml) Chloride (mg/L) Conductivity (uS/cm) TP: Total Phosphorous (mg/L) NH3-N: Ammonia as nitrogen (mg/L)	• ,													_ 1631 D630		
Railroad Bridge North (250071) M-11, Wilson Avenue (250062) Eastmanville (250040) Streams Cr Cu Fe Hg Ni Ag Zn Hard Rogue River at West River Drive Mill Creek at West River Drive M-11, Wilson Avenue (250062) 65.2 DD: Dissolved Oxygen (mg/L) PH (pH units) BOD: 5-day Biochemical Oxygen Demand (mg/L) TSS: Total Suspended Solids (mg/L) FC: Fecal Coliform (#FC/100ml) EC: E.coli (#EC/100ml) Chloride (mg/L) Conductivity (uS/cm) TP: Total Phosphorous (mg/L) NH3-N: Ammonia as nitrogen (mg/L)	_ · · · · · · · · · · · · · · · · · · ·											Tillie	,)O\		
M-11, Wilson Avenue (250062) Eastmanville (250040) Streams Cr Cu Fe Hg Ni Ag Zn Hard Rogue River at West River Drive Mill Creek at West River Drive M-11, Wilson Avenue (250062) 65.2 DH (pH units) BOD: 5-day Biochemical Oxygen Demand (mg/L) TSS: Total Suspended Solids (mg/L) FC: Eccl Coliform (#FC/100ml) EC: E.coli (#EC/100ml) Chloride (mg/L) Conductivity (uS/cm) TP: Total Phosphorous (mg/L) NH3-N: Ammonia as nitrogen (mg/L)	9 \											icinp			L)	
Eastmanville (250040) Cr Cu Fe Hg Ni Ag Zn Hard WQI Rogue River at West River Drive Mill Creek at West River Drive Mill Creek at West River Drive Rosubstantial (mg/L) TSS: Total Suspended Solids (mg/L) FC: Fecal Coliform (#FC/100ml) EC: E.coli (#EC/100ml) Chloride (mg/L) Conductivity (uS/cm) TP: Total Phosphorous (mg/L) So 6 NH3-N: Ammonia as nitrogen (mg/L)	,											pH (p	H units)	, ,	•	
Streams Cr Cu Fe Hg Ni Ag Zn Hard WQI Rogue River at West River Drive Mill Creek at West River Drive Mill Creek at West River Drive No Streams FC: Fecal Coliform (#FC/100ml) EC: E.coli (#EC/100ml) Chloride (mg/L) Conductivity (uS/cm) TP: Total Phosphorous (mg/L) 50 6 NH3-N: Ammonia as nitrogen (mg/L)	,											DOD.				id (mg/L)
Streams Cr Cu Fe Hg Ni Ag Zn Hard WQI Chloride (mg/L) Rogue River at West River Drive Mill Creek at West River Drive Mill Creek at West River Drive O.0 TP: Total Phosphorous (mg/L) NH3-N: Ammonia as nitrogen (mg/L)	Eddinarring (2000 to)										0.0	FC: F	ecal Colifo	orm (#FC/100		
Rogue River at West River Drive Mill Creek at West River Drive Mill Creek at West River Drive Mill Creek at West River Drive NH3-N: Ammonia as nitrogen (mg/L)		_	_	_				_	_			01.1.				
Rogue River at West River Drive 0.0 TP: Total Phosphorous (mg/L) NH3-N: Ammonia as nitrogen (mg/L)		Cr	Cu	Fe	Hg	Ni		Ag	Zn	Hard	WQ	Cond	luctivity (ւ	įS/cm)		
	Rogue River at West River Drive										0.0	TP: T	otal Phosp	horous (mg/l	L)	
NU2-N: NITrite as nitrogen (mg/L)												NO2-				
Indian Mill Creek at Turner Avenue 62.9 NO3-N: Nitrate as nitrogen (mg/L)		•													mg/Ĺ)	
Silver Creek at Croften/Roy 55.9 Cr: Total Chromium (\u00e4g/L) Cu: Total Copper (\u00e4g/L)	1											Cur T				
Plaster 1 at Burton 61.2 Fe: Total Iron (ug/L)												Fe: To	otal Iron (ų	ig/Ĺ) ´		
Plaster 2 at Market 53.4 Hg: Total Mercury (µg/L) Ruck Crook at Chicago Drive 63.4 Ni: Total Nickel (µg/L)												NI. Ta				
Buck Creek at Chicago Drive Ag: Total Silver (\(\text{Ug/L}\)	•											Ag: T	otal Silver	(ųg/L)		
Deer Creek 60.7 zn : Total Zinc (ug/L) ' Coldbrook Storm Drain 0 0 Hardness (mg/L as CaCO ₃)																
Coldbrook Storm Drain 0.0 Hardness (mg/L as CaCO ₃) WQI: Water Quality Index (percent)	Coldbrook Storm Drain										0.0			0.		

O3-N 1.72 1.84	
2.03 1.89	
O3-N	Ri
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0.97 1	
0.89 1.45	urv
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QUARTERLY	Y RIVER SURVEY F	REPORT October 10, 2023								CITY OF GRAND RAPIDS EPSD							
Grand River		Time	Temp	DO	рН	BOD	TSS	FC	E	С	Chlo	ride	Cond	TP	NH3-N	NO2-N	NO3-N
2023-1591-01 Northl	land Drive Bridge (250120)	09:50	13.1	9.1	8.2	<2	3.3	61			49)		0.06			1.72
	thy Street Bridge (250090) oad Bridge South (250070)	10:20	13.2	9.6	8.2	<2	3	69			54	ļ		0.05			1.84
2023-1591-04 Railroa	oad Bridge North (250071)	11:19	13.2	9.37	8.3	<2	2.6	86			59)		0.06			2.03
-	, Wilson Avenue (250062) nanville (250040)	10:52	13.2	9.44	8.3	<2	3.2	110			60)		0.06			1.89
Streams		Time	Temp	DO	рН	BOD	TSS	FC	E	С	Chlo	ride	Cond	TP	NH3-N	NO2-N	NO3-N
Rogue	e River at West River Drive																
2023-1591-08 Mill Cr	reek at West River Drive	09:11	9.9	10.4	8.7	<2	<2.0	186			53	}		< 0.05			1.3
	n Mill Creek at Turner Avenue r Creek at Croften/Roy	08:54	10.9	9.7	8.1	<2	<2.0	361			10	6		<0.05			1.68
2023-1591-11 Plaste	•	08:45	11.4	9.39	7.9	<2	4.5	727			11	3		0.06			0.97
2023-1591-12 Plaste	er 2 at Market	10:30	11.4	9.8	8	<2	3.6	613			12	6		0.05			1
	Creek at Chicago Drive	09:08	11.5	9.43	8.1	<2	4	579			13	2		< 0.05			0.89
2023-1591-14 Deer (<u> </u>	10:16	10.5	8.13	7.5	<2.0	6.8	387			48			0.14			1.45
														Mis	scellaneous	Information	
													Weath	ner Condit	ions:		
Grand River		Cr	Cu	Fe	Hg	Ni	_	١g	Zn	н	lard	WQI	Field	Technician	is:		
	land Drive Bridge (250120)	٥.	Ju	. •	9		•	.9		•	iaia	77.1			Test Desc	rintions	
	hy Street Bridge (250090)														_ lest best	iipiioiis	
	ad Bridge South (250070)											77.0 0.0		(hh:mm)			
	ad Bridge South (250070) ad Bridge North (250071)											75.3		erature (°	C) Oxygen (mg/l	1)	
	Wilson Avenue (250062)											74.7	pH (p	H units)	, ,	•	
	nanville (250040)											0.0			chemical Ox		d (mg/L)
Easun	lanville (250040)											0.0			ended Solids orm (#FC/100		
													EC: E	.coli (#EC	/100ml)	,	
Streams		Cr	Cu	Fe	Hg	Ni	A	١g	Zn	Н	lard	WQI		i de (mg/L) uctivity (u			
Roque	e River at West River Drive				_							0.0	TP: To	otal Phosp	ihorous (mg/l	L)	
•	reek at West River Drive											71.2			ia as nitroge		
Indian	Mill Creek at Turner Avenue											70.0	NOZ-I		ıs nitrogen (n as nitrogen (ı		
Silver (Creek at Croften/Roy											63.0	Cr: To	tal Chrom	ium (ųg/L) `	···· 3 ··=/	
Plaster	er 1 at Burton											68.9	Cu: To	otal Coppe otal Iron (ų	er (ųg/L)		
Plaster	er 2 at Market											69.4		otal Mercu			
Buck C	Creek at Chicago Drive											69.5		tal Nickel			
Deer C	ū											69.6		otal Silver otal Zinc (ι			
Coldbr	rook Storm Drain											0.0			Las CaCO ₃)		
													WQI:	Water Qua	ality Index (p	ercent)	

MS4 Community Annual PEP Checklist

This document outlines your community's required activities for the 2023 Reporting Period. Check the box for each action as you complete it and provide supporting documentation where indicated.

LGROW Dropbox: Link

Community Name:

City of Grand Rapids

· <u> </u>		
Date	Article	PEP Topic
4/21/2023	Celebrate Earth Day! Clean up	Personal Actions
	events – GR Connected Newsletter	
10/16/2023	Imagine a day without water – GR	General Watershed Awareness
	Connected Newsletter	
10/16/2023	Keep storm drains clear – Adopt a	Personal Actions
	Drain – News Outlet	

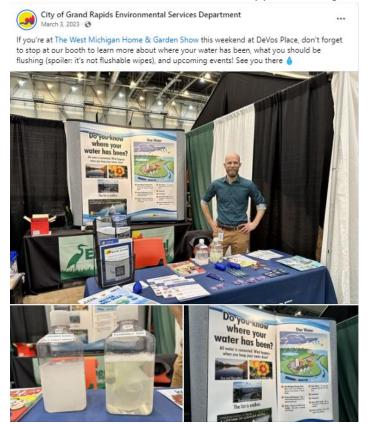
https://www.fox17online.com/news/local-news/grand-rapids/city-of-grand-rapids-keep-leaves-away-from-storm-drains



Event Date: March 2-5, 2023

Event Location: DeVos Place Convention Center

Hosted booth at Home and Garden Show over a 4 day period talking environmentally issues



☑ 3. Distribute pollution prevention information to at least 2 targeted businesses/groups listed in PEP

Names of Businesses	Title(s) of Material(s) Distributed
Landscape Services	Catch Basin – Only rainwater in the drain
Plow Services	Road salt runoff

Date shared: 4/13/2023

Location shared: Facebook/Instagram

Social Media Post Reach: 3.6K Facebook, 3.3K Instagram

Social Media Post Engagement: 223



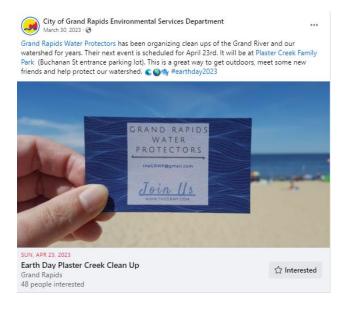
Item	# Distributed	Item	# Distributed
Troutie Coloring Book	<u>200</u>	LGROW Brochure Spanish	<u>11</u>
LGROW Colored Pencils	<u>213</u>	AAD Tip Cards	<u>43</u>
Pet Waste Bag Dispenser	Waste Bag Dispenser 100		<u>5</u>
LGROW Foldable Bags 83		Septic Smart Brochures Spanish	
LGROW Brochure English 35		Make your home the solution to	
		stormwater pollution English	
Make your home the solution to		EPA Stormwater Smart Construction	<u>4</u>
stormwater pollution Spanish		in your Neighborhood	
EPA Stormwater Smart Restaurants	<u>6</u>	EPA Stormwater Smart Parking Lots	<u>3</u>
EPA Stormwater Smart Lawn Care	31	EPA Stormwater Smart Auto Shops	<u>3</u>
EPA Stormwater Smart	19	Landscaping for Water Quality	<u>54</u>
Construction Sites			
LGROW Tip Cards	13	GR Environmental Tip Cards	<u>37</u>

Other Activities

☑ 6. Host, participate in, or support a stream cleanup effort

Cleanup Date: 4/23/2023

Cleanup Location: Plaster Creek Family Park



Cleanup Date: 9/9/2023-9/16/2023

Cleanup Location: Numerous sites throughout the watershed



☑ 7. Join or Promote Adopt a Drain Program

Date(s) of program promotion: 2/9, 4/7, 4/11, 4/26, 9/23, 10/16, 10/26, 10/30, 12/21

Method of program promotion: Social media, news article Social Media Metrics (Post Reach, Post Engagement): Facebook reach: 17,014 Post Engagement: 152

Instagram reach: 4,314 Post Engagement: 327



Spring is here and with it comes lots of rain and water looking for a drain! By keeping your drains clear, you ensure that your streets remain clear and safe. You can adopt your own drain here: adoptadrain-Igrow.org/



https://www.grandrapidsmi.gov/Our-City/News-Media/Leaves-are-falling-Please-keep-them-away-from-storm-drains

Home / Leaves are falling: Please keep them away from storm drains

Leaves are falling; Please keep them away from storm drains

Published on October 16, 2023

GRAND RAPIDS, Mich. – As leaves begin to fall this season, the City of Grand Rapids is reminding residents to be aware of catch basins, more commonly known as storm drains, when removing leaves from their yards.

Catch basins are storm sewer inlets designed to collect water during storm events; there are 17,000 of them across Grand Rapids. They are designed to filter out debris that would otherwise end up in the river. These basins are generally located next to street curbs, or in yards of residential areas and, while they generally catch large objects of debris, they are prone to becoming blocked with the leaves that



invade our yards each fall. This can lead to unnecessary and unwelcomed street flooding. On average, and as part of a 5year rotation effort, City crews clean 4,000 of the 17,000 catch basins annually. Residents can help in the prevention of street flooding by ensuring that their leaf raking for blowing) efforts do not result in the blocking of the catch basins in their neighborhoods. CLICK HERE for some options for leaf removal offered by the City.

As part of their efforts to encourage residents to keep catch basins free of leaves and other debris, the City's Department of Environmental Services (ESD) partners with the Lower Grand Rapids Organization of Watersheds (LGROW), an organization whose mission includes promoting and protecting the Grand River. LGROW also coordinates a regional year-round Adopt-A-Drain program, which encourages residents to take proactive action in their own neighborhoods "to protect the environment, manage stormwater, and minimize flooding," Information on this program can be found here.

Residents are encouraged to follow ESD on Facebook for regular updates and important announcements.



Clearing catch basins helps to keep the streets from flooding. You can adopt your own here: https://www.adoptadrain-lgrow.org/



☑ 8. Provide presentation on PEP topics to a school in your Community

Please add teacher contact information if you are interested in having LGROW work with your local school:

Teacher Name & Contact Information	School District
Cityside Middle School – Career Day – Environmental	Zeeland Public Schools (12/8/23)

☑ 9. Implement EPA SepticSmart Social Media Guide during SepticSmart Week: September 18-22, 2023 Provide Social Media Metrics (Post Reach, Post Engagement): Reach 1,148 Engagement 32



■ 10. Share social media posts provided by LGROW

Date	Post Title/ PEP Topic	Social Media Type
3/6/2023	Value of Partnerships – MS4	Both
	General watershed awareness	
3/10/2023	Spring Tips – General watershed	Both
	awareness, Personal actions	
6/7/2023	LGROW Spring Forum – General	Both
	watershed awareness	
6/29/2023	Conserve, Dispose, Measure,	Both
	Replace – General watershed	
	awareness, Personal actions, waste	
	management assistance	

Other Public Engagement Activities Completed

Use this space to provide additional detail on Public Engagement Activities described above or to describe other Public Engagement Activities completed in your Community during the reporting period.

- Promotion of LGROW Adopt-a-Drain program partnership with local artists to media outlets.
- Water Pool-ooza February 25 and March 11



• The West Michigan Home & Garden Show March 2 – March 5



 Water Career Camp, in partnership with Grand Rapids Community College (EPA Grant funded) 7/27-8/10.



• LGROW Whitecaps Event – Dog Night – Pet Waste Bag Giveaways





Grand Rapids Community Master Plan Update – 5/18/23, 11/16/23
 (Incorporating Green Infrastructure, Climate Resiliency into Master Plan)



 Commission Night Out – June and October – Engage with Community on Environmental Topics at City Commission Meetings in Community



