



# Grant Progress Report

## Watershed Based Implementation OCT 2021

**Grant Title:** 2021 Metro WBIF - Rum River Area

**Grant ID:** C21-0407

**Grantee:** Anoka CD

**Fiscal Agent:** Anoka CD

**Grant Day-to-Day Contact:** Chris Lord

**Grant Award (\$):** \$366,982.00

**Required Match (%):** 10

**Required Match (\$):** \$36,698.20

**Grant Execution Date:** 01/20/2021

**Grant End Date:** 12/31/2023

	Total Budgeted	Total Spent	Balance Remaining*
Grant Funds	\$366,982.00	\$243,211.79	\$123,770.21
Match Funds	\$36,700.00	\$26,768.94	\$9,931.06
Other Funds	\$0.00	\$0.00	\$0.00
<b>Total</b>	<b>\$403,682.00</b>	<b>\$269,980.73</b>	<b>\$133,701.27</b>

\*Grant balance remaining is the difference between the Awarded Amount and the Spent Amount. Other values compare budgeted and spent amounts.

### Budget Details

Activity Name	Category	Source Type	Source Description	Budgeted	Spent	Balance Remaining	Match Fund?
Admin	Administration/Coordination	Local Fund	URRWMO and LRRWMO	\$11,000.00	\$4,996.77	\$6,003.23	Y
Anoka Co Water Resources Outreach Collaborative	Education/Information	Local Fund	URRWMO and LRRWMO	\$3,500.00	\$3,500.00	\$0.00	Y
Anoka Co Water	Education/Information	Current State Grant	2021 Metro WBIF - Rum River Area	\$34,000.00	\$34,453.48	(\$453.48)	N

<i>Activity Name</i>	<i>Category</i>	<i>Source Type</i>	<i>Source Description</i>	<i>Budgeted</i>	<i>Spent</i>	<i>Balance Remaining</i>	<i>Match Fund?</i>
Resources Outreach Collaborative							
Subwatershed analyses	Planning and Assessment	Local Fund	URRWMO and LRRWMO	\$9,090.50	\$1,537.50	\$7,553.00	Y
Subwatershed analyses	Planning and Assessment	Current State Grant	2021 Metro WBIF - Rum River Area	\$113,000.00	\$41,333.32	\$71,666.68	N
Project Development	Project Development	Current State Grant	2021 Metro WBIF - Rum River Area	\$11,000.00	\$10,656.76	\$343.24	N
Shoreline stabilizations	Streambank or Shoreline Protection	Local Fund	URRWMO and LRRWMO	\$8,875.00	\$8,875.00	\$0.00	Y
Shoreline stabilizations	Streambank or Shoreline Protection	Current State Grant	2021 Metro WBIF - Rum River Area	\$111,000.00	\$59,844.94	\$51,155.06	N
Shoreline stabilizations	Streambank or Shoreline Protection	Landowner Fund	Landowners	\$4,234.50	\$7,859.67	(\$3,625.17)	Y
Tech/Engineering	Technical/Engineering Assistance	Current State Grant	2021 Metro WBIF - Rum River Area	\$33,000.00	\$32,136.21	\$863.79	N
Urban Stormwater BMPs	Urban Stormwater Management Practices	Current State Grant	2021 Metro WBIF - Rum River Area	\$64,982.00	\$64,787.08	\$194.92	N

<i>Activity Category</i>	<i>Proposed Indicator</i>	<i>Total Value</i>	<i>Unit</i>
Urban Stormwater Management Practices	Water Pollution (Reduction Estimates)	0.7	Sediment (Tss)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	4	Sediment (Tss)
Urban Stormwater Management Practices	Water Pollution (Reduction Estimates)	4	Phosphorus (Est. Reduction)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	3.4	Phosphorus (Est. Reduction)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	4.25	Phosphorus (Est. Reduction)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	5	Sediment (Tss)

<i>Activity Category</i>	<i>Proposed Indicator</i>	<i>Total Value</i>	<i>Unit</i>
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	.552	Phosphorus (Est. Reduction)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	.459	Sediment (Tss)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	.506	Sediment (Tss)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	.663	Phosphorus (Est. Reduction)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	.48	Phosphorus (Est. Reduction)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	.3	Sediment (Tss)
Urban Stormwater Management Practices	Water Pollution (Reduction Estimates)	.17	Sediment (Tss)
Urban Stormwater Management Practices	Stormwater Management	.88	Volume Reduced (Acre-Feet/Year)
Urban Stormwater Management Practices	Water Pollution (Reduction Estimates)	1.164	Phosphorus (Est. Reduction)

<i>Activity Category</i>	<i>Proposed Indicator</i>	<i>Total Value</i>	<i>Unit</i>
Urban Stormwater Management Practices	Water Pollution (Reduction Estimates)	.18	Sediment (Tss)
Urban Stormwater Management Practices	Water Pollution (Reduction Estimates)	.075	Sediment (Tss)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	0.976	Phosphorus (Est. Reduction)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	0.833	Sediment (Tss)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	.657	Phosphorus (Est. Reduction)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	.854	Phosphorus (Est. Reduction)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	.297	Sediment (Tss)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	.663	Sediment (Tss)
Urban Stormwater Management Practices	Water Pollution (Reduction Estimates)	.5	Phosphorus (Est. Reduction)
Urban Stormwater	Water Pollution (Reduction Estimates)	1.087	Phosphorus

<i>Activity Category</i>	<i>Proposed Indicator</i>	<i>Total Value</i>	<i>Unit</i>
Management Practices	Estimates)		(Est. Reduction)
Urban Stormwater Management Practices	Water Pollution (Reduction Estimates)	1.28	Phosphorus (Est. Reduction)
Urban Stormwater Management Practices	Stormwater Management	.83	Volume Reduced (Acre-Feet/Year)
Urban Stormwater Management Practices	Stormwater Management	.23	Volume Reduced (Acre-Feet/Year)
Urban Stormwater Management Practices	Water Pollution (Reduction Estimates)	.05	Sediment (Tss)
Urban Stormwater Management Practices	Water Pollution (Reduction Estimates)	.294	Phosphorus (Est. Reduction)
Urban Stormwater Management Practices	Stormwater Management	.43	Volume Reduced (Acre-Feet/Year)
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	1.744	Phosphorus (Est. Reduction)

<i>Activity Category</i>	<i>Proposed Indicator</i>	<i>Total Value</i>	<i>Unit</i>
Streambank or Shoreline Protection	Water Pollution (Reduction Estimates)	1.744	Sediment (Tss)
Urban Stormwater Management Practices	Stormwater Management	.42	Volume Reduced (Acre-Feet/Year)
Urban Stormwater Management Practices	Water Pollution (Reduction Estimates)	.086	Sediment (Tss)
Urban Stormwater Management Practices	Water Pollution (Reduction Estimates)	.55	Phosphorus (Est. Reduction)
Urban Stormwater Management Practices	Water Pollution (Reduction Estimates)	.20	Sediment (Tss)
Urban Stormwater Management Practices	Stormwater Management	.88	Volume Reduced (Acre-Feet/Year)

## Grant Activities

### Activity Name: Admin

**Activity Category:** Administration/Coordination

**Has Rates and Hours?:** Yes

**Description:** Bookkeeping, elink reporting, invoicing, and related. Milestones: Annual elink reports.

Staff and qualifications: Kathy Berkness, ACD Office Administrator, 15 yrs of ACD financial mgmt. Chris Lord, ACD District Mgr, BS Nat. Res. & Env. Sci. with 29 yrs in water and ecological resource management.

#### Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Local Fund	URRWMO and LRRWMO	\$11,000.00	\$4,996.77	\$6,003.23	12/31/2022	Y

#### Actual Results

2021 - Bookkeeping and elink reporting.

2022 - Bookkeeping and elink reporting.

## Activity Name: Anoka Co Water Resources Outreach Collaborative

Activity Category: Education/Information

Has Rates and Hours?: Yes

**Description:** Coordinate Anoka Water Resource Outreach Collaborative (AWROC) – Provide water resource stewardship information, outreach and engagement opportunities per joint local water plan and partner priorities. Provide 0.20 FTE of outreach staff to serve the Rum River watershed in Anoka County during years ending no later than Dec. 31, 2022. Tasks include (a) Coordinate and be directed by a collaborative stakeholder group including watershed organizations, cities, and SWCD to identify priority topics and audiences and develop engagement strategies; (b) Develop materials, organize and conduct at least 8 events (displays, workshops, videos, articles, etc) and (c) Develop audience analytics and produce an annual report. Targeted priority natural resources and issues will be the Rum River, Lake George, groundwater, land protection, streambank stabilization, stormwater treatment and watershed awareness.

Milestones: 2021 - 4 events, annual report. 2022 - 4 events, annual report.

Staff and qualifications: Emily Johnson – ACD Outreach Coord. – BA Geology with over 2 yrs exp. in public outreach and social media mgmt.

### Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Current State Grant	2021 Metro WBIF - Rum River Area	\$34,000.00	\$34,453.48	(\$453.48)	12/31/2022	N
Local Fund	URRWMO and LRRWMO	\$3,500.00	\$3,500.00	\$0.00	09/30/2021	Y



## Actual Results

2021

- Developed prioritized list of outreach efforts in collaboration with Upper & Lower Rum River WMOs and Anoka Conservation District.
- Began outreach to candidate landowners for 2-3 rain gardens during City of Anoka 2022 street resurfacing. 7 interested landowners and site selection ongoing.
- TV interview about well sealing. 6 community events.
- Newsletter articles distributed to 9 communities.

2022

- A river stewardship animated video – Completed part one of two-part series. Part 1 focused on watershed functions, how land use affects rivers, and watershed-level river protection. Part 2 has a completed script & storyboard & focuses on causes and symptoms of riverbank erosion, preventative management & how erosion can be addressed.
- Secured 4 rain garden sites that were constructed as part of 2022 City of Anoka street projects. Locations between the Anoka Fairgrounds and Bunker Lake Blvd. Each garden treats water that previously reached the Rum River with no treatment.
- Lake George pontoon tour for public officials – In collaboration with the Lake George improvement District and Conservation Club we'll view project sites, get a water quality monitoring demo, and connect with residents. The primary audience is the Upper Rum River WMO board.
- Lake George Conservation Club fall meeting presentation on 10-13-2022 to discuss lakeshore stewardship, progress toward identified water quality projects, water monitoring update, and AIS prevention and mgmt efforts.
- Continued coordination of Anoka Co Water Resources Outreach Collaborative.
- Prepared 10-yr outreach plan for Lower Rum River WMO area through use of a citizen's advisory committee, city staff input, and audience analytics.

## Activity Name: Project Development

**Activity Category:** Project Development

**Has Rates and Hours?:** Yes

**Description:** Landowner outreach, site recon., contract development and related tasks to secure project sites. Milestones: 2021 - Initial landowner outreach. 2022 - Site selection and contracting. Quantity of sites is listed in the activity lines for "streambank or shoreline protection" and "urban stormwater mgmt practices."

Staff and qualifications: Jamie Schurbon, ACD Watershed Projects Mgr (M.S. Env. Studies, 19 yrs water project mgmt.). Jared Wagner, ACD Water Resource Specialist, BS Environmental Science with 4+ yrs watershed project management experience.

### Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Current State Grant	2021 Metro WBIF - Rum River Area	\$11,000.00	\$10,656.76	\$343.24	12/31/2021	N

### Actual Results

2021 - Outreach to 40 pre-identified Lake George shoreland erosion sites resulting in 24 site visits and 8 secured eight project sites. Secured two stormwater BMP sites - both residential rain gardens.

2022 - Little work because budget was mostly spent in 2021. Completed the projects identified in 2021 and secured four residential curb cut rain garden sites in the City of Anoka's 2022 street project area.

## Activity Name: Shoreline stabilizations

**Activity Category:** Streambank or Shoreline Protection

**Has Rates and Hours?:** Yes

**Description:** Lake George shore stabilizations - Install shoreline stabilizations at Lake George. Outreach to most severe sites first. 500 lin-ft to be addressed. Annual reductions 4 ton-TSS/yr 3.4 lbs-TP/yr sustained over 10-yr project life. Anticipated approx expenditure for Lake George Shorelines is \$61,000. Milestones: 2021 site ID. 2022 design. 2023 construction.

Rum Riverbank stabilizations - Install 100 linear ft of Rum Riverbank stabilizations from ACD's prioritized inventory of candidate sites. These grant funds will supplement other funding sources secured by the ACD. All pollutant reductions (8.5 lb TP and 10 ton TSS) are attributed to (reported to) the WBIF grant because the other funding sources do not track pollutant reductions in a state database. Anticipated approx expenditure for Rum Riverbanks is \$50,000. Milestones: 2021 site ID. 2022 design. 2023 construction.

Staff and qualifications: Jamie Schurbon, ACD Watershed Projects Mgr (M.S. Env. Studies, 19 yrs water project mgmt.). Jared Wagner, ACD Water Resource Specialist, BS Environmental Science with 4+ yrs watershed project management experience.

### Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Local Fund	URRWMO and LRRWMO	\$8,875.00	\$8,875.00	\$0.00	09/19/2022	Y
Current State Grant	2021 Metro WBIF - Rum River Area	\$111,000.00	\$59,844.94	\$51,155.06	10/26/2022	N
Landowner Fund	Landowners	\$4,234.50	\$7,859.67	(\$3,625.17)	09/19/2022	Y

### Actual Results

2021 - Installed one Lake George shore stabilization project (but used funds not associated with this grant to do it). Seven more are anticipated in 2022 and will use funds associated with this grant. We currently have a list of candidate Rum Riverbank stabilization sites and installed many (>3,000 linear feet) with other grants. We'll switch to using this grant for Rum Riverbank work in either 2022 or 2023. 2021 expenditure was for surveying planned sites.

2022 - Constructed six shoreline stabilizations totaling approx 483 lf.

<b>Final Indicators</b>		
<b><u>Indicator</u></b>	<b><u>Total Value</u></b>	<b><u>Unit</u></b>
METALS (MERCURY IN WATER COLUMN) - PPB	0.48	Ppb
BOD 5 - LBS/YR	0.297	Lbs/Yr
BOD 5 - LBS/YR	0.833	Lbs/Yr
BOD 5 - LBS/YR	0.3	Lbs/Yr
METALS (MERCURY IN WATER COLUMN) - PPB	0.657	Ppb
BOD 5 - LBS/YR	1.744	Lbs/Yr
BOD 5 - LBS/YR	0.459	Lbs/Yr
METALS (MERCURY IN WATER COLUMN) - PPB	0.663	Ppb
METALS (MERCURY IN WATER COLUMN) - PPB	0.552	Ppb
BOD 5 - LBS/YR	0.663	Lbs/Yr
METALS (MERCURY IN WATER COLUMN) - PPB	0.854	Ppb
METALS (MERCURY IN WATER COLUMN) - PPB	0.976	Ppb
BOD 5 - LBS/YR	0.506	Lbs/Yr
METALS (MERCURY IN WATER COLUMN) - PPB	1.744	Ppb

Activity Action Name:	21260 S LAKE GEORGE DR. NW	Activity Count: 1
Practice Type:	580 - Streambank and Shoreline Protection	Size/Units: 124 - Cfu
TA Provider/JAA:	SWCD	Lifespan: 10 Years
Practice Description:	Shore stabilization with native plant buffer	Install Date: 09/01/2022
		Mapped: Yes

Indicator Name/Units	Value	Calculation Tool	Waterbody
METALS (MERCURY IN WATER COLUMN) - PPB	.854	Other	Lake George
BOD 5 - LBS/YR	.297	Other	Lake George

Activity Action Name:	21411 OLD LAKE GEORGE BLVD.	Activity Count: 1
Practice Type:	580 - Streambank and Shoreline Protection	Size/Units: 62 - Cfu
TA Provider/JAA:	SWCD	Lifespan: 10 Years
Practice Description:	Shore stabilization with native plant buffer	Install Date: 09/01/2022
		Mapped: Yes

Indicator Name/Units	Value	Calculation Tool	Waterbody
METALS (MERCURY IN WATER COLUMN) - PPB	1.744	Other	Lake George
BOD 5 - LBS/YR	1.744	Other	Lake George

Activity Action Name:	2859 GREENWALD ISLAND NW	Activity Count: 1
Practice Type:	580 - Streambank and Shoreline Protection	Size/Units: 68 - Cfu
TA Provider/JAA:	SWCD	Lifespan: 10 Years
Practice Description:	Shore stabilization with native plant buffer	Install Date: 09/01/2022
		Mapped: Yes

Indicator Name/Units	Value	Calculation Tool	Waterbody
BOD 5 - LBS/YR	.663	Other	Lake George
METALS (MERCURY IN WATER COLUMN) - PPB	.663	Other	Lake George

Activity Action Name:	2543 S LAKE GEORGE DR. NW shore stabilization	Activity Count: 1
Practice Type:	580 - Streambank and Shoreline Protection	Size/Units: 110 - Cfu
TA Provider/JAA:	SWCD	Lifespan: 10 Years
Practice Description:	Shore stabilization with native plant buffer	Install Date: 09/01/2022
		Mapped: Yes

Indicator Name/Units	Value	Calculation Tool	Waterbody
METALS (MERCURY IN WATER COLUMN) - PPB	0.976	Other	Lake George
BOD 5 - LBS/YR	0.833	Other	Lake George

Activity Action Name:	2351 S LAKE GEORGE DR. shore stabilization	Activity Count: 1
Practice Type:	580 - Streambank and Shoreline Protection	Size/Units: 48 - Cfu
TA Provider/JAA:	SWCD	Lifespan: 10 Years
Practice Description:	shore stabilization with native plant buffer	Install Date: 09/01/2022
		Mapped: Yes

Indicator Name/Units	Value	Calculation Tool	Waterbody
METALS (MERCURY IN WATER COLUMN) - PPB	.552	Other	Lake George
BOD 5 - LBS/YR	.459	Other	Lake George

Activity Action Name:	2449 S LAKE GEORGE DR.	Activity Count: 1
Practice Type:	580 - Streambank and Shoreline Protection	Size/Units: 52 - Cfu
TA Provider/JAA:	SWCD	Lifespan: 10 Years
Practice Description:	Shore stabilization with native plant buffer	Install Date: 09/01/2022
		Mapped: Yes

Indicator Name/Units	Value	Calculation Tool	Waterbody
METALS (MERCURY IN WATER COLUMN) - PPB	.657	Other	Lake George
BOD 5 - LBS/YR	.506	Other	Lake George

Activity Action Name:	2462 LAKE GEORGE DR NW		Activity Count: 1
Practice Type:	580 - Streambank and Shoreline Protection		Size/Units: 20 - Cfu
TA Provider/JAA:	SWCD		Lifespan: 10 Years
Practice Description:	Shore stabilization		Install Date: 07/09/2021
			Mapped: Yes
Indicator Name/Units	Value	Calculation Tool	Waterbody
METALS (MERCURY IN WATER COLUMN) - PPB	.48	Other	Lake George
BOD 5 - LBS/YR	.3	Other	Lake George

## Activity Name: Subwatershed analyses

**Activity Category:** Planning and Assessment

**Has Rates and Hours?:** Yes

**Description:** Complete SWAs for Middle Ford Brook, a direct discharge area to Mississippi River and a direct discharge area to the Rum River. Milestones: 2021 - one SWA completed. 2022 - one SWA completed. 2023 - one SWA completed.

Staff and qualifications: Mitch Haustein, ACD Stormwater & Shoreland Specialist (qualifications: M.S. in ecology, 10 yrs at ACD managing water projects).

### Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Current State Grant	2021 Metro WBIF - Rum River Area	\$113,000.00	\$41,333.32	\$71,666.68	12/31/2022	N
Local Fund	URRWMO and LRRWMO	\$9,090.50	\$1,537.50	\$7,553.00	12/31/2021	Y

### Actual Results

2021 - Began work on a Middle Ford Brook subwatershed analysis study. Are 75% if the way to selecting study subwatersheds draining to the Rum and Mississippi Rivers.  
 2022 - Selected subwatersheds draining to the Rum and Mississippi Rivers. 85% complete with West Ford Brook study.



## Activity Name: Tech/Engineering

**Activity Category:** Technical/Engineering Assistance

**Has Rates and Hours?:** Yes

**Description:** Survey, designs, bidding, construction oversight. Staff time to promote, contract, survey, design, bid and oversee construction of shoreline stabilizations at Lake George and the Rum River, and curb cut rain gardens. Designs will be done by ACD staff and signed off by an individual with the appropriate TAA. The TAA sign off role may be contracted to an SWCD or consulting engineer as needed.

Milestones: 2022 - survey, designs, and bidding. 2023 - construction oversight. Quantity of sites is listed in the activity lines for "streambank or shoreline protection" and "urban stormwater mgmt practices."

Staff and qualifications: Jamie Schurbon, ACD Watershed Projects Mgr (M.S. Env. Studies, 19 yrs water project mgmt.). Jared Wagner, ACD Water Resource Specialist, BS Environmental Science with 4+ yrs watershed project management experience.

### Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Current State Grant	2021 Metro WBIF - Rum River Area	\$33,000.00	\$32,136.21	\$863.79	12/31/2022	N

### Actual Results

2021 - Site visits, surveying, and concept designs for 7 Lake George shoreline stabilization projects. Site visits and surveying for two stormwater retrofit projects.

2022 - Designs and construction management for 6 completed shoreline stabilizations and 6 rain gardens.

## Activity Name: Urban Stormwater BMPs

**Activity Category:** Urban Stormwater Management Practices

**Has Rates and Hours?:** Yes

**Description:** Install approx 5 highly ranked curb-cut rain gardens identified in SWAs to improve water quality in high priority water resources. Milestones: 2022 site ID and design. 2023 construction.

Staff and qualifications: Jamie Schurbon, ACD Watershed Projects Mgr (M.S. Env. Studies, 19 yrs water project mgmt.) Mitch Haustein, ACD Stormwater & Shoreland Specialist (qualifications: M.S. in ecology, 10 yrs at ACD managing water projects).

### Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Current State Grant	2021 Metro WBIF - Rum River Area	\$64,982.00	\$64,787.08	\$194.92	12/06/2022	N

### Actual Results

2021 - 0 installed. 2 secured and to be installed in 2022.

2022 - 6 installed including:

3751 Roseberry Place - 3.48 ac drainage, 1.087 lb/yr TP reduction.

332 Coolidge St - 4.03 ac drainage, 1.164 lb/yr TP reduction.

3720 Rum River Dr - 0.74 ac drainage, 0.294 lb/yr TP reduction.

211 McCann Ave - 1.65 ac drainage, 0.551 lb/yr TP reduction

15170 Oneida St - 6.53 ac drainage, 1.28 lb/yr TP reduction, 395 lb/yr TSS reduction.

203 Washington St - 2.19 ac drainage, 0.5 lb/yr TP reduction, 150 lb/yr TSS reduction.

<u>Findings Indicators</u>	<u>Total Value</u>	<u>Unit</u>
NITROGEN - LBS/YR	0.23	Lbs/Yr
METALS (MERCURY IN WATER COLUMN) - PPB	1.087	Ppb
NITROGEN - LBS/YR	0.42	Lbs/Yr
METALS (MERCURY IN WATER COLUMN) - PPB	0.5	Ppb
NITROGEN - LBS/YR	0.88	Lbs/Yr
NITROGEN - LBS/YR	0.88	Lbs/Yr
METALS (MERCURY IN WATER COLUMN) - PPB	0.294	Ppb
METALS (MERCURY IN WATER COLUMN) - PPB	1.28	Ppb
BOD 5 - LBS/YR	0.2	Lbs/Yr
BOD 5 - LBS/YR	0.17	Lbs/Yr
BOD 5 - LBS/YR	0.05	Lbs/Yr
BOD 5 - LBS/YR	0.086	Lbs/Yr
METALS (MERCURY IN WATER COLUMN) - PPB	0.55	Ppb
BOD 5 - LBS/YR	0.075	Lbs/Yr
METALS (MERCURY IN WATER COLUMN) - PPB	1.164	Ppb
BOD 5 - LBS/YR	0.18	Lbs/Yr
NITROGEN - LBS/YR	0.43	Lbs/Yr
NITROGEN - LBS/YR	0.83	Lbs/Yr

Activity Action Name:	203 Washington St rain garden	Activity Count: 1
Practice Type:	712M - Bioretention Basin	Size/Units: 187 - Cfu/Yr
TA Provider/JAA:	SWCD	Lifespan: 10 Years
Practice Description:	Curb cut rain garden.	Install Date: 06/30/2022
		Mapped: Yes

Indicator Name/Units	Value	Calculation Tool	Waterbody
NITROGEN - LBS/YR	.43	Winslamm	Rum River
METALS (MERCURY IN WATER COLUMN) - PPB	.5	Winslamm	Rum River
BOD 5 - LBS/YR	.075	Winslamm	Rum River

Activity Action Name:	3720 Rum River Dr rain garden	Activity Count: 1
Practice Type:	712M - Bioretention Basin	Size/Units: 208 - Cfu/Yr
TA Provider/JAA:	SWCD	Lifespan: 10 Years
Practice Description:	Curb cut rain garden	Install Date: 09/30/2022
		Mapped: Yes

Indicator Name/Units	Value	Calculation Tool	Waterbody
NITROGEN - LBS/YR	.23	Winslamm	Rum River
BOD 5 - LBS/YR	.05	Winslamm	Rum River
METALS (MERCURY IN WATER COLUMN) - PPB	.294	Winslamm	Rum River

Activity Action Name:	211 McCann Ave rain garden	Activity Count: 1
Practice Type:	712M - Bioretention Basin	Size/Units: 383 - Cfu/Yr
TA Provider/JAA:	SWCD	Lifespan: 10 Years
Practice Description:	Curb cut rain garden	Install Date: 09/30/2022
		Mapped: Yes

Indicator Name/Units	Value	Calculation Tool	Waterbody
NITROGEN - LBS/YR	.42	Winslamm	Rum River
BOD 5 - LBS/YR	.086	Winslamm	Rum River
METALS (MERCURY IN WATER COLUMN) - PPB	.55	Winslamm	Rum River

Activity Action Name:	15170 Oneida St rain garden	Activity Count: 1
Practice Type:	712M - Bioretention Basin	Size/Units: 1607 - Cfu/Yr
TA Provider/JAA:	SWCD	Lifespan: 10 Years
Practice Description:	Curb cut rain garden	Install Date: 06/30/2022
		Mapped: Yes

Indicator Name/Units	Value	Calculation Tool	Waterbody
METALS (MERCURY IN WATER COLUMN) - PPB	1.28	Winslamm	Rum River
BOD 5 - LBS/YR	.20	Winslamm	Rum River
NITROGEN - LBS/YR	.88	Winslamm	Rum River

Activity Action Name:	3751 Roseberry Place rain garden	Activity Count: 1
Practice Type:	712M - Bioretention Basin	Size/Units: 579 - Cfu/Yr
TA Provider/JAA:	SWCD	Lifespan: 10 Years
Practice Description:	Curb cut rain garden	Install Date: 09/30/2022
		Mapped: Yes

Indicator Name/Units	Value	Calculation Tool	Waterbody
NITROGEN - LBS/YR	.83	Winslamm	Rum River
METALS (MERCURY IN WATER COLUMN) - PPB	1.087	Winslamm	Rum River
BOD 5 - LBS/YR	.17	Winslamm	Rum River

Activity Action Name:	332 Coolidge St rain garden	Activity Count: 1
Practice Type:	712M - Bioretention Basin	Size/Units: 864 - Cfu/Yr
TA Provider/JAA:	SWCD	Lifespan: 10 Years
Practice Description:	Curb cut rain garden	Install Date: 09/30/2022
		Mapped: Yes

Indicator Name/Units	Value	Calculation Tool	Waterbody
NITROGEN - LBS/YR	.88	Winslamm	Rum River
METALS (MERCURY IN WATER COLUMN) - PPB	1.164	Winslamm	Rum River
BOD 5 - LBS/YR	.18	Winslamm	Rum River