



RAIN GARDEN MAINTENANCE WORKSHOP

AUGUST 12, 2021



CAPITOL REGION WATERSHED DISTRICT

GoToMeeting

workshop test

View Who's Talking

LS

Lindsay Schwantes (she/her/hers)

REC

1

CHAT

Me 2:08 PM
Questions will show up here.

Type your questions in this area.

Send to
Everyone

SEND

Mic

Camera

Screen

Leave

Step 1.
Click the chat icon

Step 2.
Type questions to
the presentation
hosts here

Step 3.
View group comments
in right panel

Presenters



Rachel Funke

Urban BMP Technician

rfunke@capitolregionwd.org

(651) 644-8888 EXT 110

- Completed Projects
- Maintenance and Tech. Advice



Carol Lundgren

Stormwater BMP Specialist

clundgren@capitolregionwd.org

(651) 644-8888 EXT 111

- New Grant Projects
- Technical Advice



Lindsay Schwantes

Community Outreach Coordinator

lschwantes@capitolregionwd.org

(651) 644-8888 EXT 105

- Outreach
- Events



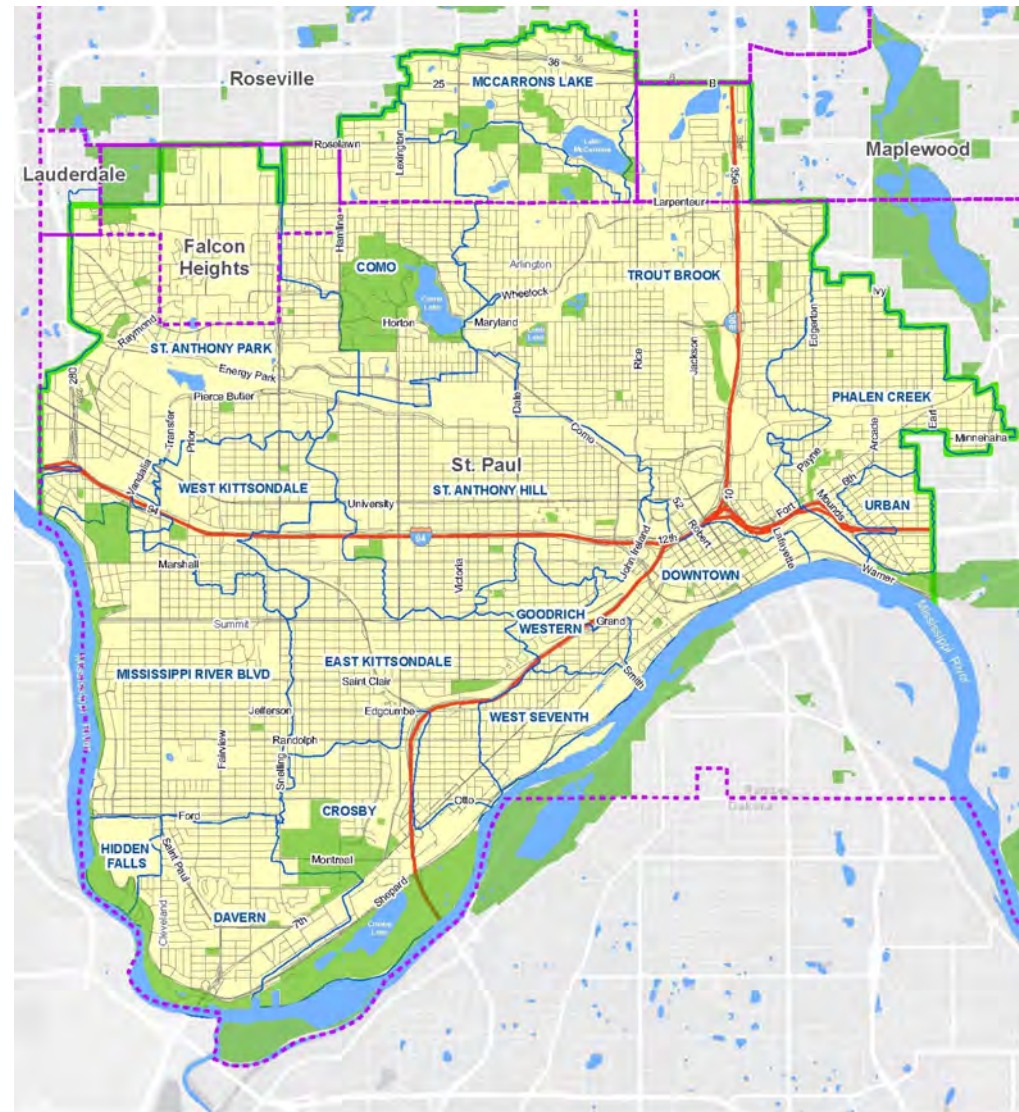
Presentation Outline

- Organization Overview
- Stewardship Grant Program
- Native Landscaping Grant Program
- Rain Garden Design and Function
- Rain Garden Maintenance
- Maintenance Assistance and Resources
- Other ways to be involved
- Q & A



Capitol Region Watershed District

- 41 Square Miles
- Portions of 5 Cities
- Population ~250,000 (1/20th Minnesotans live in CRWD)
- 42% impervious (hard) surfaces
- 4 Lakes (Como, McCarrons, Crosby, Loeb)
- Mississippi River – 13 miles



Capitol Region Watershed District is home to more than 225,000 people and is 42% impervious surfaces.



- | | |
|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| CRWD | City Boundary |
| Major Waterbodies | Major Highways |
| Parks | Roads |
| Subwatersheds | |

CAPITOL REGION WATERSHED DISTRICT



Mission: To protect, manage and improve the water resources of Capitol Region Watershed District.



Stewardship Grant Program

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Stewardship Grant Program

- The Stewardship Grant program provides an opportunity to engage and empower our community by implementing clean water projects.
- Provides financial and technical/design assistance to both private and public landowners.



Grant Program Details

Qualifying Stormwater Best Management Practices (BMPs):

- Rain gardens, green roofs, cisterns, shoreline restoration...

Grant Award Calculation: The higher the volume of runoff treated by a BMP, the more funding the project will receive.

Stewardship Grant awards are subject to match requirements:

- Residential, public agencies and non-profits: match requirement of 5%.
- Business and other for-profit organizations: match requirement of 25%

Grant Awards:

- \$500 - \$40,000

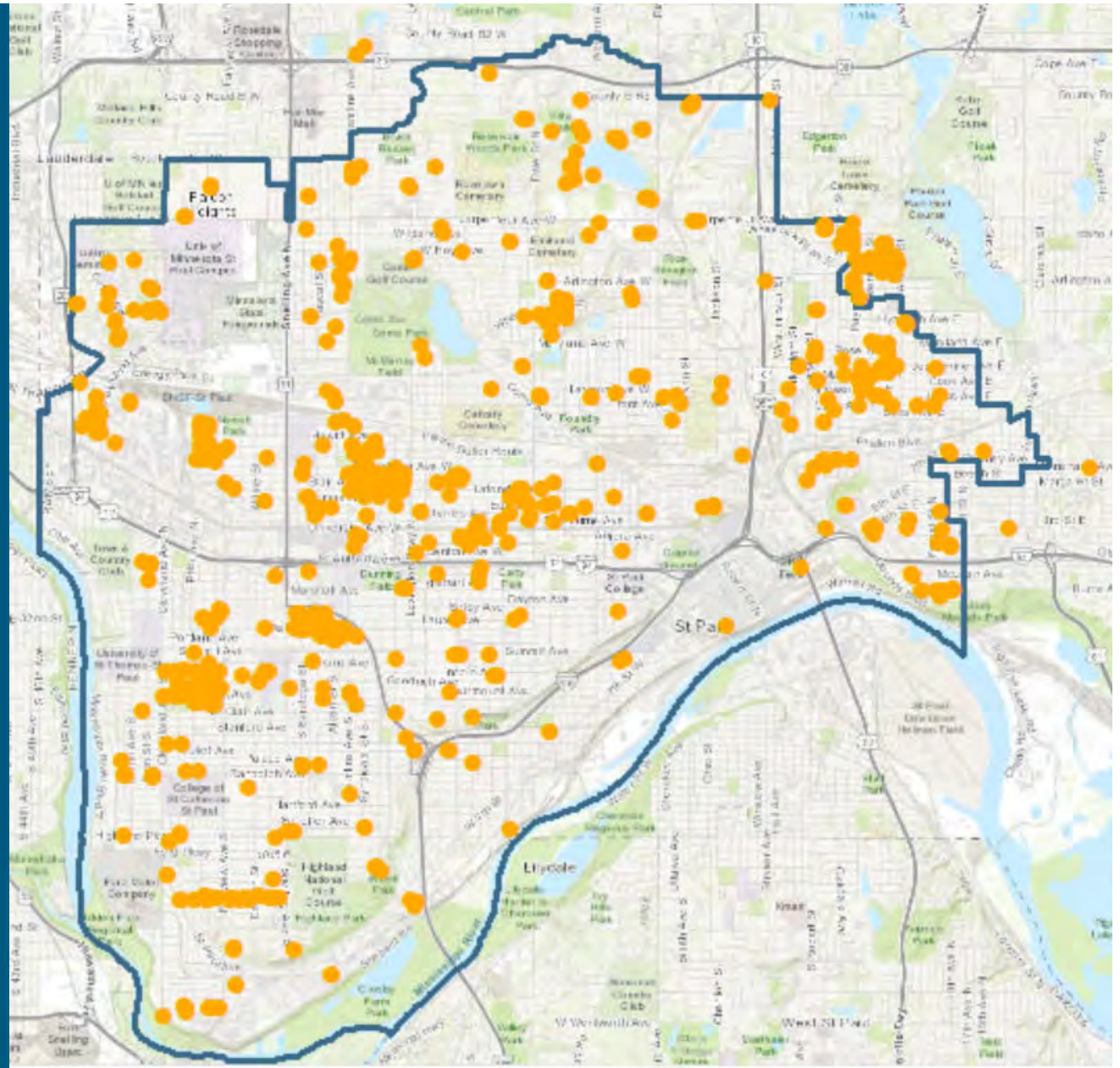
Maintenance Agreement:

- 10 years



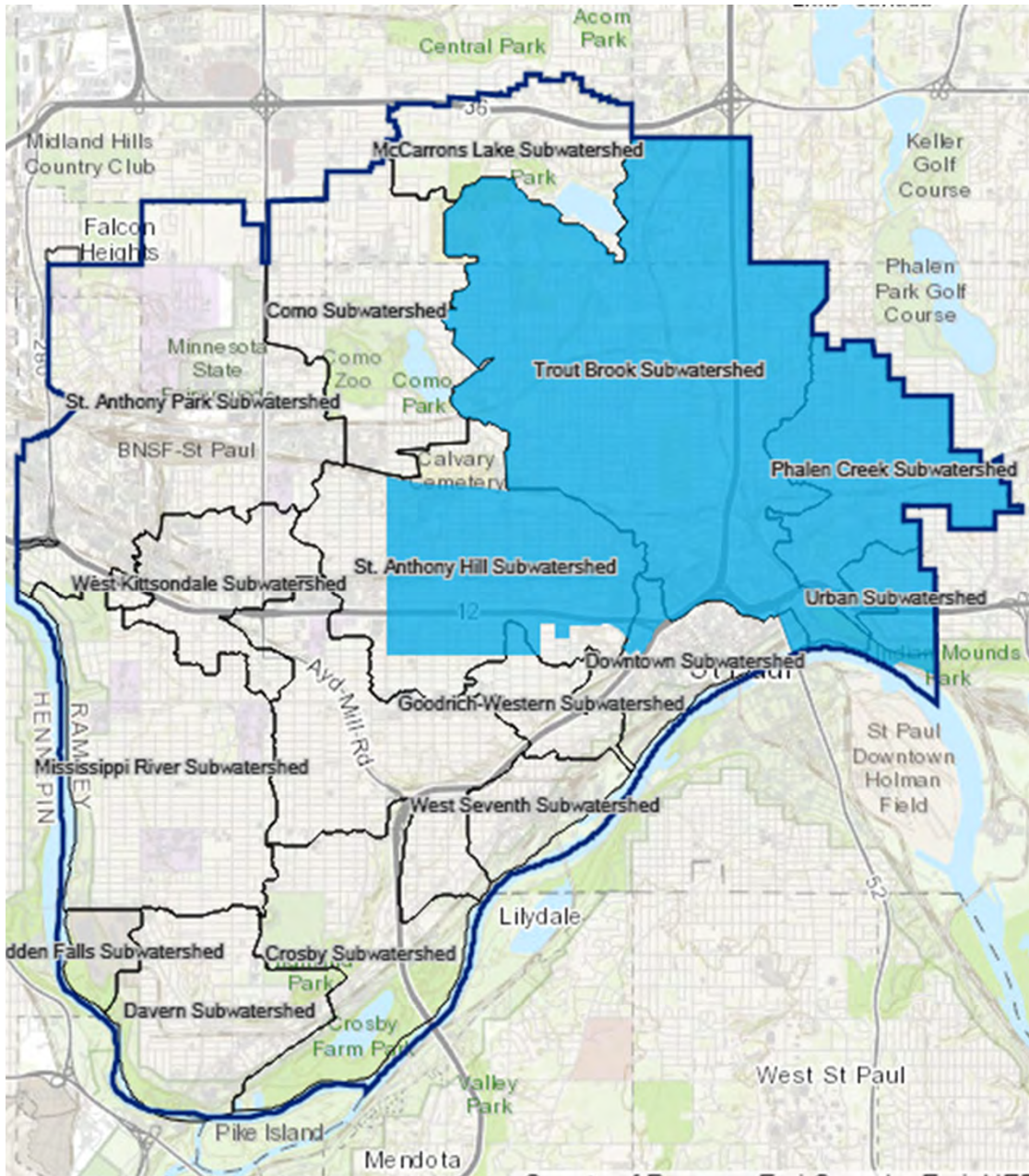
Rain Gardens in CRWD

Over 750 rain gardens
installed throughout
the District since 2005



CAPITOL REGION WATERSHED DISTRICT





STEWARDSHIP GRANT PROGRAM FOCUS AREAS



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- Rollout timeline: Fall 2021
- Grant Award: one time award of up to \$1,000. No match required.
- What's covered:
 - Native plants or native cultivars
 - Soil, mulch, and edging
 - Equipment and tool rental
 - Landscape design expenses
 - Contracted construction costs (in-kind labor not eligible for reimbursement)
- More details/questions: Carol Lundgren
clundgren@capitolregionwd.org

COMING SOON: NATIVE LANDSCAPING GRANTS



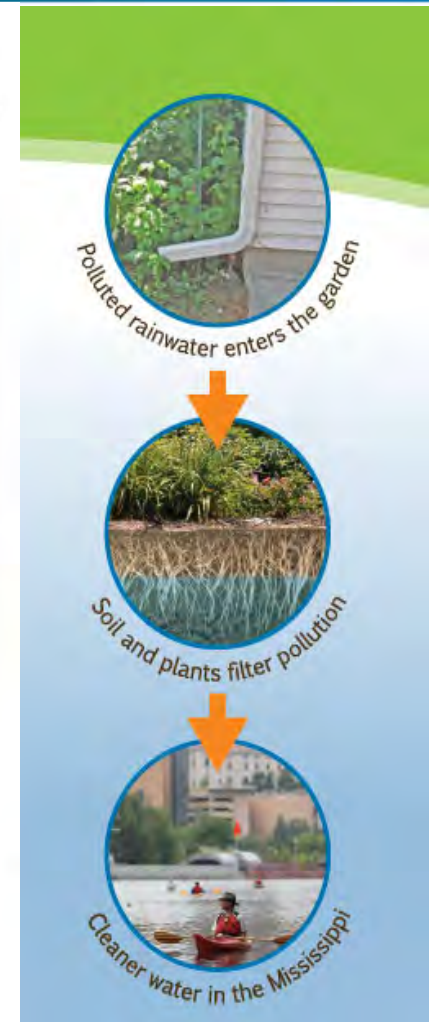
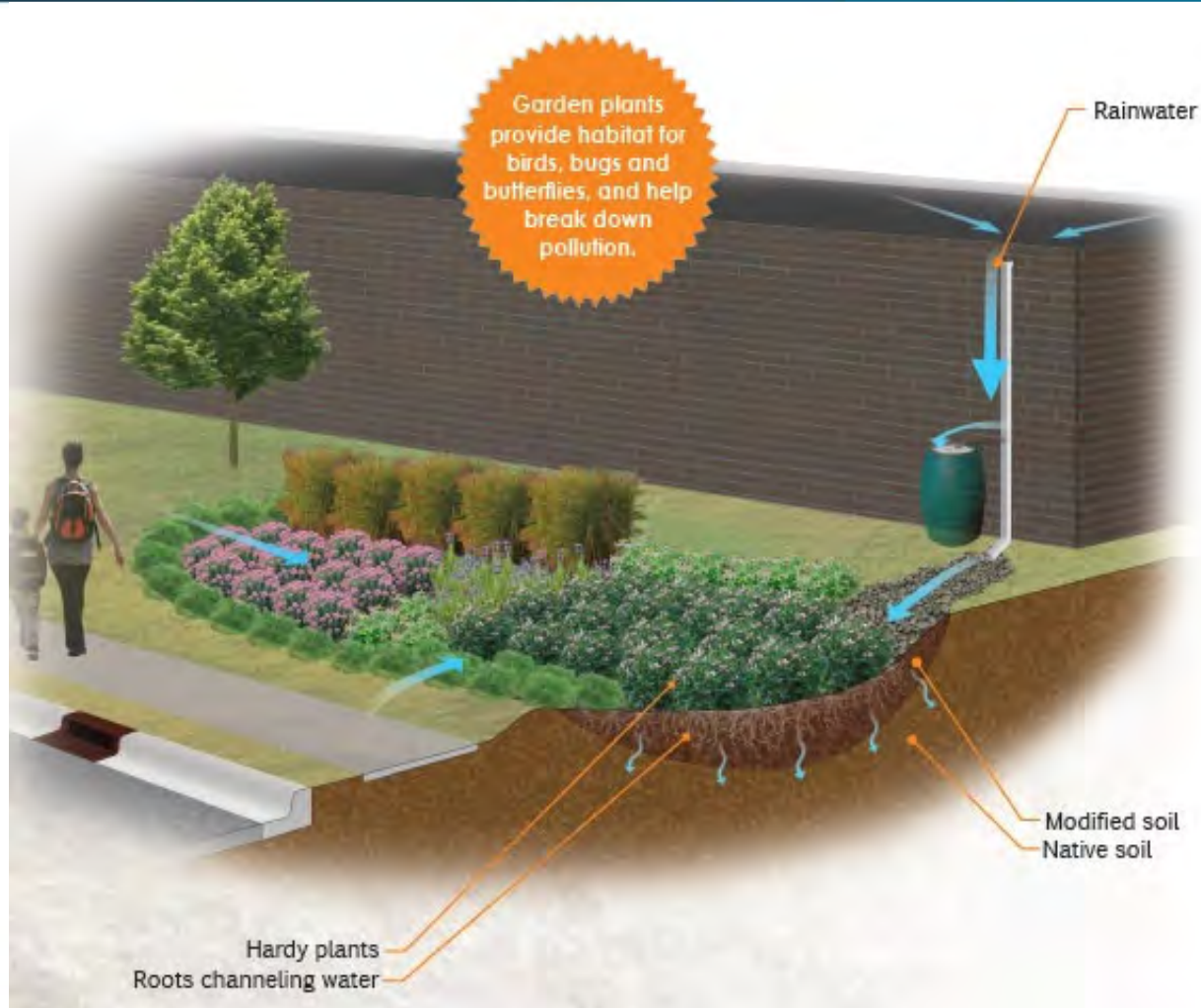
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Rain Garden Design

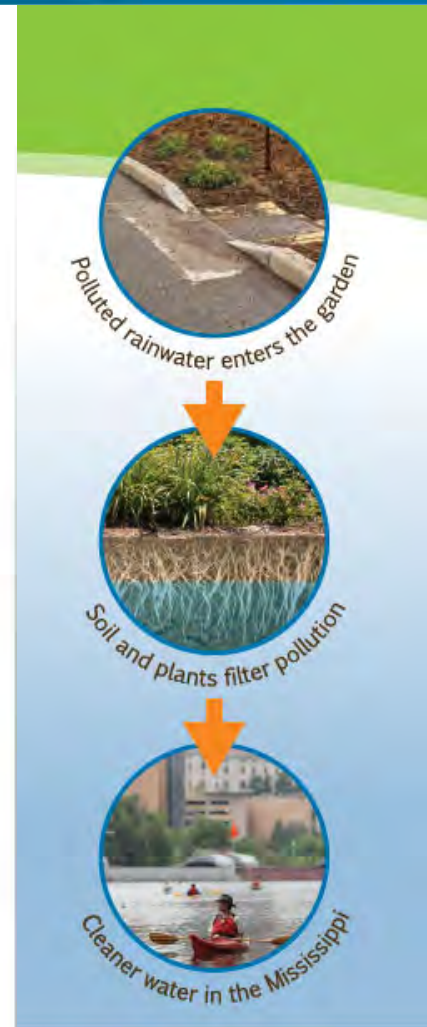
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Rain Gardens



Rain Gardens



Rain Garden Benefits

- Pollution reduction
- Creation of green space
- Flood protection
- Habitat creation
- Water conservation

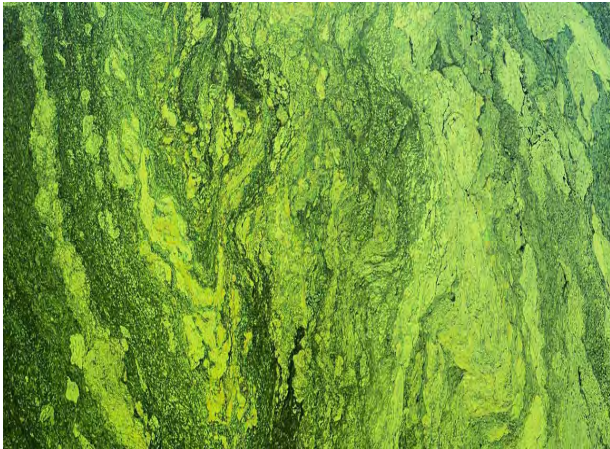


Annual Pollution Removal

PHOSPOROUS

55 lbs

(27,500 lbs of algae)



WATER

39 Million Gallons

(51 Olympic Size Pools)



SEDIMENT

22,000 lbs

(343 five-gallon buckets)



Rain Garden Maintenance



Gardening Guide



How is my rain garden doing?

The purpose of this guide is to help you maintain the beauty, health and performance of your rain garden. See below for general gardening tips, to be done as needed. The following pages include seasonal tips, to be done at a specific time of year, recommended native plants for your garden, and weeds to watch out for. With proper care, your garden will continue to help keep our lakes and the Mississippi River clean by capturing runoff and removing pollution.

Questions?	IF YES, perform these recommended tasks
Is there flooding for more than two days (48 hours) after rainfall?	▶ Rain garden is not functioning and requires assistance. Please contact our Urban BMP Specialist Andrew Novak (email and phone below).
Is anything blocking the flow of water into the garden through the inlet?	▶ Remove dirt, weeds and other debris from the inlet regularly and after each rainfall. Sand and dirt from the street should go in the trash.
Has dirt, leaves, trash or other debris collected in the garden?	▶ Remove and dispose of excess dirt and debris. Sand and dirt from the street should be thrown out with the trash. Leaves and stems can be composted.
Is there erosion or bare soil in the garden?	▶ Select and add plants based on your sun, shade and soil moisture conditions. Refer to Blue Thumb's Plant Finder for more information on planting conditions: blue-thumb.org/plants . Replenish mulch in bare spots to prevent weeds or erosion. 3" layer of double-shredded hardwood mulch is recommended.
Do the plants need more water?	▶ After planting, water every day for one week unless it rains that day. During the first growing season, water weekly with 1" of water.
Are weeds present?	▶ Pull out weeds by the roots. Refer to inside pictures of common weeds. Visit "Weed Spotter!" at capitolregionwd.org .



Capitol Region Watershed District | Andrew Novak: andrew@capitolregionwd.org, 651-644-8888
capitolregionwd.org | facebook.com/CapitolRegionWD

Inspections



2019 Stewardship Grant Inspections

Dear Stewardship Grant Participant:

Capitol Region Watershed District (CRWD) staff have received grant funding for rain garden inspections. I will be sending out another inspection to your project. Our goal is to be an ongoing resource for the proper care of rain gardens and other stormwater management projects. Please feel free to contact us with any concerns or comments please feel free to improve our Stewardship Grant program.

Please contact
Andrew Novak at:
anovak@capitolregionwd.org
(651) 644-8888.

Thank you for your participation in the community to see your project.



Rain Garden Maintenance

Throughout the summer of 2019, CRWD staff partnered with Master Water Stewards to visit your rain garden. We'd like to offer the following suggestions to help keep your rain garden looking great and improving water quality!

Inspection Date: 07/08/2019

In your garden...	Yes	No	Recommended Maintenance
Does your rain garden need help functioning as designed?		X	Rain garden is not functioning and requires technical review and significant maintenance. Please contact our office for recommendations (651) 644-8888.
Is anything blocking the flow of water into the garden through the curb-cut inlet?		X	Remove dirt, weeds, and other debris from the inlet after each rainfall, as needed. Sand and dirt from the street should go in the trash.
Has dirt, leaves, trash or other debris collected in the garden?		X	Remove and dispose of excess dirt and debris. Sand and dirt from the street should be thrown out with the trash. Leaves and stems can be composted.
Does your garden need mulch?		X	Replenish mulch in bare spots as needed to prevent weeds. Please use double shredded hardwood mulch.
Does your garden need additional plants?		X	Select and add plants based on your sun, shade, and soil moisture conditions
Do your plants need more water?		X	Water new plants in the garden when rainfall is less than 1-inch per week. Water as needed during drought conditions for established mature plants.
Are there weeds present?		X	Pull weeds out by the roots. For help, visit Weed Spotter at www.capitolregionwd.org
CRWD inspection notes	Looks great! Monitor the inlet as needed.		

2021 Inspections-Update

- 347 inspections done in 2021
- **84%** in good condition
- Most common maintenance needs are **weeding** and keeping the **inlet clear**



Seasonal Garden Care



<https://www.capitolregionwd.org/project-maintenance/>

SPRING

- Remove dead plants, seeds, stalks and any decaying material.
- Thin or prune overcrowded/overgrown plants.
- Clear inlets or pipes of any obstructing materials from winter.



- Add, move, or divide plants if crowded or bare spots visible.
- Weed mid- to late-May, before Memorial Day, or when dandelions first turn yellow.

SUMMER

- Prune decaying, unattractive, or taller plants.



- Check for erosion, ponding or flooding after big storms.
- Remove warm season weeds by the 4th of July and late summer weeds by mid-August.



FALL

- Remove or replace plants, especially poor performing ones.
- Clean up leaves from garden or inlet.



- Prune shrubs and plant stalks when dormant after first frost.
- If desired, leave native plants for winter as food and cover for wildlife.



WINTER

- Replace mulch in early winter where needed.



- Remove trash and debris.



- Avoid snow piles or chemicals on garden (i.e. salt).
- Prepare gardening tools for spring!



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Seasonal Garden Care



SUMMER

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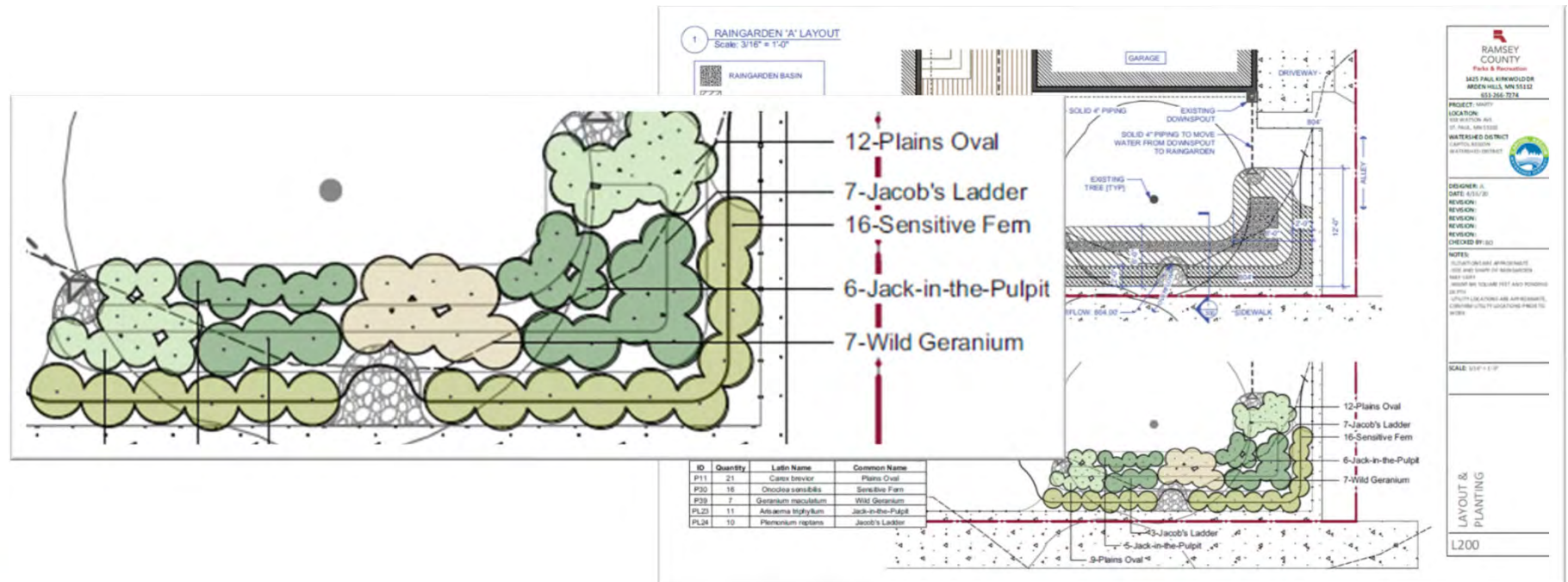


Take note of local ordinances-
boulevard plant height restrictions vary by city



Weeding

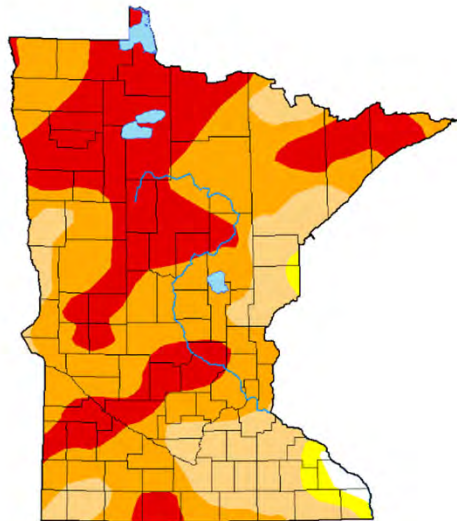
- Aim for at least 3 weeding efforts/year
- Reference your planting plan when weeding



Watering

- RGs usually require less water
- Drought conditions may require additional watering
- Follow local water restrictions (even/odd)

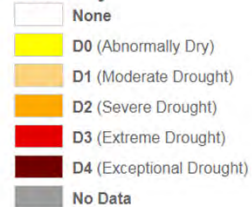
Minnesota



Map released: Thurs. August 5, 2021

Data valid: August 3, 2021 at 8 a.m. EDT

Intensity



Authors

United States and Puerto Rico Author(s):

Richard Tinker, NOAA/NWS/NCEP/CPC

Pacific Islands and Virgin Islands Author(s):

Richard Heim, NOAA/NCEI

The Drought Monitor focuses on broad-scale conditions. Local



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Seasonal Garden Care



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Transplanting Plants



Jumping Worms

- Nonnative earthworm species
- Impacts: Change soil texture, strip mulch and topsoil layers, remove nutrients, increase erosion, less successful plant growing
- ID: Wriggle/ 'jump' when disturbed. Coffee ground-like soil
- Worms/cocoons spread by moving potted plants, soil, compost, mulch and fishing bait
- Cocoons form late summer/early fall
- Consider risk/benefit of using mulch and transporting plants, especially during cocoon season
- More info: MN DNR and U of M "Meet the Jumping Worm"



Photo credit: Josef Gorres,
University of Vermont



Photo credit: Josef
Gorres, University of
Vermont

Seasonal Garden Care



WINTER ❄️

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Seasonal Garden Care



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Weed Watch- Tree Saplings



Siberian Elm



Box Elder



Green Ash

Weed Watch!



Crabgrass



Foxtail Species



Crown Vetch

Photos: MN Wildflowers

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Weed Watch!



Creeping Bellflower



Lamb's Quarters



Horseweed

Photos: Hennepin Co. Master Gardeners, MN Wildflowers

CAPITOL REGION WATERSHED DISTRICT



Gardening Guide



CRWD Recommended Native Perennials



Cardinal Flower



Sensitive Fern



Pink Turtlehead



Prairie Blazing Star



Little Bluestem



Swamp Milkweed



Blue Flag Iris



Dwarf Bush Honeysuckle



Butterfly Weed



Fox Sedge



Purple Dome Aster



Prairie Dropseed

Prairie Moon Nursery

www.prairiemoon.com

Glacial Ridge Growers

www.glacialridgegrowers.com

Blue Thumb

www.blue-thumb.org

MN Wildflowers

www.mnwildflowers.info

Plant Recommendations

- Fox sedge
- Blue flag iris
- Black-eyed Susan
- Dwarf Joe pye weed
- Swamp milkweed
- Little bluestem
- Prairie dropseed



Website and Seasonal Newsletter

Maintenance Tips



Tips for Summer Maintenance

Capitol Region Watershed District (CRWD) provides resources, training and support to help Stewardship Grantees care for their projects. Routine maintenance is an important part of any clean water project. Use the tips and resources below to assist with your clean water project's maintenance needs.

Please contact Urban BMP Technician, Rachel Funke, at rfunke@capitolregionwd.org or 651-644-8888 ext. 110 with your project questions.

Visit CRWD's Project Maintenance Resources Page

[https://www.capitolregionwd.org/
project-maintenance](https://www.capitolregionwd.org/project-maintenance)

- Rain gardens
- Shoreline restorations
- Green roofs
- Underground infiltration/dry wells
- Permeable hardscaping



CAPITOL REGION WATERSHED DISTRICT



On-site Volunteer Consultations

- MN Water Stewards and Ramsey County Master Gardeners
- One-time site-specific consults and light maintenance help to get your rain garden on the right track
- Weed ID, plant recommendations, troubleshooting, etc.
- Contact Rachel after workshop to sign up for a consult



Other Ways to Get Involved



Adopt a storm drain near your home

Sign up to

Adopt a Storm Drain!



1. Sign up online
to adopt a drain in your neighborhood

www.adopt-a-drain.org **GO**

2. Keep your storm drain clear

Rain washes anything that's on streets and other paved surfaces down the storm drains and into lakes and rivers. So sweep leaves, grass clippings and trash away from the drain surface year-round.



3. We'll post a small sign in your yard

to let your neighbors know you're protecting clean water. And if they ask, let them know how they can do their party. *(Talking points provided!)*



4. Tell us how much stuff you removed from around the storm drain, via postcard or email. It takes less than five minutes, and reporting results will be shared with participants so everyone will know their collective impact!

**ADOPT
a STORM
DRAIN**



A project of the City of Saint Paul,
Capitol Region Watershed District,
Ramsey-Washington Metro Watershed
District and Hamline University

www.adopt-a-drain.org

www.adopt-a-drain.org

CAPITOL REGION WATERSHED DISTRICT



Join CRWD's Community Advisory Committee



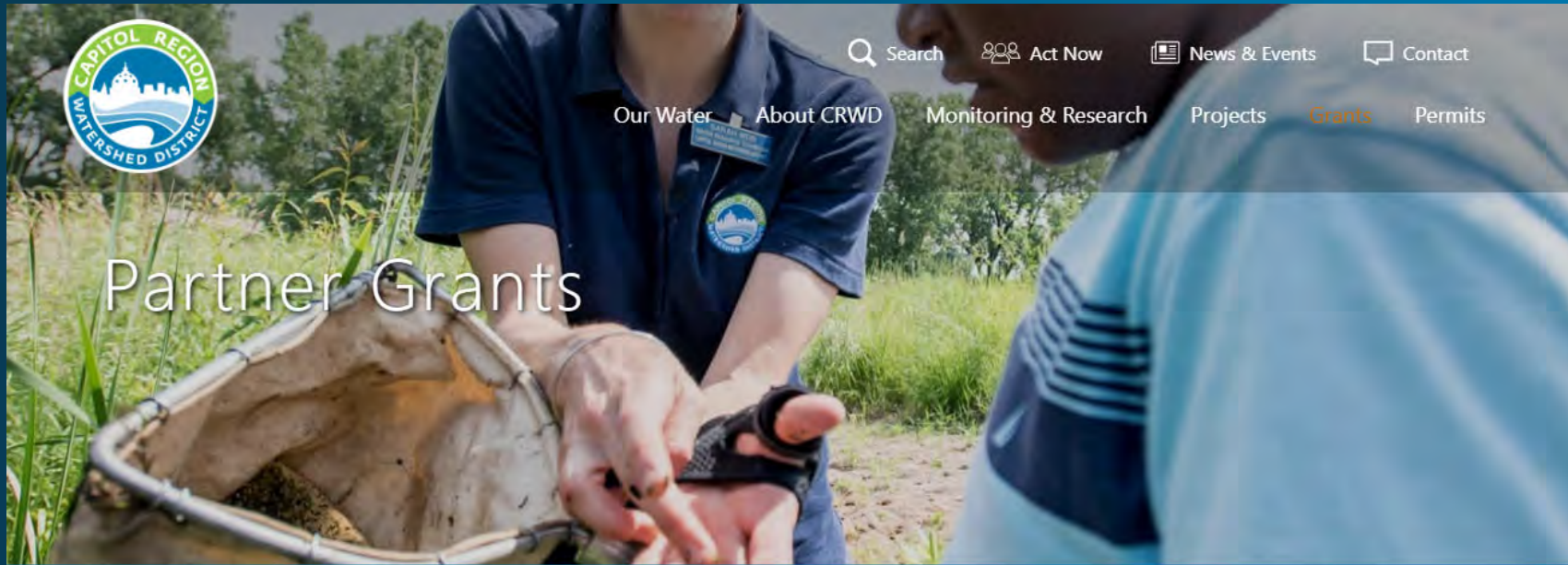
Meetings 2nd Wednesday of the month 7-9pm

www.capitolregionwd.org/about-crwd/people/

CAPITOL REGION WATERSHED DISTRICT



Apply for a Partner Grant



Partner Grants fund programs led by community, arts and environmental organizations, schools and faith-based groups that educate and promote clean water actions. Grants are awarded once a year in December for the following year, and awards typically range from \$2,000 to \$20,000.

Programs must occur within Capitol Region Watershed District's (CRWD) boundaries (click link below) to be eligible for funding. Partner grant agreement requirements include insurance requirements, submittal of a final report including high resolution photos of your project or program and grant funds are distributed following completion and reporting of your project. CRWD's Partner Grant Review Committee may determine to fully or partially fund your proposal.

Above photo credit: Caroline Yang

www.capitolregionwd.org/grants/partner-grants/

CAPITOL REGION WATERSHED DISTRICT



Become a Minnesota Water Steward

MINNESOTA WATER STEWARDS
Community Leadership for Clean Water

A program of
FRESHWATER

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Get Involved ▾

Your Watershed

For Stewards ▾

Contact Us

Apply Now



What is a Minnesota Water Steward?

[Apply Here](#)

[Information Sessions](#)

[Training Schedule](#)

[Online Course](#)

Latest from Facebook



Minnesota Water Stewards updated their profile picture.
10 months ago

[View on Facebook](#) · [Share](#)

<https://minnesotawaterstewards.org/>

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Seed Collection & Demonstration Events

Join the Minnesota Horticultural Society's Native Plant Community Science Project for two native plant seed collection and cleaning demonstration events.

9/16 & 10/7 at CRWD's office 595 Aldine St. Saint Paul 55104

More details at:

<https://northerngardener.org/mn-seed-project-workshops/>



Seed Collection Event

September 16

As flowers start ripening into seeds, join our seed collection and processing demonstration.

[Learn more >>](#)



Seed Collection Event

October 7

As flowers start ripening into seeds, join our seed collection and processing demonstration.

[Learn more >>](#)

CAPITOL REGION WATERSHED DISTRICT



Contact us



Rachel Funke

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