

# CREATING RESIDENTIAL RAIN GARDENS



#### RAIN GARDENS

A rain garden is a landscaped, depressed area that can hold stormwater runoff from impervious surfaces (such as a street) while it infiltrates into the soil below.

The City of Saint Paul encourages residential rain gardens. Properly designed and well-maintained rain gardens can increase a home's curb appeal, while improving water quality, and adding habitat. There are already over 400 residential rain gardens in the City.

This guide identifies resources for Saint Paul residents interested in creating a rain garden. It also helps property owners understand the City's permit steps for residential rain garden construction.



#### SUSTAINABLE SAINT PAUL

Mayor Melvin Carter and the Saint Paul City Council are committed to building a city that works—for all of us. The city is taking proactive steps to protect our city's air, water, and urban landscape by focusing on Carbon Dioxide (CO2) reduction activities in the areas of energy efficiency and conservation, clean energy supply, alternative fuels and transportation options, recycling and waste reduction, urban reforestation and natural resources management, and water resources management.

The City of Saint Paul encourages all residents to contribute to a sustainable urban living environment by installing rain gardens. There are many benefits for using native plants and limiting pesticide use such as sustaining ecosystem pollinators like birds, butterflies, and many beneficial insects which commonly utilize rain gardens.



### SAINT PAUL'S RAIN GARDEN PROGRAMS

#### RESIDENTIAL RAIN GARDENS

This guide provides instruction for residents to create an independent rain garden on residential private property or the associated public boulevard. The City also offers partnership programs, which are listed below.

# SAINT PAUL RESIDENTIAL STREET RECONSTRUCTION

Each year, the city reconstructs 10-to-15 miles of residential streets to improve street paving, curbs and gutters, sidewalks, landscaping, and lighting. The City of Saint Paul partners with Watershed Districts to offer boulevard rain garden installations to residents in residential street reconstruction project areas. You must be a resident within a project area to participate in the program.

# INSPIRING COMMUNITIES PROGRAM (ICP) PARTNERSHIP

The **Inspiring Communities Program** is a housing redevelopment strategy. It provides focused investment in cluster areas in neighborhoods most impacted by foreclosure and vacancy. The City partners with Watershed Districts to incorporate rain gardens into the design of rehabilitated homes.

#### DOES THE CITY PROVIDE COST-SHARING OR DESIGN ASSISTANCE FOR RAIN GARDENS?

Saint Paul does not currently have resources to provide but refers you to agencies that do. (See page 5)

#### DO I NEED A CITY PERMIT FOR A RAIN GARDEN?

You may need a permit under certain circumstances. Refer to the process steps shown at the bottom of this page for more guidance.

# MY PROPERTY IS A DESIGNATED HERITAGE PRESERVATION SITE (INDIVIDUAL OR WITHIN A HISTORIC DISTRICT), IS THERE A SEPARATE APPLICATION PROCESS?

The Heritage Preservation Commission (HPC) may require review for hardscaping elements, which may include: pavers, curbing, sidewalks, fencing and walls. (See Department of Planning and Economic Development – Historic Preservation on back contact page)

#### WHERE CAN I PUT A RAIN GARDEN ON MY PRIVATE PROPERTY?

No specific restrictions exist on placement, but design must avoid negatively impacting existing structures such as sidewalks and home. (See City Code Chapter 34 for more details)

#### WHAT IS A BOULEVARD?

City code defines a boulevard as the public right-of-way lying between the property line and sidewalk, and between the sidewalk and the roadway, or where no sidewalk exists, between the property line and the roadway.

## NEIGHBORS ARE COMPLAINING ABOUT THE APPEARANCE OF MY RAIN GARDEN.

WHAT DO I DO?

Take appropriate steps to ensure your rain garden is a welcome feature in the neighborhood. Evaluate if your rain garden needs weeding or maintenance. Lack of attention or unsuitable plant heights can often present a nuisance and occasionally cause safety concerns. (See City Code Chapter 105)

#### **BASIC CITY PERMIT PROCESS\***

#### PRIVATE RAIN GARDEN

- 1. Review questions on page 3.
- If you answer "no" to all questions on page 3, rain garden is considered minor landscaping. No permit is needed.
- 3. If you answer "yes" to *any* questions on page 3, permit from Department of Safety and Inspections (DSI) is needed.
- 4. For DSI permit, review site design with DSI Plan Review. (*See back contact page*)

#### **BOULEVARD RAIN GARDEN**

- 1. Fill out registration form.
- 2. Submit registration form and plans to Department of Public Works.
- 3. Receive registration approval letter.
- 4. Contractor applies for Public Works permits, and other permits as needed, for example, Forestry.

\*If the property is designated as a Heritage Preservation Site then you will also need approval from the Heritage Preservation Commission or its staff prior to city permits being issued.

#### PRIVATE PROPERTY

Know your property lines. Your rain garden must be on your property. You are responsible to locate all utilities. Call before you dig! Contact Gopher State One Call at (651)-454-0002.

Rain gardens on private property are generally considered minor landscaping improvements. City review or permits are typically not required, **unless the following apply**:

For proposed rain garden installation on **private property** answer these questions and follow the chart on page 2:

- Does your work involve movement of more than fifty (50) cubic yards of fill, or grading in excess of 10,000 square feet?
- Do you need retaining walls 4-feet tall or greater to be installed or modified?
- Is the rain garden edge within 10-feet of a structure?
- Does runoff or you drainage design direct water towards another property?

If your rain garden on private property is not considered minor landscaping, you will need to obtain a building permit from the DSI plan review counter. (See Department of Safety and Inspections on back contact page)



Rain garden plants at this property were excessively tall relative to their placement at the property line. While an existing fence prevented any encroachment (overhang) onto the public sidewalk, the plant height and placement resulted in safety concerns and neighborhood complaints.



#### **POST-CONSTRUCTION TIPS**

Rain gardens require care and ongoing attention. You are responsible for any potential impacts resulting from poor rain garden design or inadequate maintenance. Common impacts include safety or nuisance concerns like:

- Plants that will encroach onto the sidewalk, due to height and/or placement.
- Plants that create general public safety concerns, or noxious weeds.
- Water overflows from the garden, draining onto sidewalks.
- Standing water.

If a complaint is filed with the City of Saint Paul regarding a rain garden, Code Enforcement will inspect the situation. If changes are required and not corrected, a citation may be issued for a violation of City Code.

#### BOULEVARDS

#### (PUBLIC RIGHT-OF-WAY)

Boulevard rain gardens that will collect street runoff must be reviewed and approved prior to construction. Residents must register a proposed rain garden with the City by completing the separate Boulevard Rain Garden Registration Form.

#### REGISTRATION OPPORTUNITIES AND TIMING

Each year the City provides three opportunities to apply for a registration. These align seasonally with key windows for successful rain garden construction, avoiding heat stress or severe weather associated with midsummer, as well as serve to organize the city's assistance and review efforts for residents.

- Register by **April 1** for early summer construction.
- Register by **June 1** for late summer construction.
- Register by **August 1** for fall construction.

#### Expect a minimum of two weeks for staff review

The registration form must have plans attached which must be to-scale and show property lines, utility locations, trees and tree canopy, drainage areas, existing and proposed elevations, and rain leaders, inlets, or other drainage features. Expect a minimum of two weeks for staff review. Other information and details may be requested during staff review. The property owner will receive a registration approval letter.

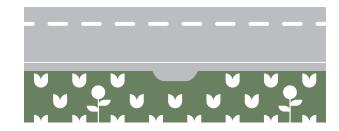
#### REQUIREMENTS

The City does not require the use of standard designs for rain garden features. However, many local laws govern activities and features in the public right-of-way. All conditions stated in relevant city ordinances apply, including:

Chapter 73 Heritage Preservation Commission
Chapter 105 Care and Maintenance of Boulevards
Chapter 116 Right-of-Way Administration
Chapter 121 Permits for Driveways, Sidewalks, Curbs, etc.
Chapter 135 Right-of-Way Permits
Chapter 176 Preservation and Protection of Trees

Staff may deny elements of a proposed plan following review in order to best balance multiple right-of-way needs and boulevard uses. Rain gardens proposed near existing street trees will be reviewed for potential tree impacts, including root systems, and shall be designed to avoid excavation within the drip line or damage to the trees.

Boulevard rain gardens require maintenance but a formal city agreement with a residential property owner is not required.



#### APPROVALS AND CONDITIONS

Depending on design, several permits may be necessary from different offices. Permits for curb work, excavation, obstruction, and sewer are issued to the contractor. The contractor must provide the registration approval letter and reviewed plan to the Right of Way Permit Desk at the time of excavation permit application. Planting, pruning, or removing trees in the boulevard requires a permit from the City Forester. (See back contact page)

Work on curbs, sidewalks and driveways within the right-of-way must be done under a **permit from the Sidewalk Office**. If your curb work damages the street, pavement restoration (asphalt and concrete) is performed by the Public Works Street Maintenance Division. Your contractor is responsible for payment to the city for your cost of such restoration.

#### DESIGN ASSISTANCE

Rain gardens must be properly located and designed in order to be successful. There are many resources available to property owners for design assistance.

Property owners may choose to work with design professionals such as landscape architects for creating a rain garden. Ramsey County's Soil & Water Conservation division, a team within their Parks & Recreation department, conserves and enhances natural resources in Ramsey County by providing technical, financial, and educational support to residents, property owners, and state, local, and federal governmental agencies and environmental organizations. (See back contact page)

#### FUNDING ASSISTANCE

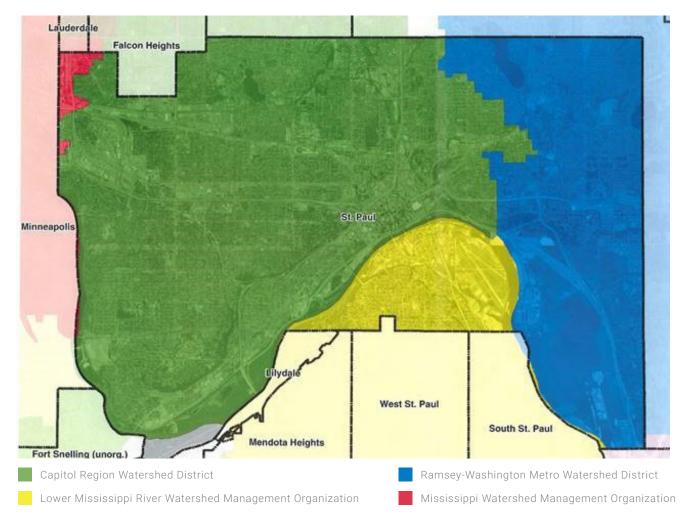
Watershed agencies often provide cost-share assistance for creating residential rain gardens. Two watershed districts that have established cost share programs include:

- Capitol Region Watershed District (See back contact page)
- Ramsey-Washington Metro Watershed District (See back contact page)

For "Do It Yourself" rain gardens, consider consulting the following resources:

- Blue Thumb: www.blue-thumb.org
- Metro Blooms: www.metroblooms.org

#### WATERSHED DISTRICTS OF SAINT PAUL



Regular rain garden maintenance will be required for at least the first two years. Once your rain garden becomes more established, the need for maintenance will decrease.

#### WATERING

If newly planted plants do not receive natural rainfall, water them once a week with an inch of water during the first growing season.



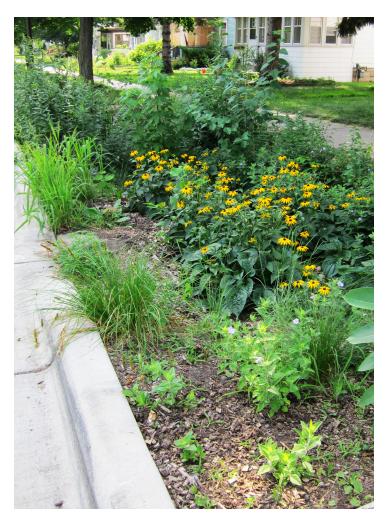
#### WEEDING

Lightly weed the rain garden once a month. This will help the new native plants become established, and keep the rain garden looking clean and neat. Leaving plant tags next to the plants will help in determining which plants are desirable. In following years, the weeding should be reduced to just twice a year or as needed if the mulch layer is maintained.

When the perennial plants go dormant in the fall, the plants may be pruned at that time, though it is recommended to prune back the plants in the spring after they have started to green up again. This will help with identification of desirable versus undesirable plants.

Mulch should be added to the rain garden annually or biannually to maintain a layer of mulch at least 3" in depth. This will help reduce the amount of weeding required.

Dead plant material can be removed at any time. Replanting can be done during the growing season, though spring and fall plantings are usually more successful. This will allow more light to reach the new growth, and help with the establishment of the new plants.



#### CITY ACTIVITIES

All boulevards are public property and subject to the right of the City to perform necessary work; plant, trim and otherwise maintain trees; access utilities and store excess snow. In the event the City interferes with boulevard plantings in the course of such work, it is responsible only for restoring the boulevard to the original grassy state with black dirt and grass seed. In no event is the City liable for any damage to, disruption of or removal of plantings, either direct or indirect, as a result of the City, its employees, agents or contractors performing any installation, maintenance or repairs. Further, the City has the right to remove or restrict any plantings deemed to interfere with the safety of pedestrians and motorists.

# CHECKLIST FOR BOULEVARD RAIN GARDENS

Submit a plan with scaled dimensions showing:

- Property lines
- Utility locations (Gopher State One Call)
   1 (800) 252-1166
- *Tree(s)* and tree canopy
- Drainage area(s)
- Existing and proposed elevations
- Rain leaders, inlets, drainage features

Boulevard rain garden plans including name, address, email, and phone number can be submitted to:

Public Works Mapping & Records 25 West 4th Street Saint Paul, MN 55102 (651) 266-6150

#### FOR MORE INFORMATION

#### WATER AGENCIES

- Ramsey Soil & Water Conservation
   https://www.ramseycounty.us/residents/environment/soil-water-conservation

   (651) 266-7270
- Capitol Region Watershed District http://www.capitolregionwd.org/ (651) 644-8888
- Ramsey-Washington Metro Watershed District http://www.rwmwd.org/costshare (651) 792-7950

#### CITY DEPARTMENTS

- Department of Public Works http://www.stpaul.gov/public-works (651) 266-9700
- Department of Safety and Inspections Building Plan Review
   http://www.stpaul.gov/index.aspx?NID=671
   (651) 266-9007
- Department of Parks and Recreation Forestry http:// www.stpaul.gov/index.aspx?NID=4529 (651) 632-5129
- Department of Planning and Economic Development
   –Historic Preservation
   http://www.stpaul.gov/hpc
   (651) 266-9078

