CITY OF BLOOMINGTON
UTILITIES

RESIDENTIAL STORMWATER GRANTS 2022

GUIDELINES

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RESIDENTIAL STORMWATER GRANTS PROGRAM

The City of Bloomington Residential Stormwater Grants (RSG) program is administered by the City of Bloomington Utilities Department (CBU) and provides small grants to homeowners for sustainable stormwater infrastructure projects on private property. These projects are expected to improve the management of stormwater before it enters local waterways or the City's stormwater conveyance infrastructure known as the Municipal Separate Storm Sewer System (MS4). The water that flows into storm drains and through the MS4 doesn't get treated, so it transports pollutants from the urban landscape directly into our local waterways.

- The City of Bloomington Utilities Department has allocated $100,000 for the 2022 Residential Stormwater Grants Program.
- Applicants are expected to demonstrate their need to fix erosion and flooding issues, and provide a detailed plan and cost estimate for their proposal.
- Possible projects may include rain gardens, vegetated buffers, driveway culvert replacements, or stormwater pond maintenance.
- An optional public information sessions will be offered in January (the session will be recorded and be available online at www.bloomington.in.gov/utilities/stormwater/grants

TESTIMONIAL - 1700 S. Clifton Ave. Project

Through its Residential Stormwater Grant program, the City of Bloomington works with homeowners to improve drainage and erosion issues on their property in green and sustainable ways. In this example, the homeowner had an issue with stormwater flooding and stagnating in their backyard. Thanks to a grant and planning assistance from the city, a contractor was able to design and build a system to channel the stormwater through a bed of water-loving native plants to absorb and clean the water before discharging it to the city stormwater system.

The homeowner first read about the Residential Stormwater Grant program in the local newspaper. After submitting an application and proposal, CBU Environmental staff replied with several ideas on ways to incorporate green design and native species. The contractor revised the design to build "up" with a berm instead of digging down to form a dry creek bed, and several trees were saved by preserving their root structure.

A Dry Creek Bed in Progress
Credit: Residential Stormwater Grants 2020, CBU Staff

From first proposal to planting of native plants in the spring, the entire process took about one year, including the revision process.

"The CBU staff were really helpful," said the homeowner in a follow-up interview. "I'm just really pleased with how it turned out."

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I. WHO MAY APPLY

The following describes eligibility for RSG 2022 projects.

All applicants must reside within the City of Bloomington city limits and meet the following requirements:

1. Individual landowners or multiple landowners (contiguous properties)
2. Neighborhood Associations
3. Homeowner Associations

All applicants must reside within the City of Bloomington city limits and meet the following requirements:

- The applicant(s) must be the owner(s) of single-family residential real estate and pay the Stormwater Fee. The real estate upon which the drainage/erosion problem exists must be owned by the applicant(s).
- For applicants applying to fix an issue spanning multiple eligible properties, the parcels of real estate must be contiguous. Please only submit one application per project. All names and addresses must be on the Application.

If applying under a Neighborhood Association or a Homeowner Association, the following additional requirements must be met:

- Each parcel of real estate upon which the drainage/erosion problem exists must be owned by members of the applying Neighborhood Association or Homeowner Association.
- Applications must be signed by the President and/or Chair of the Board of the applying Neighborhood Association or Homeowner Association.

A Rain Garden in a Residential Setting
Photo Credit: The Herald-Times and Carrol Krause

II. TIMELINE/IMPORTANT DATES

The following is a timeline for application, along with important dates to note where applicable.

Applying for a RSG 2022

Attend Public Informational Meeting (optional) Switchyard Park Pavilion	Thurs., December 2, 2021, 6 - 7 p.m.
Attend Public Information Meeting (optional) Banneker Community Center	Tuesday, December 14, 2021, 6 – 7 p.m.
View recorded Public Information Meeting of December 14, 2021 (optional - posted on webpage)	To be posted online after event
Conduct Site Visit(s) – Preliminary	December 2021 – January 2022
Submit Applications due	Tuesday, February 1, 2022
Review Committees meets	March – April 2022
Grant recipients announced and approved through Utilities Service Board	May 2021

Awarded RSG 2022 Projects

Grant recipients notified	May 2021
Grant Agreement signing email sent	May
Conduct Site Visit(s) – Initial inspection (homeowner(s) and contractor)	May – June 2022
Grant Agreements sent in for signatures and return	Summer 2022
Grant recipients notified and projects commence	Summer 2022
Projects commence	Summer 2022
Conduct Site Visit(s) – Final inspection (homeowners(s) and contractor)	Summer 2022-2023
Payment processing	Summer 2022-2023

III. APPLICATION INSTRUCTIONS

APPLICATION

The Residential Stormwater Grant 2022 Application can be found online at www.bloomington.in.gov/utilities/stormwater/grants

The grant Application form is an online form that asks for the applicant and property information, as well as a detailed description of the project. The Application form must be completed online at the above address. The following supplemental materials need to be submitted with the Application form:

1. **Map** – of project location
2. **Sketch** – of project layout, including key features (direction of stormwater flow, inlets/ outlets, etc.)
3. **Photographs** – of current drainage or erosion issues (up to 5 photos, please keep to 10M total for all). Please, no videos.
4. **Cost Estimate** – of the total project cost, such as a quote from a contractor (including a description of the project). Note: This estimate must be itemized!
5. **Other helpful documents** – Any other helpful documents (such as existing engineered designs, a copy of the neighborhood covenants, Operations and Maintenance manuals, etc.)

Completed Applications must be submitted by 5:00 p.m. on Tuesday, February, 2022, for consideration.

IV. PROJECT EXAMPLES, REQUIREMENTS, AND MAINTENANCE

PROJECT EXAMPLES

Projects can be small or large – on one property or across multiple neighboring properties. In previous years, project costs ranged from around $500 to $5,000. Examples of projects that can be funded in 2021 include those, below.

Note: Green infrastructure projects (those which consists mostly of natural practices) are preferred over gray infrastructure projects (those that are mainly man-made such as french drains).

A note on native plants. You may have heard of native plants and be wondering just exactly what they are! Generally speaking, native plants are those that are indigenous to particular areas and, as such, provide a number of benefits. Regarding those native to Indiana:

- They tend to have deep roots, sometimes up to five feet long (as compared to turf grass which tends to have roots only a few inches long); therefore, they hold soil in place better, helping to alleviate erosion.
- Support the wildlife native to the area.
- Tend to be quite attractive!

Additional information and photos can be found at: bloomington.in.gov/utilities/stormwter/grants

A. RAIN GARDENS
B. BIOSWALES
C. DRY CREEK BEDS
D. STORMWATER PONDS
E. DITCH STABILIZATION
F. DRIVEWAY CULVERTS
G. FRENCH DRAINS AND UNDERDRAINS

MAINTENANCE

- All projects are required to be maintained for five years as part of the Grant Agreement.
- The five-year maintenance period will start when CBU has inspected the completed project and approved it for payment/reimbursement (Note: If you plan to move during this time, please inform the RSG 2021 coordinator).
- The following guidelines should help homeowners inspect and maintain their stormwater projects.

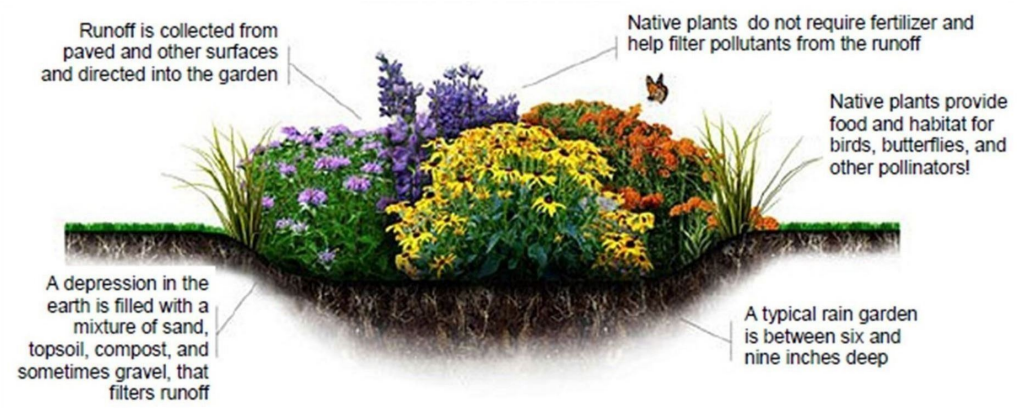
Routine Inspections — Inspect the feature, especially before and after major rain events, for any accumulated materials that could reduce water flow or drainage. Inspect for signs of deterioration, damage, invasive plants, soil erosion, or standing water. See more information, below.

Watering Plants	Water new plants at least weekly when they are first installed if it does not rain during that time. Watch for wilting plants and dry, dusty soil. Additional watering may be required during dry periods in the summer.
Weeding	Take a picture of the plants when they are first installed in order to track which plants to keep and which to pull (you may even wish to label them!). Remove invasive and nuisance plants by digging them up from the roots.
Excess Vegetation	If a section that should have bare rock (bottom of a dry creek bed, surface of an installed French drain, etc.) has excess vegetation, you can simply pull the “weeds”.
Clear Debris	Remove debris such as leaves, “weeds”, branches, accumulated silt, sand, stone, trash, or other materials so that impede water flow or drainage. Make sure flow is not reduced by more than 20% at any time.
Dispose of Waste	Properly dispose of waste materials in accordance with City of Bloomington Sanitation Program guidelines. Waste materials cannot be placed in ditches or waterways.
Pest Control	Watch for insect or wildlife damage. Remove and replace diseased or dead plants as necessary.
Bare areas	Add mulch to bare areas or replant sections where vegetation is sparse.
Erosion	Replace soil and stones if erosion occurs. Soil migration within the feature may indicate that it is undersized. If there is an outlet and erosion is occurring near it, restabilize the area as necessary using topsoil, seed and mulch, or use geotextile fabric and stone, if vegetation doesn’t establish.
Standing Water	If there is standing water in the feature for more than 48 hours (other than in a stormwater pond), this may be a sign of a larger problem such as clogging.
Underdrain	If there is an underdrain pipe present, refer to the maintenance guidelines for the component.
Pipe	Ensure the outlet is not blocked and the drain pipe is not clogged. Look for holes or low spots forming in the ground above the pipe. This may be a sign of pipe failure.
Holes	Look for holes or cracks forming in the vicinity of the feature. This may be a sign of damage.

A. RAIN GARDENS

- A rain garden is a depressed area in the landscape that collects rain water from a roof, driveway or street and allows it to soak into the ground.
- Rain gardens can help with stormwater quality and quantity:
    - Water quality: By filtering out pollutants in runoff.
    - Water quantity: By reducing flood risk by retaining and slowly releasing water over a two-day period (not enough time for mosquitos to reproduce!).
- Planted with grasses, sedges and flowering perennials, rain gardens can be a cost-effective and beautiful way to reduce runoff from your property.
- In this manner, they can provide food and shelter for butterflies, song birds and other wildlife.
- Rain gardens are typically constructed by excavating the area and creating a berm on the downhill side of the garden, then filling the excavated area with soil amended with sand and compost. Some rain gardens may have an underdrain to help promote infiltration in poorly drained soils.
- As a general rule, professional rain gardens can cost around $2,000-$5,000 depending on the size and complexity of the project. Buying the materials to build your own rain garden can cost around $500 or more.

MAINTENANCE – See pages 7 – 8, Water Plants, Weeding, Excess Vegetation, Clear Debris, Dispose of Waste, Pest Control, Bare areas, Erosion, Standing Water, Underdrain (possibly), Holes



Rain Garden Diagram and Photo
Credit: Royal Oak, MI Rain Garden Program

B. BIOSWALES

- Bioswales are linear, sloped drainage areas that contain native plants (you can think of them as linear rain gardens, see page 9).
- Bioswales can help with stormwater quality and quantity:
    - Water quality: By filtering out pollutants in runoff.
    - Water quantity: Increasing water quality and reducing flood risk by retaining and slowly releasing water over a two-day period (not enough time for mosquitos to reproduce!).
- Planted with grasses, sedges and flowering perennials, bioswales can be a cost-effective and beautiful way to reduce runoff from your property.
- In this manner, they can provide food and shelter for butterflies, song birds and other wildlife.
- Bioswales are typically constructed by excavating the area and creating a berm on the downhill side of the garden, then filling the excavated area with soil amended with sand and compost. Some may have an underdrain to help promote infiltration in poorly drained soils.
- Due to their linear design, bioswales are ideal for use along roadways, driveways, and parking lots.
- As a general rule, professional bioswales can cost around $2,000-$5,000 depending on the size and complexity of the project. Buying the materials to build your own bioswale can cost around $500 or more.

MAINTENANCE – See pages 7 – 8, Water Plants, Weeding, Excess Vegetation, Clear Debris, Dispose of Waste, Pest Control, Bare areas, Erosion, Standing Water, Underdrain (possibly), Pipe (possibly), Holes

An Attractive Bioswale
Credit: Lake County, IL

C. DRY CREEK BEDS

- Dry creek beds are another drainage tool similar to bioswales, where surface water is conveyed in a stable channel or trench (you can think of them as a bioswale without the plants in the middle!).
- Dry creek beds are typically designed to carry stormwater away efficiently to/from an area.
- Dry creek beds aren't meant for ponding water or removing pollutants, they tend to allow stormwater to disperse over a distance.
- Dry creek beds tend to mimic natural riparian areas.
- Dry creek beds are typically lined with stones and rocks and have native plants along the edges.
- Dry creek beds are a more natural solution than a French drain.
- Dry creek beds can be combined with other features, such as rain gardens.

MAINTENANCE – See pages 7 – 8, Water Plants, Weeding, Excess Vegetation, Clear Debris, Dispose of Waste, Pest Control, Bare areas, Erosion, Standing Water, Underdrain (possibly), Pipe (possibly), Holes

A Dry Creek Bed in Progress
Credit: Residential Stormwater Grants 2020, CBU Staff

D. STORMWATER PONDS

- Stormwater ponds are meant to capture large quantities of runoff to prevent downstream flooding.
- Stormwater ponds usually come in two types:
    - Detention: Hold water for a short period of time, releasing it slowly (may dry over time).
    - Retention ponds: Hold water indefinitely (may contain constant amounts of water).
- Stormwater ponds may also improve water quality by allowing pollutants to settle and be filtered out by native plants.
- Stormwater ponds typically have native plants planted outside, along the water line, and just inside of the water line. Note: The native plants actually help to deter geese.
- Residential Stormwater Grant funds can be used for detention or retention pond maintenance, for example:
    - Retrofits to improve pollutant removal
    - Shoreline restoration (erosion and plant)
    - Vegetated buffers

MAINTENANCE – See pages 7 – 8, Water Plants, Weeding, Excess Vegetation, Clear Debris, Dispose of Waste, Pest Control, Bare areas, Erosion, Underdrain (possibly), Pipe (possibly), Holes

Stormwater Retention Pond
Credit: Envirotech

E. DITCH STABILIZATION

- Ditches may need to be stabilized due to erosion.
- Erosion can occur when water moves too quickly along a ditch.
- Native plants can help hold ditch banks in place.
- Residential Stormwater Grants funds can be used for the repair of lined ditches or the conversion to vegetated swales or bioswales.

MAINTENANCE – See pages 7 – 8, Water Plants, Weeding, Excess Vegetation, Clear Debris, Dispose of Waste, Pest Control, Bare areas, Erosion, Standing Water, Holes

An example of ditch stabilization in progress
Credit: Internet

F. DRIVEWAY CULVERTS

- Driveway culverts provide access to private property where roadside ditches are present.
- These crossings can cause flooding and erosion issues if they are undersized or not properly maintained.
- Due to the high costs generally involved, Residential Stormwater Grant funds will only pay for the cost of the removal of the existing pipe, the replacement pipe, backfill, stabilization, engineering for inverts and slope determination, and labor for installation.
- Additional costs for headwalls, wingwalls and driveway improvements will be the responsibility of the homeowner.
- A typical driveway culvert replacement project may receive around $2,000 to $5,000 in grant funding, depending on the size of the pipe and complexity of the project.

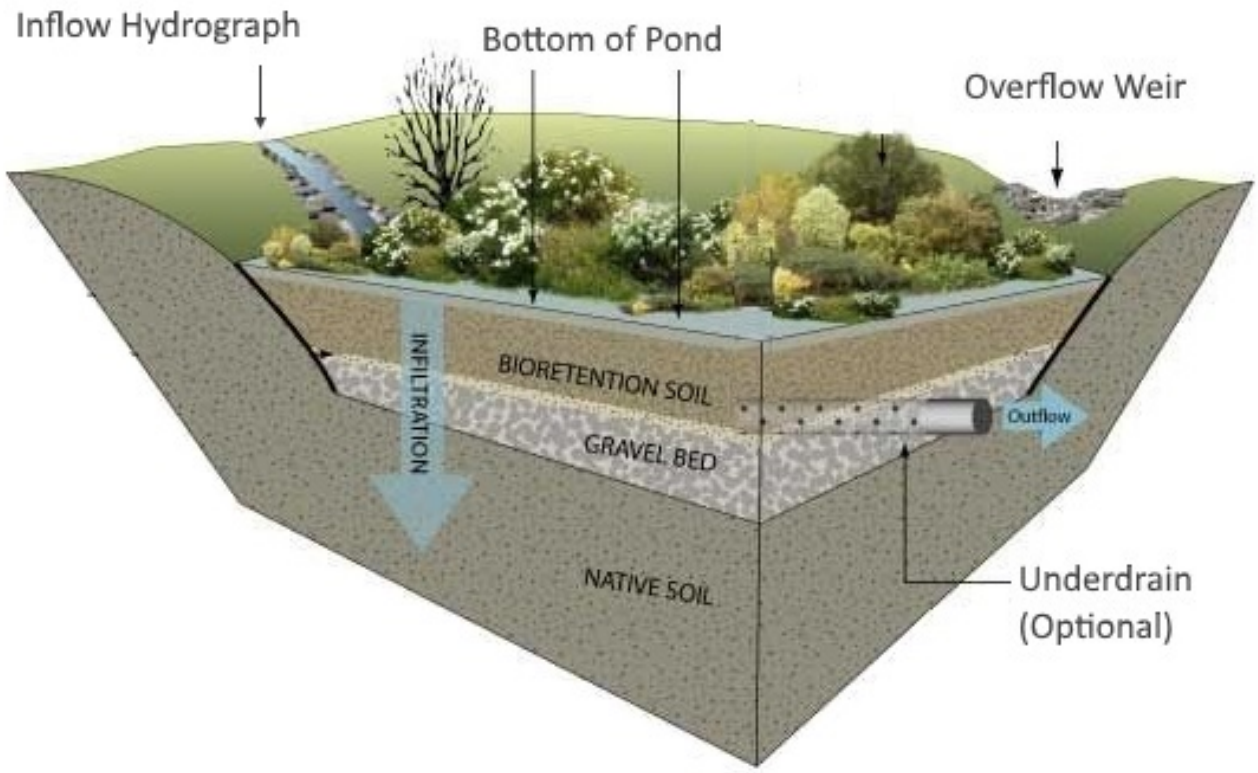
MAINTENANCE – See pages 7 – 8, Water Plants, Weeding, Excess Vegetation, Clear Debris, Dispose of Waste, Pest Control, Bare areas, Erosion, Standing Water, PIpe, Holes

An Example of an Installed Driveway Culvert
Credit: City of Greater Sudbury

G. FRENCH DRAINS AND UNDERDRAINS

- French and underdrains convey water through manmade means.
    - French drains: Generally consist of a perforated pipe buried in an excavated channel and filled with rock.
    - Under drains: A more generalized, subsurface drain to help with drainage. For example, such as one installed under a rain garden to convey stormwater as it drains the feature.
- For purposes of the Residential Stormwater Grants program, open channels such as bioswales and dry creek beds are generally preferred over these closed systems.
- However, if they are combined with more naturalized features, such as bioswales, dry creek beds, rain gardens, etc., they may be looked upon more favorable.

MAINTENANCE – See pages 7 – 8, Water Plants, Weeding, Excess Vegetation, Clear Debris, Dispose of Waste, Pest Control, Bare areas, Erosion, Standing Water, Underdrain , Holes



An Example of an Underdrain
Credit: Hydrology Studio

V. PROJECT REVIEW AND SELECTION

- There will be three phases to the project review process:
  - Internal Review Committee
  - External Review Committee
  - Utility Service Board Review and Approval

- The internal review will analyze projects based on location, drainage area, proximity to waterways or stormwater infrastructure, potential to reduce flooding and improve water quality, and median neighborhood income levels.

- The external review will include City staff from various departments as well as members of the public.

- The committees will rank projects based on the technical staff review, the project's potential benefits, and the Application materials provided. Projects located in neighborhoods with lower median income levels will rank higher than those in high-income neighborhoods.

- The committees will then determine which projects to fund, and how much funding will be awarded to each project.

A Drain After Installation
Residential Stormwater Grants 2020, CBU Staff

VI. GUIDELINES FOR AWARDED PROJECTS

The following are details regarding awarded projects.

NOTIFICATION

- Once the projects have been awarded, the recipients will be notified via the email address provided.

FUNDING

- If a project is not fully funded by the grant, recipients will be responsible for paying the remainder of the project cost.
- Recipients have the option to accept the award once it is granted and obtain updated quotes from their contractor if necessary.
- For 2022 projects, there is no minimum or maximum cost-share amount and there will be no cap in funding.
- As many projects will be funded as possible.
- Funding will only be provided for an authorized contractor to complete the engineering design (if applicable), materials, and labor.
- Funds cannot be used for permit fees, sales tax, the purchase of equipment, the purchase of land or easements, legal fees, or water/soil sampling or analysis.

GRANT AGREEMENT/SITE VISIT(S) – INITIAL INSPECTION/PROJECT COMMENCEMENT

- Once project plans have been finalized, recipients will then be asked to sign a Grant Agreement.
- A copy of the Grant Agreement will be sent via US Postal Service to the address provided.
- The recipient will be asked to sign the document. At this point, the recipient is asked to notify the RSG 2022 coordinator for a Site Visit (initial inspection), where the project will be reviewed and the Grant Agreement collected. Note: The recipient is encouraged to ask if the contractor and any neighbors that are on the grant if they can be present at this Site Visit.
- Once signed by the recipient, the Grant Agreement will then be routed for signature by the approving parties.
- The recipient will be notified by email at the address provided that the approving parties have signed the Grant Agreement, receive a scanned copy as an attachment, and that they are ready to notify their contractor and get started on their project.
- Please keep in mind that any work done before the Grant Agreement is signed by the approving parties will not be reimbursed. Successful applicants will have 12 months to complete their project.

- Grantees shall comply with all federal, state, and local laws and regulations during the Project and are solely responsible for securing any and all permits and/or licenses that may be required before any Project construction commences. Grantee shall also observe and comply with any and all real estate rights and privileges that may exist in and around the Project, including but not limited to easements and rights-of-way.
- All projects will require erosion and sediment controls during construction. Design plans must demonstrate adequate drainage and stabilization.
- If a project requires permits for work in the floodplain or Waters of the State, please contact CBU as soon as possible. These projects will require additional planning time.

  Note: All driveway culvert projects will require a pre-construction meeting with the CBU Engineering Department prior to construction. The applicant and their contractor will be required to attend this meeting at the project location.

SITE VISIT – FINAL INSPECTION

- Once a project is completed, the recipient is requested to contact the RSG 2022 coordinator for a Site Visit (final Inspection). Note: Again, it would be helpful if the contractor and all neighbors listed on the grant are present.

PAYMENT

- Payments will be made in one lump sum in arrears after the completed project has been inspected and approved by CBU.
- The recipient will be asked to have the contractor send an *itemized* invoice , complete with "Residential Stormwater Grant 2022" followed by the name/address of the recipient, and made out as well as addressed to:

  City of Bloomington Utilities
  600 E. Miller Dr.
  Bloomington, IN 47401

- The invoice must be submitted via email to stormwater@bloomington.in.gov for processing.

A note about *tax*: Either way, as the City of Bloomington is tax exempt, tax is not to appear on the bill (a tax exempt form is available upon request).

A note about *deposits*: If the recipient is paying a deposit up front (20-25% is average), they cannot be reimbursed until after the project is completed and approved and the invoice (complete with date and amount paid as well as homeowner name) has been received by the coordinator. The amount of deposit and the date it was paid must appear on the invoice submitted to CBU.