

*With a rain garden/bioretention cell, you have the ability to minimize runoff from your property and help improve water quality for creeks and streams.*

### Designing a Rain Garden/Bioretention Cell

Rain gardens rely on natural soils that let water move into and through the soil below. Water captured in a rain garden should drain down in about 12 to 24 hours. (A bioretention cell may be needed if the soil does not percolate sufficiently and an underdrain with an outlet may be required).

A rain garden/bioretention cell will usually be about 10% of the size of the area that sheds runoff to the rain garden. Rain gardens/bioretention cells generally pond water to a depth of about 6 inches.

Avoid utilities when installing a rain garden/bioretention cell. Make sure the bottom of the rain garden is level from side to side and end to end. Keep rain gardens/bioretention cells at least 10 feet away from buildings.

Refer to the **Iowa Rain Garden Design & Installation Manual** to design and install a rain garden or bioretention cell.

Download the manual at:



<http://rainscapingiowa.org/>

For more rain garden/bioretention cell information including the Stormwater Utility Best Management (BMP) Reimbursement application, visit the City's website at:

<http://www.waukee.org/468/Best-Management-Practices-Reimbursement->

**Stormwater Best Management Practice (BMP) Reimbursement applications will be available at Waukee City Hall, the Waukee Public Library and the Waukee Public Works Building.**

A Green Initiatives Committee has been assembled to assist in researching sustainable practices and make recommendations to the City Council. As one of the initial steps in becoming more sustainable, the City Council has adopted a mission **"to create a healthier, safer, and environmentally conscious Waukee that encourages and implements sustainable growth practices and maintenance of the community for both the current and future generations."**

**City of Waukee Public Works Department  
Stormwater Utility  
805 University Avenue  
Waukee, IA 50263  
Phone: (515) 978-7920  
Fax: (515) 987-3979**

Staff Contact:  
Stormwater Coordinator, Jenny Corkrean  
[jcorkrean@waukee.org](mailto:jcorkrean@waukee.org)

**Spring 2016**



## Stormwater Utility

Receive up to a **\$1,000 rebate** on the installation of a new rain garden/bioretention cell.

**More details inside!**



**Rain Garden/Bioretention Cell  
Best Management Practice  
(BMP) Reimbursement Program**

## RAIN GARDEN/BIORETENTION CELL BEST MANAGEMENT PRACTICE (BMP) REIMBURSEMENT PROGRAM

### GENERAL INFORMATION

The City of Waukee is interested in promoting a practice that reduces stormwater runoff by offering a cost-share partnership with City of Waukee Stormwater Utility customers.

#### What is a Rain Garden?

Rain gardens are landscaped depressions that capture rain water runoff from roofs, driveways and sidewalks, streets or compacted yards (*impervious surfaces*). The rainfall runoff captured in a rain garden is temporarily ponded, before infiltrating/percolating down through the soil. The installation of a rain garden helps restore a landscape's ability to manage water more sustainably by allowing rainfall to be absorbed through the soil to recharge groundwater and minimize stormwater runoff.

#### What is a Bioretention Cell?

Bioretention involves the capture and infiltration of stormwater runoff from impervious surfaces to reduce water pollution and stabilize stream flows. Bioretention cells have an engineered and constructed subgrade, due to altered and compacted soil conditions. The subgrade ensures adequate percolation of captured runoff by using a perforated drain pipe in a rock bed covered by a sandy soil mixture. A limiting factor for placement of a bioretention cell may be the lack of an outlet for the subdrain. An outlet is necessary to ensure proper drainage. The subdrain often outlets into the storm sewer or can discharge down gradient of the bioretention cell.

## PROGRAM DETAILS

The **Rain Garden/Bioretention Cell BMP Reimbursement Program** is a cost share program. In order to receive this benefit:

### 1. Submit a completed copy of the Stormwater Utility Best Management Practice (BMP) Reimbursement Program Application including:

- A map of the rain garden/bioretention cell location & area that will be treated.
- A project summary/description.
- A cost summary/contractor estimate (The program intends for funding to assist in the cost of materials and/or contract labor to install the rain garden/bioretention cell).
- An anticipated construction schedule including the expected completion date.

### 2. The submitted application will be reviewed, and approval for the project will be made by mail.

- Applicants and participants in this program will be required to allow City Staff access to private property for project evaluation.

### 3. When construction of the rain garden/bioretention cell is beginning, call the Stormwater Coordinator at Public Works (515) 978-7920.

- Implementation of an approved project will be the sole responsibility of the property owner. The City will not be liable for personal injury or property damage resulting from said work.

- Projects approved by the City carry no implied warranty by the City.
- The applicant will be responsible for obtaining all applicable permits. This includes the required notification to **Iowa One Call at 8-1-1 before digging.**



**Know what's below.  
Call before you dig.**

### 4. Notify the Stormwater Coordinator when the project is complete and ready for a final inspection.

### 5. Submit final itemized and dated receipts for approval and payment.

- This reimbursement program has a **budget of \$15,000 available for the fiscal year. The City will match 50% of a project up to \$1,000. (Rebates are subject to the availability of funds)**
- Project must be completed within the fiscal year which it is approved (July 1 through June 30).
- The rain garden/bioretention cell must be maintained for a minimum period of three (3) years. All maintenance costs will be the responsibility of the property owner.
- The applicant will be responsible for all costs. The City will issue reimbursement after all the final costs and receipts have been incurred.