

Acknowledgments: This activity is based on Visualizing Changes, an activity in the Great Lakes Curriculum developed by Ohio State Sea Grant. The original activity is a great complement to this one; find it at <http://changingclimate.osu.edu/topics/education/>. Thanks also to UW Madison Arboretum for their contribution to the development of this tool.

More or Less

Planting and Maintaining Rain Gardens

Climate change can be difficult to recognize in our daily lives. We don't notice things like an increase in average annual global temperature; we notice things like the earlier blooming of lilacs or unrelenting heat waves. We notice the ripple effects of climate change in things that are important to us.

This activity helps people to see the ripple effects of climate actions—things we do that benefit the climate—such as planting and maintaining rain gardens. It's easy to see that a rain garden adds flowers to the yard, but it's not always so obvious that it provides food for butterflies or creates a place for a grandmother to teach her grandson about growing plants—or acts as a water filtration and absorption system to protect the community from flooding.

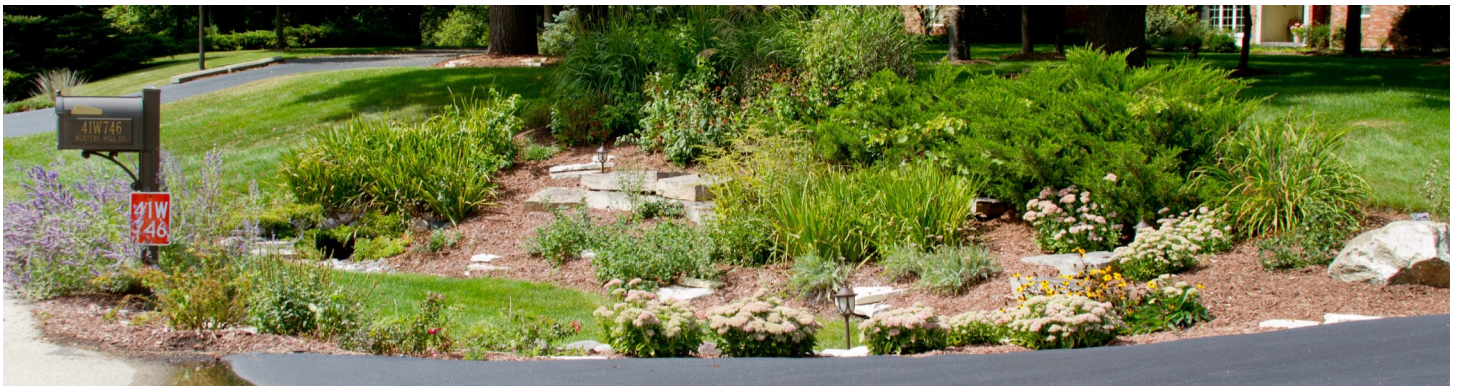
Objective: Explore the effects of climate change and climate action in relation to rain gardens

Audience: Middle school and up

Materials: 1 complete set of printed-out arrows and word cards per group

Time Needed: 30+ minutes; it will take 12-40 participants divided into groups of 3-4 about 1 hour

Use this activity to discover what you might see more of and what you might see less of when you grow a rain garden as your climate action.



Facilitator and Space

This activity game requires one facilitator to introduce the project. It is helpful but not necessary for the facilitator to have some background in climate change, to answer questions about the effects of climate change and its connections to flooding and gardening.

You will need a room with small tables or at least movable chairs that you can group together in teams. This activity can also be done outside in good weather.

Instructions

- Before you begin, print all the pages included here.

- Print one copy of the center card that says “Planting and maintaining a rain garden”
- For the cards with arrows indicating “which leads to more?” and “which leads to less?” print these double-sided, with “more” on one side and “less” on the other. Colored paper works best. Print at least four copies of these pages and cut along the dashed lines to create four cards from each sheet.
- Print one copy of each of the impact cards, then cut each sheet into four pieces (along the dashed lines) to create the activity cards.
- Begin by placing the sheet that says “Planting and maintaining a rain garden” in the center of the area where you will work — this can be a big table, a bulletin board, or the floor.
- Place the “more” and “less” cards in a pile that everyone can reach. Spread out the impact cards so they are easy to see.
- Invite people, one at a time, to select an impact card that is a direct result of a card that is already in place. Ask them to connect these cards with the “more” or “less” card that best describes the connection between these two impacts. Ask them to explain the connection. For example, someone might say that “planting and maintaining a rain garden / leads to more / time outdoors” because they would care for the gardens themselves. Someone might follow up on that by adding “more / sharing of knowledge” because they would maintain the garden with friends in a garden club who would learn from each other.
- Continue to build on the impacts, or results, until you run out of time or run out of room.
- Discuss the ripple effects that have been described. Consider asking the following:
 - Is there a result that you would especially like to see in your community?
 - Is there a result that you want to avoid in your community?
 - Are there other effects that you have thought of?

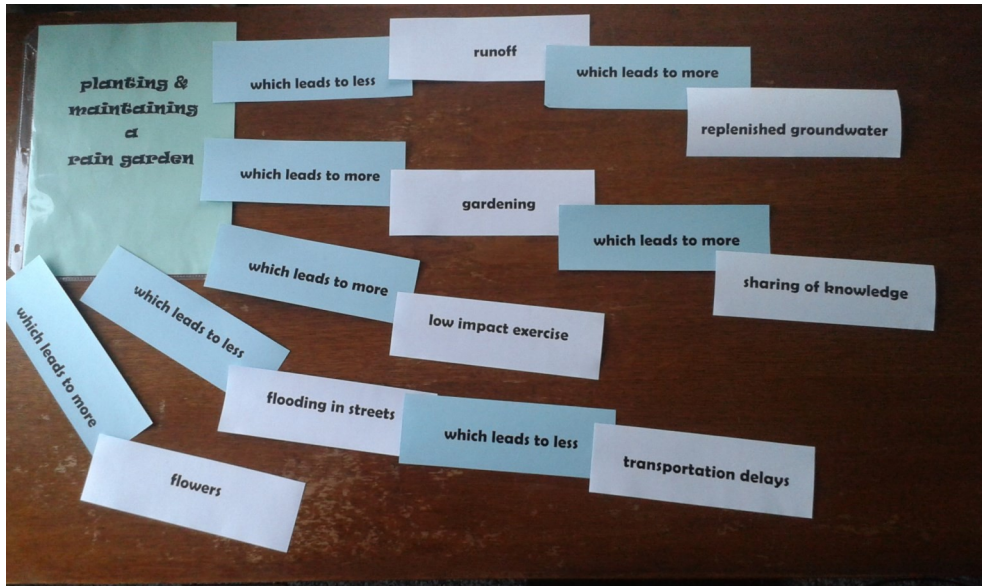
Where to Use this Activity

- In the classroom, after studying climate change and climate actions, to allow students to show their knowledge and comprehension of climate change, climate action, and cause-and-effect relationships
- In workshops, to help adults understand the ripple effects of climate actions
- In community meetings, to inspire people to imagine the results of taking climate action in their neighborhoods
- In planning meetings, to help planners identify ripple effects that might interest community members and organizations

Expand on this Activity

- Provide blank cards so people can write in impacts that they think of on their own.
- Create your own example, starting with a climate action in your community.
You can make a set of cards or simply write down the ripple effects on a big piece of paper or a whiteboard. Draw in the arrows labeled “more” or “less” to show the connection.

- Ask students to create their own examples. They can share their ideas with student groups or with adults to encourage their communities to take climate action.



An example of the connections identified using the More or Less activity

To Encourage Discussion

Divide larger groups into smaller groups of five to ten people so that everyone can take turns and easily hear each other. Provide a complete set of cards for each group.

connect

community + climate + action

Planting and Maintaining a Rain Garden



which leads to more?



which leads to more?



which leads to more?



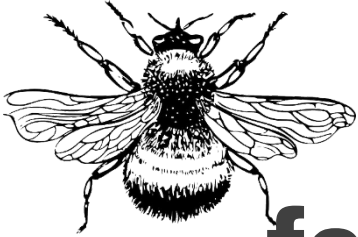
which leads to less?



which leads to less?



which leads to less?



food for pollinators

wildlife habitat



runoff



flooding



opportunity to learn



irrigation

drinking water



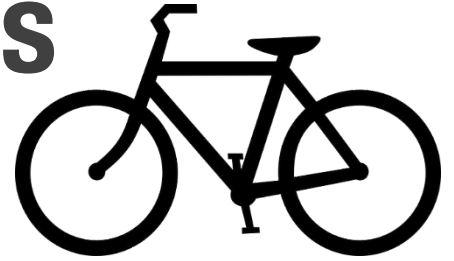


clean beaches



screen time

time outdoors



sharing of knowledge



low-impact exercise



lawn



native plants



gardening





flower



variety



maintenance



water pollution

biodiversity



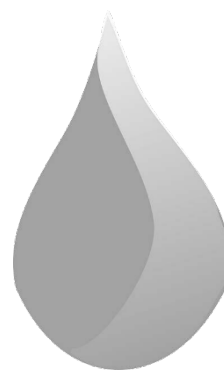
damaged homes



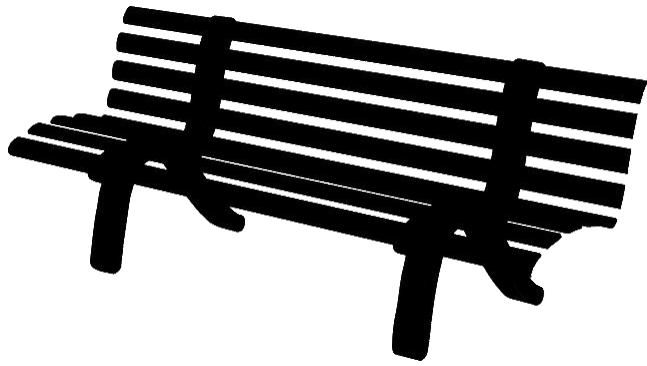


transportation delays

clean water



combined sewer overflows



green space

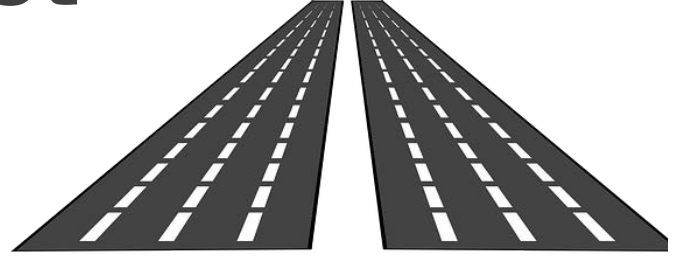
beauty



flooding in basements



flooding in street



replenished groundwater



curb appeal



connection to nature





attention to weather

passing down

traditions

muddy walkways



pesticides

climate resilience

