At Interfaith Partners for the Chesapeake, our mission is to ignite the power of faith communities in the Chesapeake region to honor all of Creation by working together to protect and restore our shared watershed. Through our programming, we work to inspire congregations to put their faith into action by starting green teams and planning and implementing projects on their properties that benefit the local waterways. In our work with green teams from various communities of faith, our hope is that congregants will view ongoing project maintenance as a spiritual practice.

Ongoing maintenance of congregational restoration projects is a manifestation of love for our Creator and one another. Without ongoing maintenance, rain gardens eventually fail to protect waterways, which is why continual maintenance of projects is so important. This handbook was assembled in partnership with Howard EcoWorks who provided the expertise for the operation and maintenance guidelines listed in this manual. The spiritual reflections were included to give you inspiration in your labor to continue to model the monastic tradition of "ora et labora" - pray and work - as you honor the Spirit by honoring Creation.

This Resource Was Made Possible with Funding from:
Caring for your restoration project

Once you have a rain garden planted, it is important that it is taken care of properly. These maintenance tasks help nurture the life of the project, and they can help nurture our spiritual lives as well. Each section of this handbook details the steps necessary to maintain your project with accompanying reflections.

Sections of Care

- Inspection
- Plant Care
- Cleaning
- Mulch
- Revitalization
**Inlet:** Regularly check the inlet to be sure it is free from accumulated trash, leaves, and other debris that might block the flow of stormwater.

**Surface:** When plants are dormant, look for areas of erosion or sediment build-up on the surface of the garden. Stabilize eroded areas with mulch and plants. See Revitalization section for sediment removal tips.

**Underdrain:** If your rain garden has an underdrain system, locate and observe the outlet of the pipe during a rain event to ensure that the pipe is collecting water and draining the soil as intended. Open the cap on the observation well and flush with water annually to ensure that there are no blockages.

**Berm:** Inspect the berm twice a year to be sure that it is intact. Pay close attention to the sections near the inlet and the overflow as this is where concentrated water flow occurs. Ideally there should be plants and/or mulch covering the surface of the berm to prevent the surface from erosion. Plants are preferred as they won't get washed away in the rain.

**Overflow:** Observe the path of stormwater as it exits the garden. Watch out for erosion or damage to the berm. Contact a professional if the garden does not seem to be performing as originally intended.
Taking Stock

As we inspect our rain gardens for needed improvements, we are taking stock and checking in to see how things are going. Is anything getting in the way? Is there debris blocking water flow and preventing the rain garden from working properly?

While inspecting the rain garden status, we can check-in with ourselves as well. As people of faith, introspection is a practice of “looking attentively” within ourselves to examine the spiritual meaning of our actions. Where are we spiritually? How is our relationship with our Creator? Is there anything getting in the way of my relationship with my Creator? What needs to be cleared away to make space for a closer connection to my spirituality?

*In Jewish tradition, the name of the divine must not be destroyed, so it is not generally used in print. Out of respect for this, we have used a dash for the "o" in "G-d".

Prayer for Inspection

Loving and restorative G-d, we thank you for giving us the opportunity to take stock of our spiritual lives as we take stock of what needs to be done in our gardens. Help us to be patient with ourselves throughout this process, and help us to stay grounded in your abiding love. Help us to see what is blocking the way to being closer to you and a brighter light in the world. We thank you for the gift of introspection.

Amen.
**Plant Care**

**Watering:** For the first growing season, plants should be watered 3 times a week unless there has been significant rain. In the second growing season, after plants become well established, watering can be reduced to dry spells and if plants appear wilted. Native plants will adapt to our climate and require minimal watering after settling. Avoid overwatering as this will cause root rot, wilting, and discoloration of leaves.

**Weeding:** Removing unwanted weeds and plants should occur once every week for the first growing season or until plants are well established. Afterward, weed once a month or so, watching out for the invasive species present in the area. Always remove weeds with vines or thorns. Avoid using chemical methods, such as Roundup. Always try to use mechanical methods (hand pulling or trowel use). If you are uncertain about identifying your native plants that were installed, please contact a Master Gardener.

**Pruning:** Prune dead or damaged branches on trees and shrubs in the late winter before they leaf out. Additional pruning to maintain shape and size should happen after the woody plant has finished flowering. This timing varies from plant to plant. Leave the dormant stalks of plant material standing over the winter to provide habitat for birds and beneficial insects. Ornamental grasses and perennials can be cut down to within three to four inches from the ground in late winter to make room for new growth. In order to keep perennials from getting leggy in the summer, the spring growth can be cut back a bit to encourage more bushy growth. After flowering, deadhead the spent flowers to promote new growth and possibly new blooms.
**Splitting and replacing:** Many successful native perennials can be dug up and split to create new plants that can be used to cover bare areas or shared with members or neighbors. This can be done in spring or fall. Be sure to water the newly relocated plants.

Before any digging occurs be sure to notify Miss Utility either by phone or more easily through their website at: [https://www.missutility.net/](https://www.missutility.net/). Use the color guide to determine which markings represent which utilities. Once the utilities in your garden are identified and marked, be sure to take note and keep record of where they are for future excavation work. Private utilities, such as parking lot lights and sprinkler systems, will not be identified by Miss Utility. These utilities will need to be identified by a private utility locating company or located using original construction plans.

**Pest management:** Plants should be regularly checked for pests to ensure continued growth. Avoid using chemicals, such as pesticides, as a control-based method. Instead, use a biological or mechanical approach to removing pests. One example of a biological method is to encourage a predator of a pest into your garden; such as encouraging ladybugs into your garden to control aphids, a common pest found on milkweed. Hand-picking of pests is the preferred method for mechanical removal.

**APWA Uniform Color Code**

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>White</td>
<td>Proposed Excavation</td>
</tr>
<tr>
<td>Pink</td>
<td>Temporary Survey Markings</td>
</tr>
<tr>
<td>Red</td>
<td>Electric Power Lines, Cables, Conduit and Lighting Cables</td>
</tr>
<tr>
<td>Yellow</td>
<td>Gas, Oil, Steam, Petroleum, or Gaseous Materials</td>
</tr>
<tr>
<td>Orange</td>
<td>Communication, Alarm, or Traffic Lines, Cables or Conduit and Traffic Loops</td>
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<tr>
<td>Blue</td>
<td>Potable Water</td>
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<tr>
<td>Purple</td>
<td>Reclaimed Water, Irrigation, and Slurry Lines</td>
</tr>
<tr>
<td>Green</td>
<td>Sewer and Drain Lines</td>
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Discernment

Inspection, as we saw in the previous section, is about introspection. In this section, discernment is about deciding what action to take. The process of inspection allowed us to get a “report card” of where we are spiritually. In this step, we must go through a process of discernment to decide what is life-giving and what is not - in plant care and in our own lives. In caring for the plants in the rain garden, what do we need to do that is life-giving for them? Do we need to take anything out? Are there opportunities to share with our neighbors? Do we need to add something?

Discernment in our personal lives can entail prayer and reflection. Similar to things we ask when thinking about plant care, we could ask of ourselves: What is life-giving to our spiritual lives that brings us closer to our Creator? What is getting in our way that should be taken out or modified? What gift can we share with our community? Take some time to write in your journal about what you have prayerfully decided as you move forward in your rain garden maintenance process.

Prayer for Discernment

Holy Sustainer, thank you for the gift of introspection and for the opportunity to take a step back and make prayerful decisions.

Guide us in our discernment as we determine what is best for our rain gardens and for our spiritual lives. Fill us with gratitude for the work we are doing, and for how far we've come.

Spark in us a new awareness with which we can share our gifts and energies with our community and the broader world. Help us to hear your voice through this process as we discern how you are calling us forward. Amen.
Cleaning

Removing leaves: Lightly rake and remove the leaves that land in the garden in the fall. Do not blow leaves from other parts of the yard into the garden.

Rocks: Various rock features are built-in as part of the overall rain garden structure. Over time, rocks can become displaced by natural force or by physical movement. Rock treatment areas can become filled with sediment after a heavy rainfall and should be cleaned out so that water can flow freely through the area without blockage. To clean rocks, first remove all rocks and place them outside of the rain garden, preferably onto a tarp. Using shovels, trowels, and/or gloved hands scoop out all of the visible sediment, weeds, and debris in the rock area. Sediment will need to be disposed of at the Howard County Landfill. Alternatively, sediment can be used to fill in sinkholes and other depressions around the property. Do not use sediment as a means to cover base soil or eroded areas as it will simply wash away. Replace all rocks in the area they were removed. While replacing rocks clean off any built up sediment that you can.

Removing trash: Windblown trash often accumulates among the plants in gardens. Remove it to maintain the beauty of your garden.
Action

We inspected our gardens to see what needed to be done, we used a process of discernment to decide what actions to take, and now we move to the next step: Action.

You may be wondering what action can be done in your spiritual life to match the work you are doing in your rain garden. Here at IPC, we believe that our faith informs our actions. One way we do this is by asking faith communities to sign the Partner Congregation Pledge. By taking the pledge, congregations commit to take actions to educate and protect and restore the watershed.

Let us pray together through the major themes of our Partner Pledge as you continue your work - in your rain garden and in the world:

Gratitude & Reverence
Giver of life, our work is rooted in deep gratitude for your Creation. Thank you for the gift of the Chesapeake Bay Watershed, and all water everywhere. Through our actions, we seek to honor our sacred bond with our Creator, to celebrate and respect Earth's blessings, live in harmony with the Earth and our fellow humans, and remain grateful for Creation which sustains all life. Help us keep a mentality of gratitude as we continue this work. Amen.

Stewardship
Faithful Creator, you have entrusted us with dominion over the Earth - to till it and keep it. Our belief in caring for Creation as a moral obligation is shared across all faiths and religious teachings. Guide our actions to protect and restore the watershed as we use our financial and volunteer resources to benefit our calling to honor all of Creation. Help us work together to protect and restore the watershed. Amen.

Community
Giver of Peace, we thank you for our communities of faith, as we strive together to do this work. Give us a sense of connectedness and understanding in our action toward a cleaner watershed - in the planning of projects for our congregations, and as we advocate for clean water for all communities. Help us love our neighbors as we love you! Amen.

Faith in Action & Inspiring Others
Great Guardian, you call us time and time again to put our faith into action. Our work to protect and restore the Chesapeake Bay Watershed is rooted in our faith, as you entrusted us to take care of this regional treasure. Guide us to teach our congregations, ignite our communities to reinforce our commitment to this cause, to cultivate leaders, advocate for all communities, and inspire others to do the same. Amen.
**Mulch**

**Raking:** Inspect garden for “caking” or packed mulch. Mulch should not feel compacted or dried out. If mulch becomes caked, break up the mulch by using your hands or a leaf rake.

**Removing:** If the mulch has degraded or filled up with sediment, it should be removed. Use a flat shovel and scrape off the top three inches of material, taking care to not disturb the plants. This is best done in the late winter when most plants are still dormant. Discard the mulch in the trash as it is likely to be contaminated with surface pollutants.

**Replacing:** If the mulch has been removed, or if it has washed away during a storm, then it can be replaced. Add one to three inches of double-shredded hardwood mulch without dyes. Avoid mulching up to the base of your plants, as this will suffocate the plant and limit the amount of water and oxygen your plants need in order to thrive. Mulching once a year can help to control erosion and weeds. Once the garden plants are well-established mulching can be reduced as there is less room for both mulch and weeds.
One way we show care for our rain gardens as care for Creation is by protecting the plants with mulch. As people of faith, it is a reflection of our love for our Creator - we honor the Earth to show our love for its creator.

Reflect on Creation Care themes from these different faith traditions as you mulch your rain garden:

**Christianity & Judaism**

"The earth is the Lord’s and all that is in it, the world, and those who live in it." Psalm 24:1

**Islam**

"And it is G-d who has spread the earth wide and placed on it firm mountains and running waters, and created thereon two sexes of every kind of plant; and it is G-d who causes the night to cover the day. Verily, in all this there are messages indeed for people who think!" Quran 13:3

"It is He Who created for you all that is in and on the earth. Again, He turned His attention to the heaven. Then, He shaped them into seven heavens. And He is knowing of everything.” Quran 2:29
Revitalization

Removing plants: Certain plants may be too successful. If pruning and splitting is not enough to control an overgrown species, then it may be necessary to selectively remove certain individual plants. Share the extras with a friend or neighbor!

Removing Sediment: The mulch and the top layer of soil will need to be replaced every three to five years as sediment builds up on the surface. Use a flat shovel and scrape off the top three to five inches of material, taking care to not disturb the plants too much. This is best done in the late winter when most plants are still dormant. Discard the mulch in the trash as it is likely to be contaminated with surface pollutants. Replace with new soil media and mulch to original design levels. Consult a professional as necessary.

Replacing plants: During the growing season it may be obvious that some plants have died or are not performing as well as expected. Replace with new native plants or by splitting some of the more successful plants in the garden.
Grounding yourself

Take a few minutes to ground yourself in the presence of the Spirit. Your rain garden maintenance up to this point has been a labor of love - but still labor. Give yourself space to be grateful for the work you have done. Before you go on, or go back to another part of caring for Creation, take a moment to walk yourself through this meditation:

"Ruach" - Breath of G-d

Our breath, the breath of plants, and the breath of the Creator of the Universe are all interconnected in a cycle of life. Read this meditation slowly:

Let us start with our breath. In the beginning when G-d created the heavens and the earth, the earth was a formless void and darkness covered the face of the deep, while a wind from G-d swept over the face of the waters. ~ Genesis 1:1-2

Breathe (pause). G-d's first relationship with Creation was with water. Breathe (pause). And the wind or Spirit of G-d that hovered over the waters is known in Hebrew as “Ruach” or breath of G-d. When we breathe we breathe in oxygen produced by plants and trees.

Breathe (pause). When we breathe out carbon dioxide, the trees and plants breathe it in. We are in a cycle of the breath with trees ... and plants. G-d’s breath of life, Ruach, flows through every living thing. Every moment of every day we are “breathed” as we breathe in life-giving oxygen.

Breathe (pause). Thanks be to the Creator for the breath of life provided by plants. Let us take a moment in silent thanksgiving as we breathe in and out with gratitude what G-d has provided from plant life.
**Glossary of Terms**

**Berm**- A berm is a barrier constructed of compacted earth or other materials that is generally intended to restrict or direct the flow of water. In a rain garden, the berm is created to retain water within the garden.

**Deadhead**- Remove dead flower heads from a plant to encourage further blooming.

**Inlet**- The location where runoff enters a rain garden is called the inlet. Whether stormwater runoff enters the rain garden through a gutter downspout, a swale, or as sheet flow, the inlet is susceptible to erosion and scouring during rain storms. To reduce erosion and scouring, the inlet should be reinforced with stone or gravel. A flat rock or paver can also be placed at the inlet, directly under where runoff enters the garden to help spread out the flow.

**Master Gardener**- Howard County Master Gardeners are volunteers, trained by the university, who provide horticultural education services to individuals, groups, and communities including government agencies, neighborhood associations, non-profit organizations, historic sites, schools and youth groups, senior citizens and garden clubs. Master Gardener programs and services are available free of charge to all Howard County residents and community groups.

**Overflow**- The overflow outlet is for excess water to escape. The outlet, which can be a pipe or even a notch dug out of the side of the berm, will ensure that the plants are not subjected to flooding conditions.

**Perennials**- A plant that lives more than two years. The term is often used to differentiate a plant from shorter-lived annuals and biennials.

**Significant rain**- A rainfall rate of over 0.10 inches/hour for at least 1 hour.

**Rain garden**- A shallow depression that is planted with deep-rooted native plants and grasses. Rain gardens are typically positioned near runoff sources, like a downspout from a home, to capture rainwater runoff and intercept the water on its way to the storm sewer system.

**Underdrain**- The underdrain operates as a kind of relief valve if excess water accumulates in the rain garden. The underdrain is connected to an outlet structure, which is there to function during intense storm events when the basin fills up.

**For more questions about rain garden maintenance, contact:**

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Write in your faith's holidays to see how they correspond with your rain garden's maintenance schedule.
ONE WATER PARTNERSHIP

CBTRUST
Chesapeake Bay Trust

Interfaith Partners for the CHESAPEAKE

HOWARD ECOWORKS

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