Bioretention Cell (Biocell) Inspection and Maintenance Recommendations

Items to inspect:

Activity	Schedule
Inspect for fallen leaves, debris, and litter accumulation.	Monthly and after major storm events
Inspect entry points and biocell floor for excessive deposition of sediment. Inspect for erosion at the points of inflow or within the ponding area.	Monthly and after major storm events
Inspect for plant health, wilting o young plants, weeds, and undesirable plants spreading through the border into a planting of natives.	Monthly
Inspect to insure inlets, overflows, and outlets all free flowing and working properly. Inspect outlet of the subdrain if it daylights to ensure animal guard is in place and it is unrestricted and free flowing.	Monthly
Inspect for mulch displacement that might smother plants or clog outlets.	Monthly
Inspect to ensure runoff that is supposed to flow into the biocell is getting into the biocell as intended.	Annually
Inspect signage at the site for condition issues.	Annually
Inspect to ensure the water infiltrates in a timely manner and that ponding does not occur for more than 12-24 hours.	Annually
Inspect for at least 50 percent of specified vegetation cover at end of first growing season and at least 90 percent of specified vegetation cover after the end of the third growing season. Supplement plantings to meet minimum cover objectives.	Annually
Inspect inflow points for clogging (off-line systems). Remove any sediment.	Semi-annually
Inspect filter strip/grass channel for erosion or gullying. Re-seed or sod as necessary.	Semi-annually
Trees and shrubs should be inspected to evaluate their health and remove any dead or severely diseased vegetation.	Semi-annually
If applicable, look for evidence of standing water in the observation port or outlet structure. This may be a sign of hydraulic failure. Standing water can lead to mosquito issues.	Semi-annually

Maintenance Items:

Activity	Schedule
Fix any erosion immediately and take measures to re-establish vegetative cover. Stabilize erosion along drainage paths using appropriate methods.	As needed
Remove any excessive deposition of sediment, debris, and floatable litter that may accumulate in the bioretention cell. Sediment removal is typically done by hand unless a vacuum truck is easily accessible. Sediment shall be removed if it is more than 4 inches thick or thick enough to damage or kill vegetation.	Monthly and after major storm events
Mulch can float and smother small plants or plug outlets. Reposition mulch to maintain a 3-inch uniform layer.	Twice a year
Replace animal guard and remove any restrictions at a daylighted outlet to ensure that it is free flowing.	As needed
Prune and thin out plants as needed. Remove weeds throughout the growing season, preferably by pulling or trimming. Replace plants when needed. Chemical use should be avoided.	Fall, spring, as needed
Replace mulch when erosion is evident and/or weed growth is excessive.	Fall, spring, as needed
Remove leaves, trash and debris from pretreatment area and bioretention cell.	Fall, spring, as needed
Replace pea gravel diaphragm when necessary.	Annually
Replace modified soil layer when ponding greatly exceeds the design drainage time.	As necessary

Considerations for Native Plantings:

Provide the necessary care to keep native plantings weed free and to maintain a pleasing appearance (applies to short or tall; low or high diversity plantings). Avoid fertilize native plantings. If native turf is installed, mow as needed or as desired to a minimum height of 4 inches (mowing can be eliminated after establishment, if desired). If allowed by local code, consider annual fire management for diverse native plantings or for unmowed native turf to maintain vigor of the plant community and maintain a pleasing appearance.

Watering guidelines during initial establishment of plants:

1) Young plants are susceptible to stress
2) Water regularly until established
3) After establishment watering is generally not needed for native plants

Additional Items to Consider:

1) Develop and follow an approved maintenance plan.
2) If there is signage at the site is it in good condition?

Bioswale Inspection and Maintenance Recommendations

Inspection Items:

Activity	Schedule
If used, inspect erosion control blanket or TRM to ensure it is staying in place, according to the manufacturer's recommendation and providing the desired protection.	During vegetative establishment
If culverts are part of the bioswale system ensure erosion does not occur at the outfall of culverts.	Monthly and after major storm events
Inspect for debris, floatable litter that may accumulate in the bioswale, and erosion.	Monthly and after major storm events
If used, inspect check dams for excessive deposition of sediment. Also, inspect the choker layer materials on rock checks.	Monthly and after major storm events
Inspect outlet of the subdrain if it daylights to ensure animal guard is in place and it is unrestricted and free flowing.	Twice during growing season
Inspect for weeds or other undesirable plant species.	Monthly
Inspect to ensure the water infiltrates or drains in a timely manner and that ponding does not occur for more than 12-24 hours.	Annually
Inspect inflow points for clogging (off-line systems). Remove any sediment.	Semi-annually
Inspect filter strip/grass channel for erosion or gullying. Re-seed or sod as necessary.	Semi-annually
Plants should be inspected to evaluate their health and remove any dead or severely diseased vegetation.	Semi-annually
Look for evidence of standing water in the riser pipe. This may be a sign of hydraulic failure. Standing water can lead to mosquito issues.	Annually

Maintenance Items:

Activity	Schedule
Minimize vehicular or foot traffic to avoid compaction. Also, minimize mowing and mow to maintain the maximum possible vegetative height.	During establishment, mow at least monthly to keep cover crop and competing vegetation to an average height of 8 inches or higher.
Repair any erosion immediately and take measures to re-establish vegetative cover.	As needed
Remove any excessive deposition of sediment, debris, and floatable litter that may accumulate in the bioswale. Sediment shall be removed if it is more than 4 inches thick or thick enough to damage or kill vegetation.	Monthly and after major storm events
Pull or spot treat any weeds or other undesirable plant species. Chemical use should be avoided.	As needed during vegetative establishment, then monthly during the growing season
Replace choker layer materials on rock checks when clogged.	As needed
Replace animal guard and remove any restrictions at a daylighted outlet to ensure that it is free flowing.	As needed
Trim vegetation if it hinders the visibility at pedestrian crossings, intersections, rest areas, medians, driveways, and bus stops.	As needed
Prune or thin out plants when needed. Remove weeds throughout the growing season, preferably by pulling or trimming. Replace plants when needed. Remove dead or diseased vegetation to stimulate new growth.	Fall, spring, as needed
Remove trash and debris from pretreatment area and bioswale.	Fall, spring, as needed
When ponding routinely exceeds the design drainage time then investigate to determine the cause and take corrective measures.	As necessary

Considerations for Native Plantings:

Provide the necessary care to keep native plantings weed free and to maintain a pleasing appearance (applies to short or tall; low or high diversity plantings). Avoid fertilizing native plantings. If native turf is installed, mow as needed or as desired to a minimum height of 4 inches (mowing can be eliminated after establishment, if desired). If allowed by local code, consider annual fire management for diverse native plantings or for unmowed native turf to maintain vigor of the plant community and maintain a pleasing appearance.

Watering guidelines during initial establishment of plants:

1) Young plants are susceptible to stress
2) Water regularly until established
3) After establishment watering is generally not needed for native plants

Additional Items to Consider**:**

1) Develop and follow an approved maintenance plan.
2) If there is signage at the site is it in good condition?

Permeable Pavers Maintenance Recommendations

Inspection Items:

Activity	Schedule
Ensure the sweeper or vacuum equipment is available to perform annual maintenance.	Annually
Ensure the area is kept clean and free of excessive debris, organic matter or sediment.	As needed
Ensure that pavement infiltrates during rainfall events (no standing water).	After any major storm
Inspect the surface for any deterioration, settlement, lift or cracking.	Monthly and after any major storm
Inspect for vegetative growth. Vegetative growth is an indication that particulate matter has accumulated and that vacuuming is most likely needed.	Monthly
Inspect outlet of the subdrain if it daylights to ensure animal guard is in place and it is unrestricted and free flowing.	Monthly
Do not stockpile aggregate materials (ie: dirt, rocks, wood) directly on pavement – place a tarp or other structure underneath to protect pavement; these materials may clog the surface.	As needed

Maintenance Items:

Activity	Schedule
Use vacuum truck or sweeper to remove organic matter and/or particulate matter.	Annually or as needed
Moisten and vacuum if particulate matter/sediment accumulates in the granular fill of pavers.	Annually or as needed
Replace permeable material when less than 3mm of surface.	As needed
Plow snow with rubber tipped blades. Properly installed level surfaces can typically be plowed with regular blades.	As needed
Only apply de-icing agents. Do not apply sand.	As needed
Replace pavers as/if needed due to deterioration or cracking.	As needed
If pavers lift or settle, take up pavers, add or remove base course to level, compact and re-lay pavers.	As needed
If vegetation growth exists but is not excessive and the system is infiltrating, then control vegetation by pulling or burning. Minimize use of herbicide.	Monthly
If vegetative growth exists and the system is not adequately infiltrating, remove vegetation and sediment and replace with clean permeable material.	Monthly
Replace animal guard if/as needed and remove any restrictions at a daylighted outlet to ensure that is free flowing.	As needed
Maintain vegetation around pavement to minimize sediment/dirt deposition onto the pavement.	Monthly

Additional Items to Consider**:**

1) Develop and follow an approved maintenance plan.
2) If there is signage at the site is it in good condition?

Planter Box Inspection and Maintenance Recommendations

Inspection Items:

Activity	Schedule
Inspect for no standing water within 24 hours after any major storm	After any major storm
Inspect for healthy plants, undesirable plant species, and accumulation of litter.	Monthly
Inspect for evidence of sediment build up at inlets, and on the floor of the planter box.	Monthly
Inspect for evidence of erosion at inlets and ponding areas.	Monthly
Inspect to insure inlets, overflows, and outlets all free flowing and working properly. Inspect outlet of the subdrain if it daylights to ensure animal guard is in place and it is unrestricted and free flowing.	Monthly
Inspect for mulch displacement that may smother plants or clog inlets and outlets.	Monthly
Inspect to ensure runoff that is supposed to flow into the planter box is getting into the planter box as intended.	Annually
Inspect for structural deficiencies in the planter box including rot, cracks, and failure.	Annually

Maintenance Items:

Activity	Schedule
Fix any erosion immediately and take measures to re-establish mulch and vegetative cover. If applicable, use small stones to stabilize erosion along drainage paths. Repair ruts or bare areas by filling with topsoil during dry season; regrade and replant bare areas	As needed
Pull or spot treat any weeds or other undesirable plant species. Chemical use should be avoided.	As needed during vegetative establishment, then monthly during the growing season
Remove any excessive deposition of sediment, debris, and floatable litter that may accumulate. Clean out inlets, overflows, and outlets. Sediment removal is typically done by hand unless a vacuum truck is easily accessible. Sediment shall be removed if it is more than 4 inches thick or thick enough to damage or kill vegetation.	Monthly and after major storm events
If applicable, level the spreader and clean so that flows spread evenly over the entire planter's width.	Twice during growing season
Manage vegetation to maintain a pleasing appearance. Prune/remove or burn dead and diseased vegetation. Remove any accumulated leaves	Early spring and fall
Supplement mulch to maintain 3-inch layer. Mulch can float and smother small plants or plug outlets. Reposition mulch to maintain a 3-inch uniform layer.	Early spring and fall
Clean off signage if it's present at the site.	Annually
Low infiltration rates should be corrected by excavating and cleaning the planter box, and replacing the filter media.	As needed

Watering guidelines during initial establishment of plants:

1) Young plants are susceptible to stress
2) Water regularly until established
3) After establishment watering is generally not needed for native plants

Additional Items to Consider**:**

1) Develop and follow an approved maintenance plan.

Stormwater Wetlands Inspection and Maintenance Recommendations

Activity	Schedule
Replace wetland vegetation to maintain at least 50% surface area coverage in wetland plants after the second growing season.	One-time activity
Assess bank stability, erosion damage, flow channelization, and sediment accumulations.	After >2" of rainfall (first year)
Monitor wetland vegetation and perform replacement planting as necessary. Check and adjust water levels until they become stabilized at optimum levels.	Semi-annually (first 3 years)
Inspect and remove rubbish, debris, litter, branches, leaves, overgrown vegetation and any other material from around inlets, trash racks, and outlet structures. Mow side slopes.	Frequently (3 to 4 times/year)
Examine stability of the original depth zones and micro-topographical features. Inspect for invasive vegetation and remove where possible. Inspect for damage to the embankment and inlet/outlet structures; repair as necessary. Note any signs of hydrocarbon build-up and remove accordingly. Monitor for sediment accumulation in the facility and forebay. Harvest wetland plants that have been "choked out" by sediment accumulation.	Annually
Remove sediment from the forebay.	5 to 7 years or after 50% of the total forebay capacity has been lost
Monitor sediment accumulations and remove sediment when pool volume has become reduced significantly (~25%), plants are "choked" with sediment, or the wetland become eutrophic.	10 to 20 years or after 25% of the wetland volume has been lost
Repair undercut or eroded areas. Check rip rap for erosion and cracking, repair if needed. Check trash racks for corrosion, replace if needed. Inspect outlet structures, pipes and anti-seep collars for leaks or soil piping erosion. Check emergency overflow path for blockages and erosion.	As needed and after large storms

Additional Items to Consider

1) Herbicides should not be used except in extreme circumstances, and then only with extreme care, since they can severely damage emergent vegetation.
2) Burrowing animals can damage dikes and liners. Using wire screening or a thick layer of gravel, rock or bentonite can inhibit burrowing.
3) Flowing water and a covered water surface minimize mosquito development. Providing purple martin houses, swallow perches, bat boxes or introducing mosquito eating fish can help with mosquito issues. Chemical treatment should be used with caution.
4) Test sediments for contaminants before dredging and dispose of sediment to appropriate location if contaminant levels are too high.
5) Test the water quality if algal blooms or fish kills are observed. This could mean the water has low levels of oxygen or high nutrient loads or pollutants.
6) Develop and follow an approved maintenance plan.
7) Does the stormwater wetland have a pleasing appearance (not weedy, no accumulation of litter, healthy plants, etc.)?
8) Are undesirable plants spreading through the border into a planting of natives? (i.e. turf grass)
9) Are plants healthy and vigorous? Do young plants show stress and need watering? Are replacement plants needed? Is the site weedy? Does it need pruning/deadheading?
10) If there is signage at the site is it in good condition?

Stream Corridor Stabilization Inspection and Maintenance Recommendations

Inspection Items:

Activity	Schedule
If erosion control blankets or TRM are used to control erosion during establishment of vegetative cover, inspect to ensure they are staying in place, installed per manufacturer, and providing protection.	During vegetative establishment
Inspect to ensure that no erosion is occurring. Install needed erosion control measures and/or re-seed as needed.	Annually
If native species are used, inspect to ensure establishment is progressing as planned, recognizing that establishment may take 2 to 3 years.	Annually
Inspect to ensure the plant community is vigorous and outcompeting weeds and other undesirable species.	Annually once vegetation is established
If native species are used, inspect for reeds canarygrass, which will be a major competitor to the native plant community and take approved measure to suppress and encourage establishment of natives.	Annually
If rip rap, bendway weirs, riffles, j-hooks, or other structures are installed inspect to ensure they are have not moved and are performing as designed.	Monthly and after major storm events
Inspect to ensure there are no log or debris jams or other obstructions restricting or deflecting flows in a manner that causes erosion or other problems.	Monthly and after major storm events
Observe flow paths and deposition patterns to ensure stream flow is occurring as planned.	Annually
If fish habitat (i.e. bank hides, loafing boulders) were installed, inspect to ensure unwanted sediment build up has not occur.	Monthly and after major storm events
Monitor for potential problems that might require “varmit control” – (i.e. weakened bank due to excessive muskrat burrowing, beaver dams that could impound water causing problems with restricted storm sewer outflow or damage to private property).	Annually

Maintenance Items:

Activity	Schedule
Repair any erosion or damage to any rip rap, bendway weirs, riffles, j-hooks, or other structures that are installed to ensure they are performing as designed.	Monthly and after major storm events
Remove any log or debris jams or other obstructions that restrict or deflect flows that cause erosion or unwanted deposition of sediment	Monthly and after major storm events
Remove unwanted sediment from fish habitat and re-direct flows to ensure deposition doesn't occur in these areas	Annually
Remove any excessive deposition of sediment, debris, and floatable litter that may accumulate.	Monthly and after major storm events

Considerations for Native Plantings:

1) Provide the necessary care to keep native plantings weed free and to maintain a pleasing appearance (applies to short or tall; low or high diversity plantings).
2) Avoid fertilizing native plantings.
3) If native turf is installed, mow as needed or as desired to a minimum height of 4 inches (mowing can be eliminated after establishment, if desired).
4) If allowed by local code, consider annual fire management for diverse native plantings or for unmowed native turf to maintain vigor of the plant community and maintain a pleasing appearance.
5) If prescribed fire cannot be performed on a regular (annual) basis, mow regularly (annually) to keep woody species from invading the planting.
6) If applicable, Plant a border of cool season turfgrass to provide a firebreak along the stream corridor and inspect to ensure it is non-flamable during burn season
7) If applicable, Mow and rake the firebreak prior to burning to ensure the firebreak is green and non-combustible for burn season (i.e. spring or fall).

Considerations for Non-Native Plantings:

1) If non-native plants (i.e. turf) are used, mow at least once annually as high as possible to prevent woody infestation that will shade out grass cover.
2) During establishment, mow cover crops or other competing vegetation to maintain a height of 8 inches.
3) If mowing is not performed, manually cut and stump treat woody invasives to prevent excessive shading of the ground cover.

Additional Items to Consider:

1) Test sediments for contaminants before dredging and dispose of sediment to appropriate location if contaminant levels are too high.
2) Test the water quality if algal blooms or fish kills are observed. This could mean the water has low levels of oxygen or high nutrient loads or pollutants.
3) Develop and follow an approved maintenance plan.
4) Are undesirable plants spreading through the border into a planting of natives? (i.e. turf grass)
5) Are plants healthy and vigorous? Do young plants show stress and need watering? Are replacement plants needed? Is the site weedy? Does it need pruning/deadheading?
6) If there is signage at the site is it in good condition?
7) Do maintenance actions require permits?

OPERATION AND MAINTENANCE PLAN
GRADE STABILIZATION STRUCTURE
CODE 410

Landowner/Operator: _____ Date: _____

Address: _____

Job Location – County: _____ Section: _____Township: _____ Range: _____

Prepared By: _____ Farm/Tract No.: _____

Operation and Maintenance Items

Operation and maintenance (O&M) is necessary for all conservation practices and is required for all practices installed with the Natural Resources Conservation Service assistance. A grade stabilization structure is used to control channel grade in a natural or constructed watercourse to stabilize grade, reduce gully erosion, and/or improve water quality. The land user is responsible for proper O&M for as long as the practice is used but no less than life of the practice, 15 years, and as may be required by federal, state, or local laws or regulations.

Operation refers to operation of the practice in compliance with all laws, regulations, ordinances, and easements; and in such a manner that will result in the least adverse impact on the environment and will permit the practice to serve the purpose for which it was installed. Maintenance includes work to prevent deterioration of the practice, repairing damage, or replacing components which fail.

Necessary operation and maintenance items during the design life of the practice include:

1. Check the structure after each heavy rainfall event for possible damage to the materials in the structure. Loose rock riprap or gabion stone may get displaced when actual velocities exceed allowable velocities. Inspect the earthfill around headwalls and sidewalls for signs of erosion adjacent to these structures. Examine the earthfill around vertical inlets for scour or internal erosion of earthfill. Replace any missing embankment material with compacted earthfill or request assistance from your NRCS office to evaluate the need for revetment stone or riprap. Check the vegetated spillway for possible damage, if applicable.

2. Inspect the entire structure annually for damage from normal use. Inspect the downstream toe of the embankment, drain outlets, and metalwork. Wet areas or seeps at the downstream toe may indicate a serious problem. Ask for assistance from your NRCS office to evaluate the seepage. Clear drain outlets of material that block the free flow of drains. Iron ochre and moss are commonly found in drain outlets. All metalwork should be repaired or replaced if it is damaged. All painted surfaces should be cleaned and painted when rust starts to appear or the paint system shows signs of peeling or heavy oxidation.

3. Trash may accumulate during a single storm event or over a series of small events. Clear accumulated tree branches and trash away from open structures, pipe inlets, or slotted flumes when found.

4. Repair erosion at the outlet of the principal spillway as needed. Deep scour holes may undermine structural components or armoring at the principal spillway outlet degrading the integrity of the spillway.

5. Fill rills and gullies that develop over time on the embankment and vegetated spillway. Reseed the filled areas.

6. Check frequently for burrowing animals. When found, remove the burrowing animals, replace embankment material and reseed.

7. For sites that have an auxiliary spillway, maintain a vigorous sod in the auxiliary spillway and on embankments by regular mowing and fertilization. Avoid mowing during the primary bird-nesting period of May 15 through August 1st. Remove excess growth. Do not burn or overgraze.

8. Prevent trees and brush from growing on embankments, abutments, or in the spillway areas. Control trees and brush growth by hand cutting, mowing, or chemicals. Avoid grass damage by herbicides.

9. Install and maintain a fence to keep livestock out of the structure area and pool area, when applicable.

Other Recommendations and Notes:

CONTACT YOUR LOCAL NATURAL RESOURCES CONSERVATION SERVICE (NRCS) OFFICE FOR ANY ADDITIONAL TECHNICAL ASSISTANCE YOU MIGHT NEED FOR IMPLEMENTATION OF THIS OPERATION AND MAINTENANCE PLAN.

Signatures:

Landowner/Operator: _____ Reviewer: _____ Date: _____

Green Roof Inspection and Maintenance Recommendations

Inspection Items:

Activity	Schedule
Roofing Membrane	
Inspect termination bars, flashing and counterflashings around every penetration, rooftop unit, skylight, and any other projections.	After every major wind event
Inspect roof drains and overflow scuppers for functionality. Look for signs of inadequate drainage include standing or ponding water on the roof surface.	After every major rain event
Review roof maintenance requirements with all contractors who will work on the roof including HVAC servicemen and landscape contractors.	As Required
On roofs not accessible to the public keep a sign in log of all personnel accessing the roof.	As Required
Record all repairs to the roof (i.e. when, where, who, what).	As Required
Inspect deck soffits, the interior underside of the deck	Semi-annually
Inspect sealant for voids and deterioration at every coping joint and coping end.	Annually
Inspect fall arrest anchors for deterioration	Annually
Assess condition of load bearing walls, evidence of structural deterioration	Annually
Monitor or perform non-destructive testing on roof before the expiration of the warranty and a minimum of every five years.	Every Five Years
Plant Material & Growing Media	
Inspect vegetation free zones (perimeter zones, penetrations, HVAC equipment, abutting vertical surfaces, and exposed roof membrane) for encroaching vegetation.	Monthly
Look for weeds and dying or dead vegetation, replant replacement vegetation as needed	Monthly
Inspect roof drains, scuppers and gutters to ensure they are not overgrown or have organic matter deposits	Semi-annually
Assess vegetative cover, look for leaks, and drainage problems	Semi-annually
Inspect vegetation for winter loss. Replant replacement vegetation as needed.	Annually
Look for evidence of wind and/or water erosion	After every major wind or rain event
Check growing media, does it appear even and level?	Annually

Irrigation System	
Inspect sprinkler heads for proper cover. Check for wet spots and/or leaks.	Semi-monthly May to September
Check growing media moisture. Use evapotranspiration loss, area rainfall, and irrigation application to determine when to apply water and how much to apply.	Semi-monthly May to September
Record water usage for the green roof. Keep a permanent record.	Monthly May to September
Visually inspect drip emitters to ensure they have not become clogged.	Monthly May to September
Check controller timing accuracy. Check field valves for sequencing and overall general function.	Spring start-up and July
Inspect Valves/Pipes for damage or leaks. Inspect wire connections.	Spring start-up and July
Take irrigation system offline and drain for the winter.	Annually
Certify backflow prevention device by licensed plumber, make sure is it up-to-date and in the correct place?	Annually

Maintenance Items:

Activity	**Schedule**
Water to promote plant growth and survival. Prune grass and plantings, remove clippings	As needed
Clear drains, remove organics and other debris from drain, loosen compacted soil	Monthly
Remove errant green roof vegetation and other debris from the drainage system and drainage path.	Monthly
Hand weed to remove invasive or volunteer plants (do not dig or use pointed tools where there is potential to harm the root barrier or water proof membrane)	Semi-annually
Replant per original planting plan, irrigate as needed	Annually
Turn off water supply to irrigation system and make sure backflow device, valves, filter, pressure regulator, pipe, sprinklers, drip hose, and drippers are free of water.	When freezing weather is anticipated (winter)
Flush out irrigation system	After last frost danger has passed (Spring)

Rainwater Harvesting Inspection and Maintenance Recommendations

Inspection Items:

Activity	Schedule
Check that access covers to storage systems are secure.	Every Three Months
Inspect storage system for presence of unwanted pests, such as rots, birds, frogs, and other animals.	Every Three Months
Check screens, filters, vents, and other openings for damage and are securely fastened.	Every Three Months
Inspect health of irrigated grass or plants.	Every Three Months
If rainwater is provided for indoor use, inspect and verify that treatment system is operational and maintaining minimum water quality requirements as determined by local health officials.	Every Three Months
Check for cross-connections and inappropriate tappings by checking visible plumbing fittings.	Annually and after any plumbing work
Check conditions of collection surface material.	Annually
Inspect for damage and clogging of overflow pipes, and check for erosion at the overflow discharge point.	Annually
For underground and indoor systems, downspouts and overflow components should be checked for ice blockages	During snowmelt events
Check sediment levels in tank.	Every Three Years
Check integrity of backflow preventer	Every Three Years
Inspect structural integrity of tank, pumps, pipes, and electrical components	Every Three Years

Maintenance Items:

Activity	Schedule
Maintain water quality devices	According to manufacturer
Replace damaged or defective system components	As needed
Clean and clear debris from all screens and inlet filtration. Clear leaves and other debris from gutters and downspouts.	Every Month
Clean first flush diverters and pre-screening devices.	Every Three Months
Remove any algae growth.	Semi-annually
Flush gutters, to clear organic matter and reduce clogging.	Annually or as needed
If not protected from freezing, above ground storage systems should be taken offline and drained for the winter.	Annually
Inspect and clean storage tank lids and mosquito screens.	Annually
Drain, clean out, and check the condition of tank walls and roof for holes due to deterioration.	Every Three Years
If safe and permitted, prune tree branches and vegetation that overhangs the roof.	Every Three Years