As the manager or owner of a green roof here in the District you are likely enjoying the environmental, energy efficiency, and aesthetic benefits these provide to your building. Green roofs however do require a bit of preventative care to keep in top condition and avoid more costly repairs down the line. The Department of Energy & Environment (DOEE) offers the following guidance for building owners and property managers tasked with maintaining green roofs.

Who can I contact for assistance with green roof maintenance?

Maintenance activities on a green roof should be done by qualified persons who have appropriate expertise and who can perform this work with proper safety precautions. Specialized green roof contractors can address preventative maintenance and repair for vegetation and soils as well as roofing membrane and drainage components. For your convenience, DOEE maintains a green roof contractor list; the service providers listed are not comprehensive and thus do not restrict you from selecting others not shown.

What does my green roof require for optimal performance?

With summer approaching, weeding becomes an important component of preventative maintenance. Volunteer plant species are acceptable to the degree that they provide stable year-round coverage and do not compromise the ability of plants to survive water inundation and drought. Entrenched weed cover or aesthetic preferences may necessitate more frequent weeding. Dead leaves and similar biomass should be regularly removed from the green roof to minimize fire hazard. Tree saplings should be removed with care as aggressive roots may damage the waterproof membrane when pulled.

When vegetative coverage is sparse this may result in soil media loss through erosion and wind scour; replacement of green roof soil media can be costly but easily prevented with regular maintenance. Soil media is typically a blend of lightweight inorganic and organic materials. Green roof media should be analyzed by a soil lab to determine % organic matter or fertilizer requirements. Roof drains and scuppers should be clear of blockages and inspected regularly. A qualified contractor can provide comprehensive inspection to keep your green roof in good condition.

Does my green roof require a DOEE maintenance inspection?

Those green roofs installed to meet stormwater management regulatory requirements are periodically inspected by DOEE to ensure proper performance. If participating in the RiverSmart Rewards or Stormwater Retention Credit Trading Program (SRC) then DOEE inspection is also required. Green roofs installed under the Green Area Ratio regulation and RiverSmart Rooftops programs shall be maintained in good condition but do not typically necessitate DOEE post-construction inspection.

What are the DOEE requirements for maintenance?

Vegetation should fully cover the green roof as it beneficially removes stored water out of the soil through evapotranspiration and additionally stabilizes the soil media. Soil media must be maintained to full depth for rainfall capture within the soil and drainage layer beneath. Standing water, clogged drains, and leaks indicate the green roof is not functional and requires immediate repair. If specified for use in the stormwater management plan, cisterns that provide irrigation to the roof should be operational from late spring through early fall.

Generate more ‘green’ with your green roof

A well-maintained green roof may qualify for River Smart Rewards and provides discounts to one’s DC Water bill. Additionally, the Stormwater Retention Credit Trading Program provides opportunities to sell SRC credits through voluntarily-built green infrastructure. Investigate the links above for additional information on these programs.