

THE TARGETS

The target for green infrastructure in the Study Area is to achieve a minimum Green Area Ratio (GAR) of 0.45, well above the District's minimum GAR of 0.30. This will be accomplished by using green roofs and living walls; bioretention in parks, plazas, sidewalks and medians; edible gardens and improved parks; and permeable pavements and sidewalks that allow for greater tree canopy and vegetation.



ACHIEVE A MINIMUM GREEN AREA RATIO OF 0.45

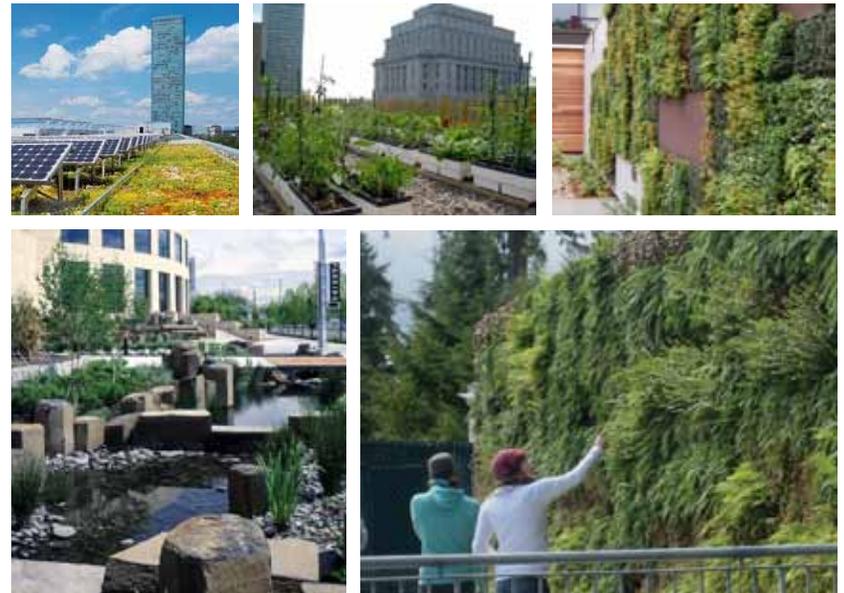
Green roofs significantly contribute towards increasing the SW Ecodistrict's GAR, and provide a variety of benefits to urban ecology and human health. They reduce energy use by providing superior insulation qualities, increase permeable surfaces, and establish vegetated areas that provide habitat opportunities for pollinators and rooftop gardens for occupants. However, the SW Ecodistrict must balance the benefits of green roofs with the need to increase renewable energy use and capture and reuse as much stormwater as possible. Because there is a limited amount of area available to successfully achieve all three goals, the use of green roofs should be strategically located in places where they are visible to building occupants, maximizing both ecological and human benefits. Establishment of green roofs, renewable energy systems and recycled stormwater/greywater systems should be planned holistically to yield maximum results.

As a part of the GAR, credit is also given to reducing the amount of impervious surface in the area, increasing the overall tree canopy, and establishing urban parks. By establishing a minimum pervious surface area target of 35 percent, the SW Ecodistrict will contribute to the improved health of the Chesapeake Bay watershed. By establishing a minimum tree canopy area target of 40 percent and concentrating new plantings along streets and in the 14.3 acres of new or improved parks and plazas, the SW Ecodistrict can help Washington move towards its city-wide goal of 40 percent.

RECOMMENDATIONS

BUILDING-SCALE The following recommendations are able to make the biggest impact through implementation on a building-by-building basis.

- › Green Roofs: Locate and design green roofs to maximize their ecological function and their visibility to on-site and nearby building occupants and/or from the street level.
- › Edible Rooftop Gardens: Designate selective rooftop areas for edible gardens, and use compost and mulch from the area to amend planting beds and improve soil quality.
- › Green Walls: Incorporate green walls into exterior building features to cool structures, decrease energy costs, reduce heat island effect, and enhance streets and plazas.
- › Rain Gardens: Incorporate rain gardens into landscaping to provide stormwater management.



(Images, clockwise from upper left) - Solar/Green Roof, Edible Rooftop Garden, Edible Green Wall, Green Wall, Rain Garden