

Green Infrastructure

Green Infrastructure is ...

an approach to stormwater management that is cost-effective, sustainable, and environmentally friendly.

Green Infrastructure projects:

- capture,
- filter,
- absorb, and
- reuse stormwater

to maintain or mimic natural systems and treat runoff as a resource. Green Infrastructure can be used to manage stormwater runoff from impervious surfaces.

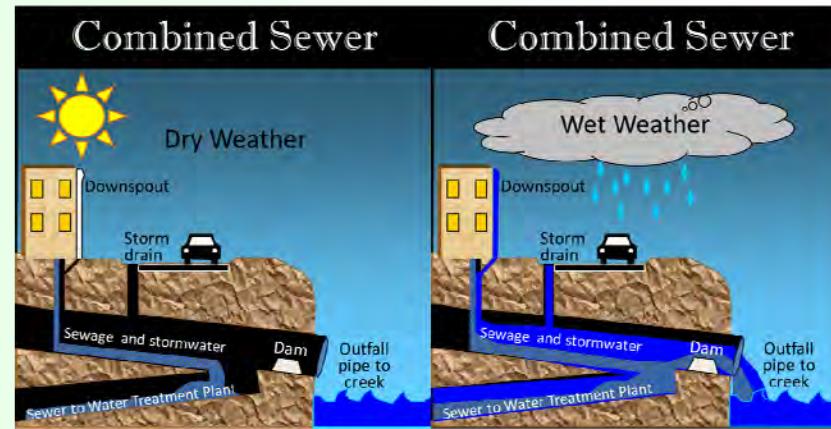


Green Infrastructure includes ...

- simple disconnection
- rain garden/bioretention systems
- rainwater harvesting
- green roofs
- tree filter boxes
- permeable pavements
- vegetated swales
- green walls
- green streets



What is a Combined Sewer Overflow (CSO)?



Some urban areas are served by combined sewers where sanitary sewer and stormwater are captured in the same system. When these systems receive too much rain water, a combined sewer overflow (CSO) occurs, discharging a slurry of human wastewater and stormwater into local waterways and flooding of local streets and basements.



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Green Infrastructure Practices to Reduce Flooding and CSOs





It's all about managing stormwater runoff from impervious surfaces ...

The primary cause of flooding problems and combined sewer overflows (CSOs) is simple; we have too many impervious surfaces that drain directly to our sewer system and local waterways. We need to intercept stormwater runoff from going directly to our sewer systems and local waterways by capturing and treating it, then infiltrating it, reusing it, or letting it out slowly, all in a cost-effective manner.



Impervious surfaces are defined as any surface that has been covered with a layer of material so that it is highly resistant to infiltration by water. Examples include paved roadways, paved parking areas, and building roofs.



By preventing these impervious surfaces from flowing directly into the local waterways through disconnection, we can reduce flooding and improve the quality of New Jersey's water resources.



Stormwater is the water from rain or melting snows that can become "runoff," flowing over the ground surface, picking up pollutants and returning to lakes and streams.



Are there impervious surfaces that you can eliminate? Depaving—removal of pavement and restoring the area to a pervious surface.



If you can't eliminate it, can you reduce it? Replacing traditional pavement with permeable pavement is a great option when deteriorated surfaces need to be replaced.



If you can't eliminate or reduce it, can you disconnect it? There are many ways to disconnect an impervious surface from flowing directly into a waterway or sewer system including directing runoff into a rain garden, rain barrel or cistern, or a dry well.



Here is how to get started . . .



Are there impervious surfaces that you can harvest rainwater for reuse? Disconnecting impervious surfaces and harvesting the rain water for reuse increases the sustainability of a project and reduces water costs.



Are there conveyance systems that can be converted to bioswales? These vegetative systems can remove pollutants from stormwater and promote infiltration.

