

## Green Infrastructure/ Low Impact Development (GI/LID) Program

### Program Objectives

- Develop procedures for evaluating the feasibility and site applicability of different GI/LID techniques and practices to be considered.
- Identify the GI/LID structures allowed to be constructed.
- Develop procedures for the inspection and maintenance of the GI/LID structures.
- Meet the Green Infrastructure/Low Impact Development requirements of the County's Phase II NPDES Permit.

### Evaluation Procedures

In order to encourage the use of GI/LID techniques and practices, the relevant staff from the Public Works and Planning Departments will conduct an evaluation of the current development code to determine if the language prohibits or discourages the use of GI/LID practices, and if necessary, propose changes to the code language.

In order to actively encourage GI/LID techniques, the use of incentives will be considered, including the specific types of incentives that might be used. If it is determined that incentives would be beneficial, changes to the development code to include incentives will be proposed.

A mechanism to require of long-term maintenance of privately-owned structures will be determined and proposed for inclusion in the development code.

### GI/LID Techniques/Structures

The following list includes some examples of GI/LID techniques that may be encouraged (sourced from epa.gov):

- **Bioswales** – Bioswales are vegetated, mulched, or xeriscaped channels that provide treatment and retention as they move stormwater from one place to another. Vegetated swales slow, infiltrate, and filter stormwater flows. As linear features, they are particularly well suited to being placed along streets and parking lots.
- **Pervious pavement** – Permeable pavements infiltrate, treat, and/or store rainwater where it falls. They can be made of pervious concrete, porous asphalt, or permeable interlocking pavers. This practice could be particularly cost effective where land values are high and flooding or icing is a problem.
- **Rain gardens** – Rain gardens are versatile features that can be installed in almost any unpaved space. Also known as bioretention, or bioinfiltration, cells, they are shallow, vegetated basins that collect and absorb runoff from rooftops,

sidewalks, and streets. This practice mimics natural hydrology by infiltrating, and evaporating and transpiring—or “evapotranspiring”—stormwater runoff.

- **Rainwater Harvesting** – Rainwater harvesting systems collect and store rainfall for later use. When designed appropriately, they slow and reduce runoff and provide a source of water. This practice could be particularly valuable in arid regions, where it could reduce demands on increasingly limited water supplies.
- **Downspout Disconnection** – Water from the roof flows from this disconnected downspout into the ground through a filter of pebbles. This simple practice reroutes rooftop drainage pipes from draining rainwater into the storm sewer to draining it into rain barrels, cisterns, or permeable areas. You can use it to store stormwater and/or allow stormwater to infiltrate into the soil.
- **Green Parking** – Parking lots are a good place to install green infrastructure that can capture stormwater that would usually flow into the sewer system. Many green infrastructure elements can be seamlessly integrated into parking lot designs. Permeable pavements can be installed in sections of a lot and rain gardens and bioswales can be included in medians and along the parking lot perimeter. Benefits include mitigating the urban heat island and a more walkable built environment.

### Inspection & Maintenance Procedures

For privately-owned GI/LID structures: The responsibility for maintenance of will be responsibility of the owner. Most likely, the County will require the execution of a maintenance agreement detailing the maintenance requirements for proper long-term functioning of the GI/LID structure.

For County-owned GI/LID structures: The County will be responsible for proper long-term maintenance of the structure. The maintenance activities will be performed by County staff or contractors, and a record of the maintenance activities will be retained.

An inventory of all of the GI/LID structures in the permit area will be maintained as part of the County’s Storm Water Management Plan, and the inventory will be updated annually to include any new structures that have been constructed. The Environmental Coordinator will inspect 100% of the GI/LID structures within a 5-year period in order to ensure proper maintenance, and documentation of the inspection results will be submitted to EPD with each storm water annual report.