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## New Jersey Green Infrastructure Municipal Toolkit Green Infrastructure Plan Guidance

*This document was created for New Jersey Future by Clarke Caton Hintz.*

Municipalities may choose to create a Green Infrastructure Plan to guide decision making. GI Plans are helpful to identify specific concerns, prioritize projects, present policy recommendations, clarify linkages between and among other municipal planning documents, and set forth an implementation framework and schedule.

There is no single correct type of green infrastructure plan. Hoboken has taken a comprehensive approach with its [Green Infrastructure Strategic Plan](#). The [GI Feasibility Studies](#) prepared for municipalities by Rutgers' Water Resources Program are less detailed and less policy oriented, but provide excellent information and feature an [Impervious Cover Reduction Action Plan](#). Rutgers also offers a variety of [E-Learning tools](#) related to GI planning. And Sustainable Jersey offers points toward certification for specific Actions related to Green Infrastructure Planning.

Following are features and characteristics of a good Municipal Green Infrastructure Plan.

- 1. Project Identification and Prioritization Mechanism:** The GI Plan describes the mechanism by which the municipality will identify, prioritize and map potential and planned projects that incorporate green infrastructure components in different drainage areas within the municipality. These include public and private projects that may be implemented over the long term, with milestones for implementation. The mechanism can include the criteria for prioritization and outputs that can be incorporated into the municipality's long-term planning and capital improvement processes.
- 2. Prioritized Project Locations and Timeframes:** The GI Plan contains the work products resulting from the identification and prioritization mechanism described above, such as lists and maps of prioritized projects and timeframes for implementation. The outputs can also include "targets" or estimates of how much impervious surface within the municipality will be converted or retrofitted to drain to a green infrastructure feature, such as a vegetated area or stormwater capture or treatment facility.
- 3. Completed Project Tracking System:** The GI Plan describes the municipality's process for tracking and mapping completed public and private projects and making the information available to the public.

4. **Guidelines and Specifications:** The GI Plan includes general design and construction guidelines, standard specifications and details (or references to those documents) for incorporating green infrastructure components into projects within the municipality. These guidelines and specifications should address the different street and project types within the municipality as defined by its land use and transportation characteristics, and should allow projects to provide a range of functions and benefits, such as stormwater management, bicycle and pedestrian mobility and safety, public green space, urban forestry, etc.
5. **Integration with Other Plans:** The GI Plan describes its relationship to other planning documents and efforts within the municipality and how those planning documents have been updated or modified, if needed, to support and incorporate the green infrastructure requirements. If any necessary updates or modifications have not been accomplished by the completion of the GI Plan, the GI Plan should include a work plan and schedule to complete them.
6. **Evaluation of Funding Options:** The GI Plan includes an evaluation of funding strategies and options for design, construction, and long-term maintenance of prioritized green infrastructure projects, considering local, state federal and private funding sources.
7. **Project Prioritization and Mapping.** The municipality can use the following approaches to identify, prioritize and map potential and planned projects that incorporate green infrastructure in different drainage areas within the municipality:
  - **Develop a GIS-based modeling tool for use in mapping, prioritizing, and phasing of potential and planned projects identifying local opportunities for GI projects** including the development of modeling tools for estimating pollutant load reductions over future timeframes.
  - **Develop prioritization criteria for GI project opportunities using a metrics-based approach for quantifying project benefits** such as volume of stormwater infiltrated and/or treated and quantity of pollutants removed. The metrics-based analysis can be conducted using hydrologic/hydraulic and water quality models coupled with GIS resources and other tools.
  - **Develop mapping and associated database of GI project opportunities** with information needed to perform a prioritization assessment of the opportunities with a map of opportunity areas for GI projects throughout the watershed, an initial prioritized list of potential projects and strategies for implementation of these and future projects.
  - **Develop phasing plan for GI project opportunities:** A phasing plan can be developed to easily assess load volume and associated load reduction potential from prioritized GI projects to meet specified timeframes.

- **Develop a method for integrating the phasing plan into the municipality's long term planning and capital improvement plans:** The method for integration can include projects that are intended to be implemented to achieve future load reduction targets.
- **Integrate the phasing plan:** The GI Plan can include the prioritized list of projects and map of locations within the municipality's jurisdiction. The outputs will also include "targets" or estimates of how much impervious surface within the municipality will be converted or "retrofit" to drain to a green infrastructure feature, such as a vegetated area or stormwater treatment facility, or converted to pervious surfaces, by specified milestones.