



LEED ND: Built Project | v3 - LEED 2009

Stormwater management

GIBC8 | Possible 4 points

Glossary

Intent

To reduce pollution and hydrologic instability from stormwater, reduce flooding, promote aquifer recharge, and improve water quality by emulating natural hydrologic conditions.

Requirements

Implement a comprehensive stormwater management plan for the project that retains on-site, through infiltration, evapotranspiration, and/or reuse, the rainfall volumes listed in Table 1. Rainfall volume is based on the project's development footprint, any other areas that have been graded so as to be effectively impervious, and any pollution-generating pervious surfaces, such as landscaping, that will receive treatments of fertilizers or pesticides.

The percentile rainfall event (Table 1) is the total rainfall on a given day in the record that is greater than or equal to X percent of all rainfall events over a 20- to 40+-year period. For example, a 95th percentile event in a particular region might be 1.5 inches (40 millimeters), which would then be the volume to retain. To determine the volume to be retained, projects may use NOAA's published national rainfall data, run an approved stormwater model, or independently gather local rain gauge data and rank rainfall events. One hundred percent of the water volume from rainfall events up to the X percentile event must not be discharged to surface waters unless the harvested and reused runoff is authorized for discharge or allowed to be discharged into sanitary treatment systems.

Table 1. Points for retaining stormwater on-site

Percentile rainfall event (determines total volume from development footprint to be retained)	Points
80th	1
85th	2
90th	3
95th	4

Projects that earn at least 2 points under this credit may earn 1 additional point by meeting one of the following site characteristics:

- a. The project is located on a previously developed site (1 point).
- b. The project is located on a site that meets the definition of brownfield in SLL Credit 2, Brownfields Redevelopment (1 point).
- c. The project is designed to be transit ready by achieving the following (1 point):
 - a. ° At least 2 points under NPD Credit 1, Walkable Streets.
 - b. ° At least 2 points under NPD Credit 2, Compact Development.
 - c. ° At least 2 points under NPD Credit 3, Mixed-Use Neighborhood Centers.

Select BMPs that are consistent with Green Infrastructure and Low Impact Development (LID) strategies such as the Washington State Department of Ecology's Stormwater management Manual for Western Washington, Volume V, Runoff Treatment (2005 edition), or a local equivalent. Choose BMPs that are the most stringent and appropriate to the project site and region. BMPs must also comply with all national, state, and local regulations.

For stormwater reuse systems not on a combined stormwater and sewer system, the total water reused for indoor use must not exceed 90% of the average annual rainfall.

Stormwater BMPs (except cisterns) must be designed to drain down within 72 hours.