

4.1 PERFORMANCE STANDARDS

This guidance manual recommends the management of stormwater runoff from development activity through the implementation of performance standards identified in Table 4-1. This includes structural control measures and low-impact development design. The aim of these design standards and environmental incentives is to improve methods of stormwater management by relying less on individual BMPs and more on mimicking existing hydrology through total site design techniques. This approach can eliminate constructed stormwater control measures when impervious cover is limited or produce smaller facilities that are less costly.

Table 4-1: Performance Standards

Performance Standards	Purpose	Minimum Requirements
Pre-development Planning	Clarify stormwater requirements, encourage low impact development that costs less and facilitate permitting	Meeting with the jurisdictional stormwater authority staff and/or engineer
Water Quality and Drainage Management	Improve stormwater runoff water quality and manage runoff quantity. Eighty percent TSS management and peak rate management	Structural practice design, size, and define the low impact development design approach and compliance
Buffer Zones	Protect creeks, rivers, wetlands, and tidal waters from construction activities, manage flood risk	Delineate buffer widths on creeks, rivers, wetlands, and tidal waters
Construction – Phase Erosion and Sediment Control	Minimize construction sediment runoff, protect creeks, rivers, wetlands, and tidal waters	Construction phase erosion control plan per the TCEQ Construction Stormwater General Permit
Water Quality Education	Reduce the runoff of herbicides, pesticides, fertilizers, and trash to creeks, rivers, and tidal waters	Provide to residents and building/site managers – GLO website
Maintenance of Structural Practices	Ensure long-term water quality and peak management performance, improve appearance and function	Prepare a maintenance plan and perform annual inspections and maintenance when necessary

These performance standards would apply to all new development and redevelopment projects per the criteria below:

Alternate BMP requirements employing low impervious cover levels with vegetative conveyance of stormwater runoff have been established. Compliance with the following specifications is assumed to meet the water quality management performance standards in this guidance manual. Development eligible for these Alternative Standards must meet the following design requirements:

- The gross development site impervious cover is 20% or less and the cluster development sections (individual drainage areas) have 25% or less gross impervious cover,
- Street and drainage network are designed to include the use of open-roadway sections, ribbon curb, and maintenance of sheet flow,
- Stormwater credits as defined in this guidance manual can be used to gain compliance with the impervious cover limits stated above.

- Commercial tracts with gross impervious cover less than 15% can obtain Alternate Standards compliance by providing vegetated filter strips per the guidance manual design criteria.

A cluster development section can be considered as an individual drainage area or discharge point containing development. The impervious cover is computed within this area and divided by the drainage area to determine the cluster development impervious cover percentage.

Development projects with less than 8,000 square feet of impervious cover and less than 1 acre of disturbance are exempt from providing permanent water quality measures. The landowner provides written notification to the regulating community and provides documentation that the planned activities meet these criteria.

Impervious cover includes but is not limited to:

- Pavement including streets, sidewalks, driveways, parking lots, etc;
- Rooftops if not part of a rainwater harvesting system;
- Compacted road base, such as that used for parking areas; and
- Other surfaces that prevent the infiltration of water into the soil.

Bicycle and pedestrian paths separated from other impervious surfaces by a distance of at least 10 feet, except at intersections, are considered sustainable and do not require any special runoff management.

When the development project includes residential tracts that will be developed subsequently, and whose future impervious level is unknown, the assumptions presented in Table 4-2 should be used. The values in this table do not include the area of streets in the development.

Table 4-2: Impervious Cover Assumptions for Residential Tracts

Lot Size	Assumed Impervious Cover (ft ²)
> 3 acres	10,000
Between 1 and 3 acres	7,000
Between 15,000 ft ² and 1 acre	5,000
Between 10,000 and 15,000 ft ²	4,000
< 10 acres	3,500