

5.3.2 Site Design BMPs

The two BMPs in this section are general practices for design and maintenance at the site.

BMP T5.20 Preserving Natural Vegetation

Purpose and Definition

Preserving natural vegetation on-site to the maximum extent practicable will minimize the impacts of development on stormwater runoff. Preferably 65 percent or more of the development site should be protected for the purposes of retaining or enhancing existing forest cover and preserving wetlands and stream corridors.

Applications and Limitations

New development often takes place on tracts of forested land. In fact, building sites are often selected because of the presence of mature trees. However, unless sufficient care is taken and planning done, in the interval between buying the property and completing construction much of this resource is likely to be destroyed. The property owner is ultimately responsible for protecting as many trees as possible, with their understory and groundcover. This responsibility is usually exercised by agents, the planners, designers and contractors. It takes 20 to 30 years for newly planted trees to provide the benefits for which trees are so highly valued.

Forest and native growth areas allow rainwater to naturally percolate into the soil, recharging ground water for summer stream flows and reducing surface water runoff that creates erosion and flooding. Conifers can hold up to about 50 percent of all rain that falls during a storm. Twenty to 30 percent of this rain may never reach the ground but evaporates or is taken up by the tree. Forested and native growth areas also may be effective as stormwater buffers around smaller developments.

On lots that are one acre or greater, preservation of 65 percent or more of the site in natural vegetation will allow the use of full dispersion techniques presented in BMP T5.30. Sites that can fully disperse are not required to provide runoff treatment or flow control facilities.

Design Guidelines

- The preserved area should be situated to minimize the clearing of existing forest cover, to maximize the preservation of wetlands, and to buffer stream corridors.
- The preserved area should be placed in a separate tract or protected through recorded easements for individual lots.

- If feasible, the preserved area should be located downslope from the building sites, since flow control and water quality are enhanced by flow dispersion through duff, undisturbed soils, and native vegetation.
- The preserved area should be shown on all property maps and should be clearly marked during clearing and construction on the site.

Maintenance

- Vegetation and trees should not be removed from the natural growth retention area, except for approved timber harvest activities and the removal of dangerous and diseased trees.