Article 129

Feature article from Watershed Protection Techniques. 2(1): 233-238

The Peculiarities of Perviousness

When the provided as any cropland, as far as the input of water, fertilizer or pesticides are concerned.

In this article, the hydrology and pollutant dynamics of pervious areas are explored. To do so, it is necessary to examine the types and distribution of pervious cover found in urban landscapes. Next, the complex interactions of pervious and impervious cover are investigated, particularly along the many edges between the two. The next section examines the hydrological consequences of the direction of flow from pervious areas to impervious ones, and vice versa. Finally, this paper looks closely at the pervious areas that receive high inputs of chemicals and water: lawns, golf courses, and public turf areas. The evidence that this high input turf, which comprises perhaps a third of all pervious areas, influences the water quality of urban streams is evaluated.

The Many Natures of Perviousness

Pervious areas are very diverse in size and vegetative cover. Each community consists of a mosaic of forest, wetlands, meadow, lawn, turf, landscaping and the ubiquitous "vacant" lands. While the mix among these types varies based on the history and intensity of past development, pervious cover can be grouped into one of six general types (Figure 1). The estimated distribution of each type of pervious cover in a typical urban landscape is shown in Figure 2. It should be noted that these estimates are a composite drawn from many different sources and regions, and should be considered very provisional. More accurate local estimates of the distribution and management of pervious cover need to be developed.

