# THE SUSTAINABLE SITES INITIATIVE

The Sustainable Sites Initiative is a collaborative effort of the American Society of Landscape Architects, the Lady Bird Johnson Wildflower Center and the United States Botanic Garden to create voluntary national guidelines and performance benchmarks for sustainable land design, construction and maintenance. Although standards exist for sustainable structures, i.e. "green buildings", there are no comprehensive guidelines for sustainable landscapes. The central message of the Sustainable Sites Initiative is that any landscape holds the potential to improve and regenerate the natural benefits of its individual ecosystem and the Sustainable Sites Initiative will provide tools for those who influence land development and land management practices to help in this effort.

In November 2007 a preliminary report was published to establish benchmarks in five critical areas. It goes into detail specifying kinds of plants that can cleanse a disturbed wetland; how trees can be used to shade a building, protect it from wind, prevent erosion and clean the air; and what kind of plantings enhance mental health, for examples. Listed below are some of the highlights of that report.

## **HYDROLOGY**

Water is a limited resource. In many areas rainfall is treated as waste, funneled from roof gutters and roadway to sewers and, consequently increasing costs of storm water management. A sustainable approach finds ways to use this rainfall on site, using it for irrigation, ornamental water features and groundwater recharge. Re-grading to prevent run-off, avoiding development near streams and wetlands or directing storm water run off to rain gardens or wetlands are other suggestions in the report.

## **SOIL**

Being pro-active during construction, whether it is a building or a newly landscaped area, is critically important. Suggestions include retaining the original topsoil and minimize grading, compaction and soil disturbance. Disturbed soils emit high levels of carbon dioxide, methane and nitrous oxide. Composting is another important part of healthy soil.

#### **VEGETATION**

Protection of and use of existing vegetation is at the core of the guidelines. Using native plants and appropriate non-native plant will reduce pesticide use and conserve water. Once established, native plants save time and money. Careful placement of the vegetation can also reduce energy consumption. Planting trees in parking lots reduces evaporative emissions from the cars, or planting them in strategic positions around buildings can reduce indoor energy consumption.

## **MATERIALS**

A sustainable approach to choosing materials in landscaping encourages using as much of existing site materials as possible. When choosing new materials, select local materials and recycled materials. This helps reduce energy cost for production as well as for transport, which, in turn, reduces greenhouse gas emissions.

### **HUMAN HEALTH AND WELL BEING**

Healthy ecosystems are a source of many benefits for us. Social science research shows that encounters with nature-a green view from an office window, a lunchtime walk or beautiful landscapes around schools or officeshelp us concentrate, calm anxiety and reduce aggression. Preparing sites that are easily accessible, screening visual distractions, and using elements like wind breaks or movable furniture to encourage people to use these outdoor areas are some of the suggestions in the report.

For much more information and the full preliminary report visit sustainablesites.org