The purpose of sustainable design practices is to provide a set of techniques that are applicable in scale from the garden to the large office complexes that incorporates ecological benefits and has a sense of place. Ms. Harwell uses design concepts learned as a student of renowned landscape architect Ian McHarg.

Ms. Harwell illustrated the evolution of performance landscapes by presenting a number of projects she had worked over the past 20 years. Twenty years ago the concept of sustainable design and the methods used to implement were new and not widely accepted. The products on the market to fit the concepts were limited. In addition, clients were often hesitant to adapt the new techniques.

One of her first projects was the Alexandria Library completed in 1995. Stormwater and roof runoff were managed through the use of large-scale rain gardens. The concept was based on the idea that water runs downhill. Since then the concept of developing in a manner that eliminates negative environmental impact and relates people with the natural environment has become the norm. New techniques have evolved over the past 20 years.

Later projects such as Four Mile Run in 2004 used many more techniques reflecting the changes in acceptance and advances in methods. Four Mile Run was a large scale project designed to transform a highly-impacted stream into a community asset. Four Mile Run is located in a highly urban area and success was based on understanding the existing conditions and past changes. It was also very complex because it involved inter-jurisdiction coordination between the City of Alexandria and Arlington County.

Ms. Harwell recommended that anyone wanting to develop their own technical toolbox should begin with LEED 2.2 or the Sustainable Sites Initiative. The Sustainable Sites Initiative is an interdisciplinary effort by 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 practices. Not every technique fits every project. The key is to select the tools that fit the site (landscape and ecology), the intended use and that water runs down hill.
Other examples of projects that illustrate sustainable design and performance landscapes mentioned in the presentation include:

- National Aquarium in Baltimore
- Branch Brook Park, Essex County, NJ – Park renovations restoring Branch Brook designed by the Frederick Law Olmstead firm
- DC Artwalk, 2006
- Irving Street, 2008 (on-hold) – Creating extensive green roofs, roof gardens and streetscape

[Summary prepared by Debbie Weller]