

## Land Use & Environment Committee

### Rappahannock-Rapidan Regional Commission

#### Meeting Minutes - October 28, 2008

##### Attendees:

Melissa Allen	John Marshall SWCD
Matt Brown	Virginia Cooperative Extension
David Grover	Orange County
Sharon Lee	Town of Remington
Laura Loveday	Culpeper County Department of Development
Chris Mothersead	Town of Warrenton
BJ Valentine	Fauquier County – Community Development
Greg Wichelns	Culpeper SWCD
Deirdre Clark	Rappahannock-Rapidan Regional Commission

##### LID and LEED at Wetland Studies and Solutions, Inc.

**Jennifer Brophy-Price**, a civil engineer with Wetland Studies and Solutions, Inc. (WSSI - <http://www.wetlandstudies.com/>), presented a first-hand account of the Low Impact Development (LID) and Leadership in Energy and Environmental Design (LEED) practices implemented at the Wetland Studies and Solutions, Inc., office site in Gainesville, Virginia. Detailed information was provided on the construction, maintenance, relative costs and benefits of several practices, including a green roof, cistern, rain garden, several types of pervious pavements and elements of building design.

The construction of WSSI's green roof generated a lengthy discussion focused on the design, installation procedures, cost and expected longevity. It was noted that because of cost the green roof was installed only on one part of the building. Despite a rather comprehensive warranty, the interior ceiling was left open to the substructure to facilitate repairs in the event of a leak. Jennifer indicated that the practices used on site were monitored closely to determine their level of function both individually and as integral parts of linked systems. Various types of pervious paving systems have been installed on the property and evaluated in an effort to determine their relative benefits and site suitability. The difficulty of quantifying all associated benefits was discussed.

Jennifer reviewed those aspects of WSSI's building design, construction and practices that have earned it Gold Certification under the Leadership in Energy and Environmental Design for Commercial Interiors (LEED-CI). Costs, savings and payback time estimates were provided for those practices used. Daylight-responsive and motion sensor light controls contribute to energy savings as do high efficiency appliances and the solar heated water. Uses of gray water and limitations imposed by current Health Department regulations were discussed. Questions were asked regarding construction permits and financing. Interested in innovative approaches to site design, stormwater management and energy efficiency in building construction,

Prince William County worked with WSSI to facilitate permit approval and minimize barriers to an efficient building schedule. WSSI worked with an out-of-state lender who is familiar with the owner to secure funding for the project. It was noted that although many of the innovative techniques used on the site are being incorporated into building design with increasing frequency, the availability of local financing for such projects apparently is uncertain.

**Items of Interest:**

- For a general update on stormwater management regulations and links to specific regulatory actions, check the following:  
<http://www.dcr.virginia.gov/documents/LRDCRStormwaterRegulatoryActions.pdf>
- The direct link to the draft version currently under review by the APA is as follows:  
<http://www.dcr.virginia.gov/documents/swmParts12and3.pdf>
  
- The November 19, 2008 CRRES meeting included discussion of the possibility of hosting a green infrastructure workshop as prelude to establishing interest in the development of a regional green infrastructure plan. Interest in such a plan was expressed at the Land Use & Environment meeting, July 28, 2008. Information about CRRES may be viewed at <http://www.rregion.org/crres.html>.

**NEXT LAND USE & ENVIRONMENT COMMITTEE MEETING**

January 28, 2009

For future topics, please contact Deirdre Clark at the Regional Commission.