

Environmental Finance Center Charrette II  
**Financing Stormwater Protection in Shenandoah Valley**  
Shenandoah County Office Building - December 5, 2006

About 47 people participated, including representatives from six counties, four cities, three towns, and two planning district commission.

Financing Truths

- It is cheaper to protect than to restore.
- Taking action today is cheaper than taking action tomorrow.
- All communities have a stormwater management program; they may not call it that, but they have to deal with water.
- Pay me now or pay me later.
- The trick is explaining to the community so they understand that even if you aren't paying for it, you are still paying for it.
- Too concerned with costs. We need to tell the community what it's buying. That should be the first step.

**Costs:**

- 40% of Bay cleanup is for stormwater
- Average across country: \$30 to \$150 / acre per year
- Costs \$0.80 / gallon to treat through green infrastructure vs. \$4.00 / gallon piped
- Two funding choices:
  - Fee – proportional to the service; can opt out
  - Tax – no choice
- Examples: Rain Tax / Pavement Tax / Maryland – Flush Tax (will upgrade STPs)
- Need 1) clear goals, 2) effective public outreach 3) involvement of local officials

**State Policies:**

- DCR as of January 2005 handles permits for stormwater (DEQ still does industrial)
- Stormwater management now required for MS4 and Chesapeake Bay localities; optional for others. DCR website: [www.dcr.virginia.gov](http://www.dcr.virginia.gov) \ lawregs has updates.
- All communities will have to address post-construction water quality. Currently only inspect during construction, generally using minimum standard 19. Many Valley localities are not enforcing well.
- Consensus after presentation: Need more clarification from the state.

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### **Local Examples:**

- Staunton is redoing its stormwater ordinance and incorporating LID. Trying to address financing (now it's equal fee for all)
- Waynesboro is investigating idea of Stormwater Utility. Council on board because the public's been complaining for 10 years.

### **Outside Region Examples:**

#### Fairfax County

Pro Rata Share – based on impervious area; goes into fund to build projects identified on priority basis (ex; regional SW structures)

Recommends:

- 1) Adopt floodplain ordinance
- 2) Adopt comprehensive stormwater regulations. Protect streams banks; use LID (versus 2- and 10-year storms)
- 3) Watershed Planning – do first so can put resources where most needed
- 4) Pro Rata Share – supplemental, not primary, funding

#### Montgomery County MD

Utility Fee (\$25/household) funds maintenance on the almost 4000+ devices. Finally got it passed because administrator and county chair pushed it.

Benefits for developers include a price premium. Cheaper to build (\$7,400 less) and lots sell in less time than conventional (2004 APA Journal: Illinois study found that the #1 value people chose their lot was a nature view for their home).

Localities are not going to do it unless someone tells them to do it. Can be regulations, can be citizens. Need leadership and educated populace.

#### Low Impact Development Center (Kloss)

LID can be very effective. As an example, one retrofitted street has had zero stormwater discharge since LID was installed in 2002. His advice: address more than one outcome for your investment:

- Rainfall as a resource (stormwater management + water supply)
- Looks like landscaping (stormwater management + aesthetics)
- Stormwater management + traffic calming
- Green roofs (stormwater management + mitigate heat island)

Maine consultant: Sees tensions between state and localities; need venue to build relationships with state.

**Financing Stormwater Protection in the Shenandoah Valley  
Shenandoah County Office Building (Woodstock) - December 5, 2006**

**BREAK OUT SESSIONS**

**SMALL COUNTIES**

- “If state had clear standards, that would solve our regional issues.”
- Lack of education to implement, to know what to ask the board of supervisors for. Who on staff could put that together!? It would be a full time job.
- Huge and complicated issue – LID, ordinances
- Localities can’t keep track of what’s going on in Richmond. Local staff can’t figure it out.
- Data needed. Don’t know how much impervious; don’t know potential impact of a specific subdivision, where the sinkholes are.
- Integrating E&S, SW, and Clean Water Act? Different manuals; would like one plan review. Need state to more clearly set level of service.
- Counties need to complain to the state; need participation and clarification
- Boards prefer using general fund rather than utility (enterprise fund)

Summary of Issues for small counties:

- Lack of plan (staff can’t do it with what have now)
- Lack of coordination with neighbors
- Lack of coordination with state; lack of understanding
- Education at all levels (staff, BoS, state)
- Data needs

**CITIES**

- Issues: flooding, MS4, TMDL, Stormwater utility; establishing LID and setting requirements
- Barriers: values, different goals by different people
- Need Educating: 1) development community, 2) staff (ex: would like to see Stormwater training like that for E&S), 3) citizens, 4) politicians
- Lack of understanding
- Lack of incentives
- Coordination and management and maintenance of LID
- Requirements in limbo with state

**LARGE COUNTIES**

- Want to protect water; want staff and tools – but nothing says we have to
- City/county issues
- Lack of state leadership
- Constant struggle between urban and rural – If restrict urban with regulations and don’t restrict development in ag areas, this pushes development out to rural areas.
- If these things need to be done, tell us it’s so and give us the tools at the state level.

## **TOWNS**

- Counties push development to towns, but this has costs and adds to struggle
- Aging or minimal infrastructure
- Concentrating development (may not want that much)
- Benefit not clear: Why would people build there if there are extra regulations and therefore it would be cheaper in the county?

## **Barriers**

- Lack of resources (staff)
- Wastewater is the biggest issue – huge costs. I/I takes precedence over SWM (ex: a few hundred people have to fund a \$25 m STP)

## **FINAL BREAK OUT SESSIONS**

### **What's Needed**

- Message to Council
- State Guidelines (clear)
- Public education – ex: Fact sheet for each audience
- Data on watershed (such as characteristics and identification of priority areas)
- Coordination and connection of various departments to collaborate on actual implementation (to get past gaps)
- Need for multi-jurisdictional approach
- Need for dedicated staff or outside consultant or within jurisdiction

### **What People Plan to Do Next:**

- Educate councils and boards
- Local/state communication
- Small watershed plan
- VCC offer educational assistance
- Continue educating public
- Winchester advocate for Natural Resources Advisory Board
- Research web for SOP
- Walk streams (Page)
- Explore SW and Wastewater relationships (operators)
- contact local officials
- Add chapter on SW in Watershed Management Plan (Page)