

## **Additional References to the Task Force on Environmental Action Final Report**

### **Buildings**

1. All the home energy audit/retrofit professionals hired should be certified by the Maryland Energy Administration (MEA). A list of Building Performance Institute-certified Building Performance Analysts can be found on the MEA web site at <http://www.mdhomeperformance.org/Counties/MontgomeryCounty.htm>.
2. Participating property owners for demonstration and subsidized audits/retrofits will be required to provide energy usage information for one year prior to and after the retrofit implementation as a condition for the City paying for or subsidizing the audits and retrofits. Takoma Park should enter into an agreement with local utilities to allow them to provide energy information for homes participating in the energy audit/retrofit projects directly to the City with approval of the property owner.
3. Takoma TV has won two Government Programming Awards and the Overall Excellence in Government Access for stations with budgets under \$200,000 among many other awards. See <http://www.takomaparkmd.gov/cable/index.html>.
4. The Takoma TV documentary of home energy audits/retrofits is envisioned to be done in the style of the Public Broadcasting System program, "This Old House."
5. The new Montgomery County Home Energy Loan Program for energy efficiency expected to be funded by summer 2010, is known as HELP. For more information, see [http://www.montgomerycountymd.gov/content/council/pdf/bill/2009/20090422\\_6-09.pdf](http://www.montgomerycountymd.gov/content/council/pdf/bill/2009/20090422_6-09.pdf).
6. One well-placed mature tree can reduce energy use by up to 30%.
7. Under the recommended home energy audit/retrofit program, for each \$30 K in subsidies invested by the City, the benefits would be expected to be about \$30 K per year in each subsequent year in homes that are audited/retrofitted. This annual cost savings could rise as market energy costs rise.
8. The subsidies offered under the recommended home energy audit/ retrofit program would allow the City to enter into contracts with homeowners to obtain energy use documentation on each home. This feedback will allow the City to refine the program if needed.
9. The Federal government and State of Maryland have several grant programs for funding energy efficiency and energy efficiency retrofits. The City should investigate and apply for funds for these programs.

## Habitat

1. The *American Forests* report cited is "Urban Ecosystem Analysis for the Washington DC Metropolitan Area," February, 2002, [http://www.americanforests.org/downloads/rea/AF\\_WashingtonDC2.pdf](http://www.americanforests.org/downloads/rea/AF_WashingtonDC2.pdf).
2. This parking lot where one of the weather stations for the microclimate study was located has trees planted between parking lanes so is not the worst of urban heat islands.
3. A degree day is one degree of outside average temperature above or below the base. Each degree above the base is one cooling degree-day. Trees in Takoma Park can save more than \$400,000 per year in energy costs.
4. In 1995, an area of Prince Georges County petitioned to become part of Takoma Park. Council then established the Reconstituted Open Space Committee to inventory undeveloped lots in this new area of Takoma Park and evaluate each according to the same criteria and make recommendations for City action. It is the report and recommendations of this Reconstituted Open Space Committee that the TFEA recommends that Council consider and act on now.
5. MWCOG and CWP recommendations of impervious cover of less than 25% and tree canopy cover of greater than 65% for most of the suburban areas of Takoma Park and canopy cover of greater than 40% for the more urban areas are from Metropolitan Washington Council of Governments, "Anacostia Watershed Forest Management and Protection Strategy," prepared for The Anacostia Watershed Restoration Committee, June, 2005, <http://www.mwcog.org/uploads/pub-documents/8FtaWQ20050729081527.pdf>.
6. Planting native trees in median strips of New Hampshire and University Avenues could sequester 42,000,000 BTW carbon equivalent over 10 years based on the following. Assume 60 oak trees installed on New Hampshire Avenue and 30 on University Boulevard. Assume trees that are installed grow very conservatively: 2 cords of wood by 10 years later (yield tables unavailable at time of preparation) for 42 Million BTU equivalent of carbon sequestration. Assume trees are 3 inch caliper and 18 feet high at planting and grow to 6 inch caliper and 30 feet height 10 years later. Calculate volume of bole, convert to cords. Assume one cord red oak yields 21.3 Million BTU equivalent carbon sequestration. Source of Cord/BTU data from "Heating with Wood," publication 016 of the National Center for Appropriate Technology and attributed to the U.S. Forest Products Laboratory, USDA Forest Service.
7. The source of information that deer populations in Sligo Creek Park have increased to approximately ten times the number that can be supported by the land is Park deer expert Bill Hamilton as reported by Sally Gagne at <http://www.fosc.org/DeerInSligo/10.htm>.
8. There were 1,841 vehicle collisions with deer County-wide in 2008.
9. More information on the recent Friends of Sligo Creek (FOSC) survey on deer can be found at the FOSC web site at <http://www.fosc.org/DeerSurveyReport.htm>. More information on the overpopulation of deer and the problems this is causing can be found at <http://www.fosc.org/DeerInSligo/index.htm>.

## Stormwater

1. The Takoma Branch and Long Branch are also within the Sligo Creek watershed.
2. The image of the hydrologic cycle and the quote on the variability of streamflow are from FISRWG (10/1998), *Stream Corridor Restoration: Principles, Processes, and Practices*, by the Federal Interagency Stream Restoration Working Group (FISRWG)(15 Federal agencies of the US gov't), pp. 2-15. GPO Item No. 0120-A; SuDocs No. A 57.6/2:EN 3/PT.653. ISBN-0-934213-59-3.  
[http://www.nrcs.usda.gov/technical/stream\\_restoration/](http://www.nrcs.usda.gov/technical/stream_restoration/).
3. The image of the hydrographs of the rate of flow in urban and rural streams is from Center for Watershed Protection, Urban Subwatershed Restoration Manual 1, *An Integrated Framework to Restore Small Urban Watersheds*, February, 2005, p. 24  
[http://www.cwp.org/Resource\\_Library/Center\\_Docs/USRM/ELC\\_USRM1v2trs.pdf](http://www.cwp.org/Resource_Library/Center_Docs/USRM/ELC_USRM1v2trs.pdf).
4. The photos of streams in good and degraded conditions are from Center for Watershed Protection, Urban Subwatershed Restoration Manual 1, *An Integrated Framework to Restore Small Urban Watersheds*, February, 2005, p. 28  
[http://www.cwp.org/Resource\\_Library/Center\\_Docs/USRM/ELC\\_USRM1v2trs.pdf](http://www.cwp.org/Resource_Library/Center_Docs/USRM/ELC_USRM1v2trs.pdf).
5. Language for the Montgomery County requirement that any development greater than 400 square feet must plan for conveyance of extra runoff can be found at [http://www.montgomerycountymd.gov/content/council/pdf/SCANNED\\_DOCS/20061017\\_res26-05.pdf](http://www.montgomerycountymd.gov/content/council/pdf/SCANNED_DOCS/20061017_res26-05.pdf). TFEA recommends that the City use the same language in City code to make implementation easier.
6. The *American Forests* report cited is "Urban Ecosystem Analysis for the Washington DC Metropolitan Area," February, 2002,  
[http://www.americanforests.org/downloads/rea/AF\\_WashingtonDC2.pdf](http://www.americanforests.org/downloads/rea/AF_WashingtonDC2.pdf).
7. The full citations for Center for Watershed Protection Manuals 2 and 3 are: Center for Watershed Protection, Urban Subwatershed Restoration Manual 2, *Methods to Develop Restoration Plans for Small Urban Watersheds*, August, 2005,  
[http://www.cwp.org/Resource\\_Library/Center\\_Docs/USRM/elc\\_usrm2lsl.pdf](http://www.cwp.org/Resource_Library/Center_Docs/USRM/elc_usrm2lsl.pdf). Center for Watershed Protection, Urban Subwatershed Restoration Manual 3, *Urban Stormwater Retrofit Practices*, August, 2007,  
[http://www.cwp.org/Resource\\_Library/Center\\_Docs/USRM/ELC\\_USRM3.pdf](http://www.cwp.org/Resource_Library/Center_Docs/USRM/ELC_USRM3.pdf).