

(9/19/2006): Proceedings from the Urban Open Space Meeting
September 14, 2006
Durham City Hall.

DOST Open Space Committee: Will Wilson

From the Durham County Website: The purpose of the Open Space and Trails Commission is to prepare, implement and review policy matters related to the County's Open Space Program. The commission also acts as a liaison between County government and the citizens on issues related to open space, greenways and conservation corridors.

Durham County has an excellent rural Open Space preservation record with fee simple, easements. Rural Woodlands: Healthy watersheds for urban water needs, and recreation. Imply public lands/easements. Growing movement to consider ecosystem services, or the many benefits open space provides. Some call open space "natural capital" to emphasize its value to provide clean air and water, recreation benefits, alternative transportation routes, urban heating reduction, among other services.

We urged that the city develop an UOS plan; last in 90some priorities (Frank Duke). Only happen if voters demand it or value is unmistakable. Get city support for UOS. Get voter support for UOS. Incentives for conversion of impermeable surfaces and lawns. Identify current organizations and contacts involved in these goals.

-PLANNING: Define urban open space, and identify the problems UOS solves.

-IMPLEMENTATION: What you groups are doing.

-DOST ROLE?

Benefits: decreased runoff, enhancing air/water quality, reducing water treatment costs, reducing urban temperatures, habitat, visual relief, promotes community investment, promotes citizen connections, pedestrian-friendly environment.

How to make urban open space pay for itself? Develop economic value of urban open space, costs and benefits. Think of "insuring natural capital". Tax the depletion of natural capital. Still, putting the value of these benefits on a city budget, and even allocating money to enhance open space to gain these benefits, is most likely a difficult argument when faced with public school needs, infrastructure expenses.

Rural Farms: need \$250K income/year to break even (USDA 2005). Corn @ 100bushels/acre @ \$2.50/bushel = soybeans @ 50bushels/acre@\$5/bushel= Large 1000 acre farms! Small farms require "first job" subsidies, or intense farmer's market crops (eliminating the first job, increasing economic risk). Some farmland conservation easements.

Rural land purchase: \$20K in money market funds @ 5% return/year = \$1000 versus \$20K/acre @ 5% return/year = \$1000 profit on one acre?

Urban Open Space: Parks for recreation (reduced quality of non-rec services but better than parking lots).

Other Urban Opportunities: community gardens, roadsides, benches and bus-stops, rivers and streams, city and county-owned small natural areas and pocket parks, cemeteries, plantings near public buildings, medians, informal pedestrian paths, storm water detention ponds, owner-maintained gardens, and entrances/parking areas of commercial/office properties.

Questions:

Cost of stormwater (in units of 1" rainfall per acre -- about 27,000 gallons)
= value of filtration?

Tree evapotranspiration (small tree: ~200-400grams/hr = cooling potential of 200-400 W/m²; 5m canopy tree provides 2 tons cooling ~ 24 kBTU/hour; numbers not verified) fridge 600kWh/year = 2000 kBTU/year (1000 kBTU is approximately 293 kWh) = 1/4 kBTU/hr (one 5m canopy tree is like 100 fridges). Value wrt urban heating to city? Evapotranspiration requires water filtration.

Amount of similar services from lawns? Value of converting lawns to trees? Urban forestry jobs?

Impervious surface conversions? Trees in parking lots?
Implementation:

How does one convert Home Depot parking lots?

Care of surplus city lots. Who becomes responsible?

Convert private lawns. Incentives?

Add roadside trees (like TLNA).

QOL in low income areas (low owner-occ, low canopy cover).

Streams.

Native plants on abandoned lots/edges.

Identify stakeholders, participants, sponsors. Is an umbrella UOS group in existence/needed?

Southwest Central Durham Quality of Life: Andy Balber

- Six neighborhoods in Southwest Central Durham [Tuscaloosa-Lakewood (TNLA), Morehead Hills, West End, Burch Avenue, Lyon Park Lakewood] with a broad neighborhood improvement agenda. For more information see the following link:
http://community.duke.edu/neighborhood_priorities/southwest_central_durham_quality_of_life.html
- Activities coordinated with local neighborhood associations [where they exist and are active] and with Duke Office of Community Affairs through a general steering committee and various interest-oriented task forces.
- Open space issues adopted as a general arena of QOL concerns at goal setting workshops over the past year. Specific items related to Open Space put on the QOL agenda for further action include:
 - Greenways
 - Pedestrian trails
 - Plantings
 - Walkable neighborhoods with local commercial services
 - Parks
 - Community gardens
- These concerns are being expressed primarily in the Housing Task Force at present as this has been historically the most active group with a strong record of building affordable housing in the neighborhood in a coalition with non-profit agencies.
- The first concrete accomplishment in open space is a land trade that allowed establishment of a park adjoining the site of a major housing development on Gattis Street. This park will be dedicated shortly. It was the first venture into land use that does not directly involve housing.
- Ideas related to other articulated open space goals are less developed.
- Overlap in interests with TNLA that Todd Twigg should relate [plantings, NPO, streams, trails] will help formulate concrete agenda elsewhere in SWCD.
- Growing concern with ground water and how it impacts additional development sites have recently emerged and could have a large impact on the area.
- Jonathon Nyberg and Meadowsweet Creek are in the QOL area.

Adopt-a-Stream: Jonathan Nyberg

“Each subwatershed contains a network of small stream channels that are known as headwater streams. While each headwater stream is short and narrow, they collectively represent a majority of the drainage network of any watershed management unit. They dominate the landscape through their sheer number and cumulative length. They comprise roughly 75% of the total stream and river mileage in the United States.

What happens in the local landscape is directly translated to the headwater streams and on to larger watersheds and river basins.

Focusing on the headwater stream level is important in watershed management for several reasons: headwater streams are exceptionally vulnerable to watershed changes, streams are on the same scale as development, streams are the “narrowest door” for water resource protection, streams are good indicators of watershed quality and the public intuitively understands streams and strongly supports their protection.”

Quoted from: the “Do-It-Yourself Watershed Planning Kit” distributed by Marc Seelinger of Cill Ide Native Plant Nursery, 919-302-6900, Raleigh, NC.

Focusing on the small stream corridors in Durham can affect the following goals of DOST: wildlife habitat, informal pedestrian paths, increase water qualities, open space, greenway. And I would add, places of beauty.

Each headwater stream needs its own “creek-keeper”, ideally someone who lives on the creek and can pull out trash on a regular basis and quickly alert the city to sewage spills, or episodes of sedimentation.

Given the number of headwater streams, the number of volunteers needed is tremendous. But if we truly want to clean up our water, I believe citizens, monitoring and taking action in their own neighborhood, in their own back yard, is a vitally necessary part of any watershed protection plan.

Issues for stream monitoring in Durham:

Trespassing on private land, dealing with land owners.

Much of the trash comes from the poorer neighborhoods. For example, the streams through Forest Hills Park are deluged with trash coming from poorer neighborhoods. These neighborhoods must be engaged, and issues addressed.

Organizing and providing support to creek-keepers such as trash bags, pick up, safety vests, reach extenders.

Remaining Summaries jotted down, for better or worse, by WGW:

New Hope Creek Watershed Association: John Kent

This group has performed monthly environmental assessments of six sites in the New Hope Creek/Watershed since 1990. They have information such as turbidity data and can identify in their data the presence of stream perturbations such as subdivisions, etc. They've been involved in various cross-county organizations and projects and have received various clean water management grants.

Storm water Department: David Brown

This city/county department is quite interested in retrofitting properties to enhance storm water retention, particularly in lower income areas. Apparently this focus is new in that only recently have regulations have been adopted on stormwater outflow quality. This department may be a good source of collaborations and, perhaps, small amounts of project funding that could lead to big impacts on rainfall retention.

Durham Central Park: Camille Berry

This organization has recently developed Durham Central Park and a part of that involved some stream restoration. They were awarded money through city stormwater department.

Ellerbe Creek Watershed Association: Paula Childers

This group owns something like 100 acres upon which they are performing native Plant restoration, storm water retention projects.

Tuscaloosa-Lakewood Neighborhood Association: Todd Twigg

With the planning department, this neighborhood association is developing an overlay protection area plan for their neighborhood. They've been involved in planting street trees with the urban forestry manager, and developing something called a green initiative.

Urban Forestry manager: Kevin Lilley

The urban forestry department has been merged with landscape services. These folks are involved in things such as street treeplanting on city right-of-ways and in city parks, all city owned properties. Todd Twigg says they get things done.

Appearance Commission: John Wood

This city-appointed commission reviews public projects for their architectural appearance. They are involved in open space-related projects such as retrofitting parking lots, dealing with tree islands and impermeable surface issues. (mentioned talking to Home Depot?) They also have interests in gateway corridors and streetscapes, for example, plantings along the 147 and I-85 corridors.

Open Space and Real Estate Department: Jane Korest

This department has been deeply involved in rural open space, those properties primarily emphasized as inventory sites or watershed locations. They're also involved in surplus county and city owned properties.

Frank Hyman

Horticulturist involved in many projects. He has been involved in the development of playgrounds and parks, presently very interested in green roof initiatives and the storm water plan. Presently also involved in the Duke Park Initiative (?).