October 27, 2003
Briefing to the Attorney General’s Water Advisory Council

Interface Between Land Protection & Georgia’s Water Resources
Outline

• Overview
  – Ecological, economic & other rationale

• Tools for Permanent Protection
  – Conservation easements
  – Restrictive covenants

• Applications
  – Conservation subdivisions
  – TDRs
  – Overlay zones

• New Directions
Development Impacts on the Water Cycle

- 10% to 50%
- 15% to 55%
- 15%
Impervious surfaces

- indicate intensive land uses that cause pollution
- inhibit recharge of groundwater
- prevent natural processing of pollutants in soil, plants
- provide surface for accumulation of pollutants
- provide express route for pollutants to waterways
Waterway Health & Imperviousness

Adapted from Schueler, et. al., 1992

Waterway Health & Waterway Health & Imperviousness

(%)
Time

Stream flow

Pre-development

Post-development

Short, high volume peak discharge

Increased total runoff volume

Baseline peak discharge

Higher base flows

Storm Hydrograph
Phosphorus Load Comparison

- Current
- Default future
- All Tools
- Stormwater

TP (lbs/yr) vs. WQ Target
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Basic Economic Benefits

- saves local governments money on servicing development
- raises property values for surrounding properties
- attracts businesses, thereby creating jobs
- attracts educated, skilled workers, indirectly attracting businesses
How Green Space Saves $$

Expenditures per $1.00 of Revenue

- **Resid.**
- **Comm.**
- **Farm/for.**

Expenditures:
- Oconee County
- Habersham County
The Potential for Community Forests to Be Self-financing
Georgia Case Studies

Athens-Clarke
Cobb
Fulton
Habersham
Measuring Value

• Hedonic pricing approach
  – estimation technique
  – used in studies of air and water quality, parks and scenic views

• Enhancement value
Conclusion

• Enhancement value is affected by:
  – Age
  – Location
  – Type of protection

• Protected areas can contribute to county revenue
Livability Benefits

- Community
- Public health
- Sense of place
Conservation Easement

A legal instrument through which a Landowner voluntarily agrees to give up certain uses of his land to protect some conservation value.
Land Ownership Bundle of Rights

- To Cut Timber
- To Subdivide
- To Farm
- To Build Houses
What are Conservation Values?

- Recreational/educational purposes
- Habitat
- Open space pursuant to government policy
- Scenic/historic preservation
Deed of Conservation Easement

• Recorded w/ deed to property

• May either be:
  – in perpetuity, or
  – for a specified term of years

• Binding on future property owners
Typical Provisions of a Habitat Protection/Open Space Easement

- Prohibit development on sensitive portions of land
  - riparian buffers
  - wetlands
  - plant colonies

- public access unnecessary
Benefits of Conservation Easements

• Protect conservation values of the land

  - Income tax
  - Estate tax
  - Property tax
Income Tax Benefits if:

- Easement is permanent

- Satisfies conservation purpose
  - Landowner may deduct value of easement from federal/state income taxes
    - Easement value = FMV of land w/o restriction minus FMV of land with restriction
Property Tax Benefits

Statute requires that property taxes reflect restricted use

- UGA guidance for tax assessors
Land Trusts

• Can be governmental or ngos

• Fastest growing segment of conservation community

• About 50 in GA
On the Horizon

• Income tax credits
  - North Carolina
  - South Carolina

• Enforcement by AG

• Increase capacity of land trusts
CONSERVATION SUBDIVISIONS
aka “Open Space” subdivisions
Traditional v. conservation
Cane Creek, Jackson Co.

Conventional Subdivision Layout

This layout illustrates the development that would be allowed under the current county regulations.
Cane Creek, Jackson Co.
Fern Park
Lumpkin County

Walking trail

Home under construction
"Forget golf courses. The hottest amenity in metro Atlanta is a backyard forest."
Dorms getting a break

Sanford expansion ceasing during finals

By Kate Carter
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The University of Georgia Athletic Association is breaking a deal with the residents of Reed and Payne Hall dormitories, who have lived with wall-shaking construction noise associated with a fast-track project to expand Sanford Stadium.

Milford Hills

Milford Hills is the first subdivision built as a "conservation subdivision" under Athens-Clarke County ordinances, protecting almost half of the property from development. But it also illustrates problems that should be fixed in county rules, says the group that holds the conservation easement for the preserved part of the property.

Problems at Barnett Shoals development

Group sees erosion, 'bad' ordinances

By Lee Shearer
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A new subdivision under construction near Barnett Shoals Elementary School will set aside nearly half the development's 56 acres as protected greenspace. But erosion and other problems at the 128-unit Milford Hills may be more an illustration of Athens-Clarke County's low standards for protecting green space and controlling erosion than a shining example of conservation, according to an Athens conservation group involved in the project.

The site plan, prepared by a previous owner of the land and inherited by developer Langley Properties of Loganville, is considerably less than what it could have been, both in aesthetic considerations and in preventing clay from silting in nearby waterways and lowlands, said Laura Hall Gabriel of the Athens Land Trust, an group dedicated to land preservation and affordable housing.

See DEVELOPMENT on A12.
Implementation-
Site Construction
Assess collateral
damage to site
during development
Impediments

- Local regulations are major barrier
- Conservation subdivision ordinance helps
- Other regulatory changes may be needed
- Neighborhood opposition may be significant
TRANSFERABLE DEVELOPMENT RIGHTS (TDRS)

Development Rights

Sending Area
(Farmland, natural area, historic site)

Receiving Area
What is TDR?

- Development rights (rights to build) from naturally or historically significant parcel of land are separated from land & sold for use on another tract.

- Landowner enters into conservation easement permanently restricting development on naturally or historically significant parcel.
National Trend (30 yrs.)

• At least 107 communities have TDR programs
  - Over \( \frac{1}{2} \) protect environmental resources
  - New direction: interjurisdictional transfers
Chattahoochee Hill Country
TDR Program Goals

- To preserve open space & natural, agricultural, environmental, historical, cultural resources of Chattahoochee Hill Country

- To accommodate growth while minimizing sprawl

- To maximize existing infrastructure
Master Plan

- Sending:
  
  Entire Chattahoochee Hill County Planning Area, except...

- Receiving:
  
  3 Living Working Zones
How many TDRs are needed to develop land?

• Depends on type of development
  
  - **Residential:**
    1 TDR required for each additional unit over one per acre in Living Working Area
  
  - **Commercial:**
    1 TDR per 2000 sq. feet of commercial space
The Conservation Easement

- When TDRs are transferred, landowner grants a conservation easement to a land trust.

- Conservation easement permanently protects open space; it does *not* necessarily provide for public access.
TDR Bank

- can buy, hold, and sell TDRs,
- will also be the central registry for TDRs on the market,
- will be run by a community board.
How does the transfer really work?

The Bottom Line
The Process

- Landowner applies for TDR certificates; within 95 days, the Department issues them
- Landowner transfers development rights to purchaser
Continued...

- Landowner transfers a conservation easement & records it
- Then the Deed of Transfer for the TDRs is recorded
- If less than all TDRs are sold, landowner resubmits the TDR certificate & county reissues to reflect new number of TDRs.
The Future: Interjurisdictional Transfers

New Jersey Pine Barrens

- 7 counties, 52 cities
- Protects forests, water quality, cranberry/blueberry agriculture
- 12,834 acres protected to date
http://outreach.ecology.uga.edu

lfowler@uga.edu
Why TDRs?

Landowners:
• retain land & continue traditional uses
• are compensated for lost development potential

Communities:
• preserve green space without paying full price for land