

SHORT MEMO TOPICS

- A. With UGA at the lead, much attention is currently being focused on ongoing maintenance and repair of septic tanks. In order to determine what the implications of such actions will be, we need to understand what the load reductions from such actions might be. How do we model and/or estimate pollutants (nitrogen, bacteria/pathogens) that will be reduced from fixing failing septic tanks? (Larry West, Environmental Practicum Faculty, email: lwest@uga.edu.)
- B. Some states (Michigan for sure) have adopted semi-regulatory frameworks for addressing nonpoint source pollution from agricultural sources. Michigan's program is called GAAMPS for Generally Accepted Agricultural Management Practices. Basically, if agricultural interests follow these practices, they are shielded from nuisance law suits and the ag industry self-policies itself regarding compliance (similar to what Georgia's forestry industry currently does in terms of self-policing). Describe this program—what motivated it, who/how many participate?, to what effect, what are the ag management practices and who developed them, success or failure of the program, etc. and give your best shot at a discussion about whether this might make sense for Georgia to adopt. (Michelle Vincent, Georgia Environmental Protection Division 319 Program Director, email: Michelle_Huffman@dnr.state.ga.us.)
- C. What percentage of stream miles are actually being monitored in Georgia to determine whether they are impaired or not? Compare this to other states. The Georgia legislature contemplated reducing monitoring last year given perceived budget constraints. How much do other states spend on monitoring and where do they get the money to do it? (April Ingle, Ex. Dir. Georgia River Network, email: ingle@garivers.org.)

These same questions were asked by a different source: What is the importance of water quality monitoring in Georgia? Who (state or local) is responsible for funding it? What is the history of funding in Georgia (including appropriations from the General Assembly) (can include federal grants, or lack thereof here)? How much funding do our neighbors such as North Carolina allocate for this purpose and what are the sources of those funds? Is more funding necessary for Georgia? (Todd Edwards, Associate Legislative Director, Natural Resources and Environment, Association County Commissioners of Georgia (ACCG) email: tedwards@accg.org.)

- D. Local governments have differing policies regarding maintenance responsibilities for drainage easements and stream channels. Policies vary by jurisdiction from full responsibility of maintenance to no responsibility for maintenance. I have a summary of several Georgia Stormwater Phase II communities' maintenance policies. These easements and streams are often shown on plats, but rarely recorded on a property deed or explicitly conveyed to a local government.

So the questions that arise are: What legal requirements do local governments have for maintaining these easements or stream channels with respect to stormwater management? Is there a difference in legal requirements between governments that have an NPDES Stormwater Discharge Permit and local governments that are not subject to the same regulations? If there is a legal requirement to maintain these easements, who has authority to define maintenance standards, the property owner or local government? (Jason Peek, Engineering Administrator, Athens-Clarke County, email: jasonpeek@co.clarke.ga.us.)

- E. What are typical ranges of DO and pH in south Georgia blackwater systems, and in slow moving south Georgia waters? Should standards be developed for both dry and wet weather, and what would these look like? What is a method that could be used to determine natural DO in these systems? (Elizabeth A. Booth, P.E., Ph.D., TMDL Modeling and Development Unit Coordinator, EPD)
- F. Develop annotated source of environmental finance resources for Georgia communities. Many of the local government elected officials and staff we surveyed for the Upper Altamaha Initiative for Watershed Excellence asked for information regarding funding sources for all sorts of watershed projects ranging from outreach and education to restoration. Two previous practicum students took a stab at developing a concise bulletin describing these various funding sources; what we need to do now is to provide at least one Georgia case study for each source of funding. Stacey Isaac Berahzer of the North Carolina Environmental Finance Center (her office is located in Atlanta) has offered to provide finishing touches if a practicum student will research and draft the case studies. (Stacey Isaac Berahzer, UNC Environmental Finance Center Isaac@sog.unc.edu.)
- G. Draft a 319 grant application for building the access road in the Milledgeville greenway that our students worked on last semester.
- H. The Georgia Department of Natural Resources just built the “greenest” building in Georgia—Sweetwater Creek State Park in [xxxx](#). They’d like us to draft a case study of the building detailing all the sustainable design, building and landscape features and including photographs and information about costs. The design firm was Gerding Collaborative; the initial contact will be Atticus Rominger at 205-572-1370 or [xxx \(email\)](#). This product will be used by DNR and will be posted on the River Basin Center website.
- I. A similar case study is needed for Lakewood, a new urban residential development in Athens-Clarke County which was the first (and maybe only) community in Athens to earn EarthCraft status. EarthCraft Community, a voluntary green development and building program partnered by the Greater Atlanta Home Builders Association and Southface Energy Institute, serves as a blueprint for homes that reduced utility bills and protect the environment. The program, which encourages home builders to practice smart growth management and environmental stewardship, bases its

recognition of Earth Craft House communities on their ability to maintain the integrity of the environment in which they will be built. Lakewood's developers earned the Earth Craft House designation partly for focusing the project on water management: reusing organic material to control erosion and sedimentation, reducing runoff volume and using potable water by pumping lake water for the irrigation of common areas. (Most of this information came directly from a little blurb in the Athens Banner Herald). The initial point of contact will be a person yet to be determined at Southface Energy Institute.

- J. Assist Christine in taking samples at least once, and maybe twice in the City of Gordon (two hour drive, one way) as carry-over from last semester's practicum project.
- K. There's some talk about dredging the Oconee River close to the confluence of the Middle and Upper Oconee. We need a memo regarding the purpose of and potential impact of dredging, permitting requirements, and any mitigating practices. (Christine Rodick at Christine.rodick@gmail.com)
- L. Memo re harvesting for cypress mulch in GA. Where in Georgia is it happening, are there sensitive species in these areas at risk, how do forestry BMPs for water quality apply, is there evidence that the industry is or isn't in compliance with these BMPs, are there eco-friendly alternatives to cypress mulch? Please incorporate lessons from other states—seems like there might be some evidence of environmental degradation—maybe related to trees being chipped during droughts when large floodplain system become temporarily accessible – caused by this practice in Louisiana and other states.
- M. Dick Field, Athens Clarke-County Environmental Coordinator has asked for a memo summarizing the science, experience, technical specifications and potential applications for using structured wetlands to treat wastewater. (Dick Field, ACC, email: DickField@co.clarke.ga.us.)
- N. Nathan Klaus, senior wildlife biologist with the nongame conservation section of the Georgia Department of Natural Resources, has asked for a synopsis of federal and state laws that pertain to bird protection and conservation in Georgia. (Nathan Klaus, DNR, email: naklaus@mindspring.com.)
- O. Stacey Berahzer, with the North Carolina Environmental Finance Center has asked us for a memo on enforcement of water use restrictions during times of drought—are there reliable numbers about residents receiving citations for breaking these restrictions? How are folks most commonly caught; is there follow-through and if so, what are the penalties? (Stacey Isaac Berahzer, UNC Environmental Finance Center Isaac@sog.unc.edu.)
- P. Tim Carter who has taken the lead on RBC's stormwater work on the coast, has asked for a brochure-type "Guide to Designing and Constructing a Rain Garden" aimed

specifically at coastal communities (some earlier students developed an excellent brochure for non-coastal communities that you can get ideas from. (Tim Carter, River Basin Center, email: tlcarter@gmail.com.)

- Q. Three-page flier for a general audience describing stormwater impacts on coastal communities and low-impact development solutions. (Tim Carter, River Basin Center, email: tlcarter@gmail.com.)
- R. Newly-elected Athens-Clarke County Commissioner Kelly Girtz wants to know how you restore urban streams after repeated use of the stream and stream banks as a dump site. Several stem in Athens have suffered this fate. (Commissioner Kelly Girtz, kgirtz@yahoo.com; 706-369-9457)
- S. Athens-Clarke County Mayor Heidi Davison says she and a number of her staff have been talking about the association between community design and obesity. The idea is to describe how a physically healthy community of people is supported through specific land use policies and designs. (Mayor Heidi Davison, mayer@co.clarke.ga.us.)
- T. Mayor Davison would also like a memo regarding how Athens Clarke County could promote the use of community gardens to present to a group that has been meeting to discuss creation of a farmers' market. She'd like the memo to address the concept of community agriculture and urban design similar to the Garden City concept of the past. (Mayor Heidi Davison, mayer@co.clarke.ga.us.)
- U. Limnology students of ecology professor Amy Rosemond found very high chlorophyll a values in Lake Chapman in Sandy Creek Park and low/no oxygen in the bottom of the lake. Would someone take a look at the land uses upstream to determine what might be the sources of phosphorous and suggest ways to increase public awareness of the issue? (rosemond@uga.edu)
- V. Last year, Amy Rosemond and USGS aquatic scientist Mary Freeman discovered that the flow of the Middle Oconee dropped below the "7Q10" low flow level on at least two consecutive days in late fall. What happened? Why was water of this volume being pumped into Bear Creek Reservoir from the river? Were the dam operators aware of the downstream impact? Should there be controls in place to keep this from happening? (mary@ttrout.ecology.uga.edu)
- W. New ecology professor John Drake conducts research concerning nonindigenous aquatic invertebrates and their parasites. He wants to import invertebrates for research. However, since the species he is interested in are not known to be invasive, are not regulated under CITES or similar laws and (for the parasites) are not known to cause disease in humans or livestock, he has had a difficult time determining what agencies at the state and federal level may regulate their importation and what permits need to be obtained. Can we help him with this? (John Drake, email: jdrake@uga.edu.)

- X. Draft funding proposal for retrofitting of Whitehall Mill Condominium Development parking lot immediately adjacent to the Middle Oconee River as follow up to last semester's practicum project (Laurie Fowler, lfowler@uga.edu)
- Y. Can the Environmental Practicum help us evaluate how other states coordinate Endangered Species Act (ESA) consultation on the Clean Water Act's National Pollutant Discharge Elimination System (NPDES) general construction permit, the pros and cons of different methods, and development of the BEST way for Georgia.

I didn't even know that the national general permit had ESA consultation requirements. We were working on local coordination procedures with GAEPD solely because the guys up in north GA are fed up with developers ignoring their need to meet even minimal S&E standards. This info Ben Dickerson sent will give us even more impetus to set up a consultation procedure. (Robin Goodloe, U.S. Fish and Wildlife Service, Robin_Goodloe@fws.gov)