Spring 2006 THE UNIVERSITY of TENNESSEE

Pond Creek Watershed

News for Watershed Residents

Produced by UT Extension (974-7266), partial text from So. Reg. Water Program

Watershed Management and Restoration

Many watersheds in east Tennessee are threatened by current and changing land uses, resulting in impaired water quality, eroding streambanks, siltation, and loss of floodplain functions. Causes of watershed impairment include improperly managed lands, expedited soil erosion, unnecessary fertilizer applications and animal waste.



State and federal resource management agencies are now promoting a watershed approach to managing water quality. This involves assessing causes and sources of impairment, developing watershed management plans, encouraging local actions to protect and restore water quality, monitoring changes, and educating citizens to become watershed stewards. As many of you know, much of this work has already been conducted.

Over the next few months, UT Extension will be developing a Watershed Restoration Plan for state and federal officials. This plan will include recommendations and goals to enhance Pond Creek water quality. Everyone who has an interest in the watershed is invited to participate in the planning process.

The next community meeting will be Friday, May 19, 10:30am at the Dinner Bell, I-75 exit 62.

Three objectives in watershed management:

Restoration

Protection

Enhancement

Restoration Activities Provide:

- Cleaner drinking water
- Healthy pastures and forests
- Protected streambanks
- Improved grazing efficiency
- Reduced fertilizer and herbicide costs
- Sense of community accomplishment

UT Extension Updates

UT welcomes Jonathan Hagen as a new extension associate based in Knoxville. He comes to this post with a background in forestry and will assist in the development and the outreach activities involved with a Pond Creek Watershed Restoration Plan.

"I have always respected the services provided by UT Extension, and I am thrilled to contribute to the initiatives already coordinated. I believe that it is the ideas and efforts of individuals who live in the watershed that will make this plan successful."





Success Stories

With support from both the TVA and a federal 319-grant, several Best Management Practices were installed on six farms in the watershed in 2005. The projects provided:

- 1705' pipe installed
- 1750' fencing installed
- Free Soil tests

- 8 loads of gravel
- Fescue and orchardgrass seed
- Spring herbicide applications

Four dairy operations enrolled in the Environmental Quality Incentive Program (EQIP) sponsored by NRCS. EQIP offers financial and technical help to assist eligible participants install or implement structural and management practices on eligible agricultural land.

More work to be done

Samples of water quality from Pond Creek have noted high bacteria levels in the water. Possible sources include overgrazed pastures, animal feeding operations and biosolids, among others. With your help, UT Extension will develop community based watershed management practices that will help reduce runoff, decrease the loss of pasture, reduce soil erosion and improve water quality.

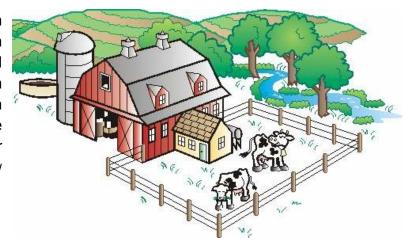
Crop Practice	Tons/Acre/Year
Corn Silage; Conventional Till	12.90
Soybean; No Till Cropland	7.28
Corn / Grain; No Till Cropland	3.81
Mixed Pasture	0.24

Soil Loss from Pond Creek Watershed Croplands

Over the next few months, UT Extension will compose a list of suggested management practices that may be used to significantly lower bacteria levels. Watershed enhancement requires participation from the landowners, so comments and new suggestions are always welcome.

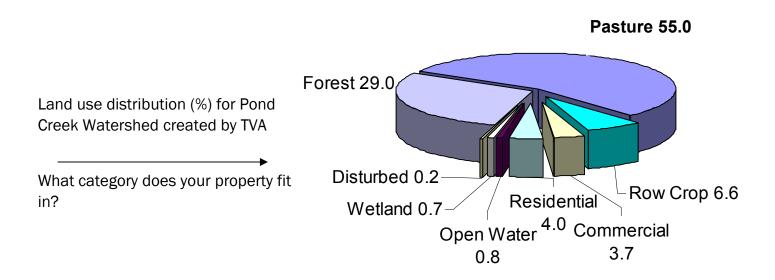
Animal Waste Management

The manures generated by animal production are currently receiving a great deal of attention both nationally and locally. The proper disposal of animal waste inherent in animal production must be done in a manner to protect human health and the environment. Excess manure applications can lead to bacteria, organic matter and nutrients entering surface and shallow ground waters.



Did you know?

Bacteria, nutrients, and oxygen-depleting substances commonly associated with livestock and poultry waste are listed by EPA as three of the top five surface water contaminants.



Five steps to a great pasture

Great pastures provide grazing throughout most of the year, suppress weeds, and are aesthetically pleasing even through the eyes of a neighbor. You almost can guarantee that the grass will be green on your side of the fence by planning and implementing proven techniques known as Best Management Practices (BMPs). These BMPs include:

> Soil Testing, fertilizing and liming Controlling grazing patterns

Over-seeding and renovating bare spots Controlling weeds Establishing and maintaining a sacrifice area

Pond Creek Watershed Restoration Project

UT Extension is committed to restoring and enhancing Pond Creek through education and outreach, to remove this waterway from EPA's 303(d) list of impaired waters.

Mission:

To promote and coordinate efforts between stakeholders and government agencies to maintain and improve the quality of Pond Creek watershed, while protecting landowner rights.

Goals:

- Establish, build and foster relationships with government agencies, private organizations, and most importantly, the landowners.
- Provide a Watershed Restoration Plan that describes the current and projected water quality status of Pond Creek.
- Promote land management practices that improve watershed quality without jeopardizing agriculture production.
- Accelerate watershed restoration and enhancement by increasing public involvement and securing funding for restoration projects.



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