Pursuant to N.C. Gen. Stat. §153A-52.1, the Henderson County welcomes public comment at its meetings. Please note that each speaker is limited to three (3) minutes, unless a different time limit is announced. Also, the Board may adopt rules limiting the number of persons speaking taking the same position on a given issue, and other rules regarding the maintenance of good order.

Each speaker should be aware and by their signatures hereto they agree that their comments may be recorded (by audio-visual recordings, photography or other means), and may be (but are not required to be) broadcast by the County as a part of the broadcast of this meeting, or as a part of the County's programming on its local video channel(s). By their signature they further agree that Henderson County is and will be the sole owner of all rights in and to such programming. The undersigned hereby indemnifies Henderson County, its employees and agents, against any and all claims, damages, liabilities, costs and expenses arising out of the use of the undersigned's images and words in connection therewith.

<table>
<thead>
<tr>
<th></th>
<th>PRINTED NAME</th>
<th>SIGNATURE</th>
<th>Mailing Address</th>
<th>Topic</th>
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<tr>
<td>1.</td>
<td>ALAN HOUSE</td>
<td>Alan J. House</td>
<td>Pardee Hospital</td>
<td>ICE DETENTION BUILDING</td>
</tr>
<tr>
<td>2.</td>
<td>JANICE PARKER</td>
<td>Janice Parker</td>
<td>506 Glover St</td>
<td>Mud Creek</td>
</tr>
<tr>
<td>3.</td>
<td>GLEN ENGELHAM</td>
<td>Glen Engelham</td>
<td>320 Millard Ave</td>
<td>Mud Creek Watershed</td>
</tr>
<tr>
<td>4.</td>
<td>JANE BILELLO</td>
<td>Jane C. Bilello</td>
<td>218 Vincent PL</td>
<td>Mud Creek Watershed</td>
</tr>
</tbody>
</table>
1. Since the Board is being requested to discuss the Mud Creek Watershed Program, we’d like to throw a few thoughts into the pot.

I checked the NC Extension website and saw that The Mud Creek Watershed Council is the work of Land of Sky Regional Council, and had to do with “fulfil[ling] Federal requirements for restoring stream and wetland ecosystems as compensation for similar areas that are impacted by road building by the State”. Their own report states that it “completed its Watershed Restoration Plan in January, 2003.”

Yet the “summary of the proposed work” presented by Ms. Silver admits the project “has shifted from agricultural land use, to urban land use” and now is focusing on “storm water run-off” from individual homes. In other words, the project has already expanded from roadways, to agriculture, to urban, and now to individual home gutter systems. When will this end!! We are aware of the Idaho couple whose land was declared wetland and they had to take their case against the EPA to the Supreme Court in order to build a home on their own land.

Consider that the Federal requirement was completed in 2003; that plenty of steps have been taken since then to improve flooding and erosion; and that there is vast amount of education material now in place. Surely the Board can now say “We’ve done what we are required to do. Enough – no more!”

The 2012 NC GOP Platform states “We believe that a primary role of government is to protect God-given inherent rights”. Because of incremental expansion of this project against property rights, we ask the Board to NOT support submission of any further applications.

2. Ms. Silver’s request states that the grant request will be close to $250,000 for a 2-year grant period but that the “Exact budget is in the works”. First of all, should the Board approve a project where the budget that they will be the fiscal agents of has not been finalized yet?

Further, certain items in the budget amount to legal plunder, the subject of Bastiat’s book that I gave each of you last month and which I hope you have read. “Installing and monitoring engineered rain gardens at 3 sites” and “installing about 15 rain gardens or cisterns at single-family homes” is unjust – who decides which sites, or who the 15 lucky home owners will be? Plundering the many to hand out free goodies to a favored few is a perversion of the law and an abuse of power.

I hope you keep in mind that the only legitimate objective of local planning should be how to provide for equal protection and services that citizens require. Yet NC Extension materials admit that “bio-retention/rain gardens” are a “very new practice with little data to prove effectiveness” and that “Plants must be removed if soil clogs or becomes polluted”.

Because this project is legal plunder, and because it is not providing protection or services, we ask the Board to NOT support submission of the application.
3. Ms. Silver's letter reports that the source of funding for this program is a "grant" from the EPA through the NC DENR (Dept of Environment & Natural Resources). We know nothing is free and that grants always have their strings attached. Accepting funding from EPA allows distant bureaucrats in the federal government a toe-hold to creep in and control our behavior, steer our choices and change the way we live our lives. We oppose this! And so does our 2012 NC GOP Party Platform.

This project supports the VWIN program, which also has EXPANDED from 5 sites to 8 sites to 18 sites in 1992 to 33 sites. In 2008 it also "broadened and shifted its focus" toward "water quality and stream health". Having ECO volunteers report violations and monitor our streams in order to decide which of them "need to be preserved" or "cannot support further development" is a frightening concept! Who will make those decisions? WE are the ones with the true interest in local water quality, and WE are the ones who should decide how, or when, or even IF any "stream health" problems need to be addressed.

The real erosion problem here is the erosion of local control, and we ask that the Board NOT support submission of the application.

REQUEST FOR BOARD ACTION
HENDERSON COUNTY
BOARD OF COMMISSIONERS
MEETING DATE: May 16, 2012

SUBJECT: Mud Creek Watershed Program
PRESENTER: Diane Silver, Mud Creek Watershed Coordinator
ATTACHMENTS: Yes

1. Letter

SUMMARY OF REQUEST:

The Mud Creek Watershed Restoration project is a consortium of local governments, state agencies, non-finals, and business partners working to protect and improve the quality of Mud Creek and its tributaries through voluntary efforts. Since 2003, the Mud Creek Project has been hosted by Henderson County Cooperative Extension, funded through grant funds from the Division of Water Quality. The current grant expires Dec. 31, 2012. Applications for funding for 2013 are due May 24, 2012.

BOARD ACTION REQUESTED:

The Board is requested to discuss the Mud Creek Project in Cooperative Extension, and provide direction to Staff regarding whether or not it wishes to support the application. If the Board does wish to support the application, the grant application would be submitted through the County, and the County would serve as the fiscal agent if the grant is awarded.

Suggested Motion:
   Option 1: I move the Board support and direct Staff to submit the the application.
   Option 2: I move the Board not support submission of the application.
MEMORANDUM
To: County Commissioners, via Amy Brantley, via Ivy Olson
From: Diane Silver
Date: April 10, 2012
Re: Support for continued grant funding for the Mud Creek Watershed Project

The Mud Creek Watershed Restoration project is a consortium of local governments, state agencies, nonprofits, and business partners working to protect and improve the quality of Mud Creek and its tributaries through voluntary efforts.

Since 2003, the Mud Creek Project has been hosted by Henderson County Cooperative Extension, funded through grant funds from the Division of Water Quality. The current grant expires Dec. 31, 2012. Applications for funding for 2013 are due May 24. I am working on pulling together the details for a proposal. This memo is to request confirmation that the Commissioners will continue to support hosting the Mud Creek Project in Cooperative extension by submitting the grant application through the County and serving as the fiscal agent if the grant is awarded.

Details:
Grant Source: Federal EPA 319 program. Funds are awarded to the state (DENR, Division of Water Quality), and then allocated to projects by DWQ.

Summary of proposed work:
The Mud Creek project is shifting focus from the agricultural land use of Clear Creek to the urban land use of Brittain Creek, to begin addressing the impacts of urban stormwater run-off. Primary deliverables will be installation of voluntary stormwater management practices in the Brittain Creek sub-basin, to stem the massive volume of run-off that is causing erosion and sedimentation of Brittain Creek, and subsequently contributing to sedimentation of Mud Creek.

3 projects will be proposed in collaboration with specialists from NC-State. These involve installation and monitoring of bio-retention areas (engineered raingardens) at community sites: two at Opportunity House on US 25, and one at Calvary Baptist Church on Rte 191. Both have big parking lots that contribute significant stormwater to Brittain Creek, both are highly visible and have lots of community traffic and therefore would be great sites for educational outreach, and both are eager to participate. A fourth site may be proposed at The Oaks development off Rte. 191. This would be a small bioretention area adjacent to the creek, where a stormwater outflow is located.

We also plan to propose installation of ~15 backyard stormwater practices (raingarden or cisterns) at single-family homes through the CCAP program, administered by Soil and Water, and to conduct a “downspout disconnect” campaign in the relevant neighborhoods. In addition, the grant would support continuation of the education programs currently underway through the Mud Creek project, namely:
- the Kids-in-the-Creek program for 8th graders
- the Master Stream Steward class, aimed at volunteers who are interested in water quality (similar to the Master Gardener classes)
- constituent service (responding to requests for assistance related to stream problems)
- all the miscellaneous work I do as an Extension agent.

The grant would also support continued monthly monitoring of 14 stream sites in the Mud Creek watershed through the VWIN program. The county has supported VWIN for many years.

The total grant request will be close to, and definitely not exceed, $250,000 for a 2-year grant period. Exact budget is in the works.

Please respond as to whether the County will support submission of this grant proposal.

Thank you.
Diane Silver
Contact ECO
Phone (828) 692-0385 . Fax (828) 693-0942 . 121 Third Avenue West, Suite 4 . Hendersonville, NC 28792

Volunteer with ECO!
Volunteers are the lifeblood of our organization. Join us to help protect water quality, promote better environmental policies, educate on green energy and sustainability and advocate recycling. Read about all volunteer opportunities here. Contact ECO NOW to volunteer!

LEARN MORE ABOUT our four mission area committees:
- Energy
- Green Infrastructure
- Recycling
- Water Quality

ECO Voice
Read Spring 25th Anniversary issue of ECO's quarterly newsletter

Membership & Supporting ECO
Join now or renew your membership to help protect WNC's natural heritage

VWIN – Volunteer Water Information Network
Long range water quality data is essential to the protection of our water resources. The Volunteer Water Information Network (VWIN) is a cooperative effort among several organizations in Western North Carolina to monitor chemical properties of streams throughout the region. ECO began monitoring 18 sites in 1992 and has since expanded to 33 sites in Henderson County.

Volunteers collect water samples from each site monthly. The samples are sent to an independent lab to be evaluated for eleven chemical parameters: pH, conductivity, alkalinity, turbidity, total suspended solids, copper, zinc, lead, orthophosphate, ammonia nitrogen and nitrate nitrogen. This provides a valuable database of water quality information to monitor trends and the effects of changing land use on our waterways. VWIN data is analyzed to create an annual report on the water quality for Henderson County. The VWIN program has created an objective dataset covering nearly two decades, allowing ECO to identify streams facing degradation and obtain financial and political resources to protect streams in Henderson County.

Through the VWIN program ECO has identified waterways of pristine quality and detected highly degraded streams in Henderson County.

VWIN Success Stories
Mud Creek Watershed Restoration Project

Causes of Degradation

What did we learn from the Mud Creek studies?

The Mud Creek Watershed Council completed its Watershed Restoration Plan in January, 2003. It reveals that many streams in the Mud Creek watershed are rated below average or poor. The problems are the result of the cumulative effects of many causes throughout the landscape:

Erosion and Sedimentation:

Sediment is the number one pollutant in our region's streams. Plain old dirt that runs off from the land clouds the water, blocking light and preventing the growth of aquatic plants. It also piles up in streambeds, burying rocks and gravel and filling in pools. This degrades aquatic habitat.

Rocky areas are an important part of stream habitat. They cause the water to form riffles, which gather oxygen from the air. When sediment buries the rocks, it smooths out the flow of the water so that it gathers less oxygen. Additionally, aquatic insects cling to the rocks and live there, and these insects provide food for fish. Burying the rocks eliminates the physical living space for these organisms.

Sediment also fills in deep pools, which are another critical element of stream habitat. Deep pools tend to be colder than shallow water, and many kinds of fish, especially trout, require cold water to survive. Filling in the pools destroys the cold-water hiding places for these fish, and leads to overall increases in water temperature. Just a few degrees can mean the difference between survival and death for some fish species.

Sediment also smothers insect larvae, mussels, and fish eggs, and destroys the spawning areas of fish and shellfish. In severe cases, it can even kill fish.

In addition to its effect on aquatic plants and animals, sediment fills lakes and ponds, obstructs waterways, and clogs storm sewers, ditches, and water supply intakes. The cost to remove sediment is enormous.
<table>
<thead>
<tr>
<th>Practice</th>
<th>Advantages</th>
<th>Disadvantages</th>
<th>Pollutant Removal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet Ponds</td>
<td>Traditional. Can double as recreational facility.</td>
<td>Relatively land-intensive. Safety issues.</td>
<td>Suspended particles (TSS)—very high (70%) Nitrate-Nitrogen moderate (20%)</td>
</tr>
<tr>
<td>Stormwater Wetlands</td>
<td>Highest pollutant removal option. Good educational site.</td>
<td>Most land-intensive. Public opinion can be negative.</td>
<td>Suspended particles (TSS)—very high (80%) Nitrate-N high (40-45%)</td>
</tr>
<tr>
<td>Infiltration Trenches/Wells</td>
<td>Relatively low design and construction cost. Introduces surface water to ground water.</td>
<td>Limited application (sandy soils). High potential for clogging.</td>
<td>Limited data suggests that removal of suspended particles is initially high—but this causes infiltration practices to fail. Very little Nitrate-N is removed by this practice.</td>
</tr>
<tr>
<td>Sand Filters</td>
<td>Can fit in high land-cost situations. Removes pollutants found in parking areas.</td>
<td>Most expensive per square foot of device. Maintenance can be cumbersome.</td>
<td>Suspended particles (TSS)—very high (75-80%), but operators must maintain to keep high efficiency. Nitrate-N leaker (negative removal). High metal removal.</td>
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<tr>
<td>Bio-Retention/Rain Gardens</td>
<td>Aesthetically pleasing. Can double to meet landscape and water quality objectives.</td>
<td>Very new practice with little data to prove effectiveness. Plants must be removed if soil clogs or becomes polluted.</td>
<td>Suspended particles (TSS)—initially high but will result in clogging. Total nitrogen appears high, but Nitrate-N may be negative.</td>
</tr>
<tr>
<td>Level Spreaders/Riparian Buffers</td>
<td>Construction cost very low. Effective pollutant removal. Aesthetically pleasing.</td>
<td>Land-intensive. Effectiveness of level spreader relatively untested.</td>
<td>Note: data from agricultural research Suspended particles (TSS)—very high (80%) Nitrate-N—moderate (20%)</td>
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<tr>
<td>“Reinforced” Grassy Swales</td>
<td>Can carry higher flow than traditional grassy swales. More aesthetic and cheaper to construct than riprap alternative.</td>
<td>Construction and maintenance costs higher than for traditional grassy swales. Relatively new device with limited long-term testing.</td>
<td>Highly variable removal efficiencies. Suspended particles (TSS)—moderate (median of 40%) Nitrate-N—low (10-15%)</td>
</tr>
</tbody>
</table>
Mud Creek Watershed Restoration Project

Some Steps in the Right Direction

History of the Mud Creek Project

To address water quality problems and develop a restoration and management strategy for the Mud Creek Watershed, several groups with projects in the watershed decided to combine their efforts. The Land-of-Sky Regional Council worked with local stakeholders and the North Carolina Division of Water Quality (NC DWQ) to form the Mud Creek Watershed Restoration Council. A major focus of the Council's work has been to develop a watershed restoration and management strategy – a detailed plan with specific recommendations for restoring the health of Mud Creek and its tributaries.

The first step toward restoring a stream is to identify the source(s) of degradation. Once we figure out what is causing the problems, we can start working on solutions. The first stage of the Mud Creek Watershed Project was to conduct in-depth studies of the problems in the watershed to identify their causes through the best scientific methods available.

Mud Creek Watershed Studies:

The NC DWQ: As part of a statewide Watershed Assessment and Restoration Program (WARP), the Division of Water Quality conducted two years of intensive monitoring of physical, chemical, and biological conditions of streams in the Mud Creek watershed. This project identified many causes and sources of stream impairment.

The North Carolina Ecosystem Enhancement Program (NC EEP): The EEP is part of the State government whose job is to fulfill federal requirements for restoring stream and wetland ecosystems as compensation for similar areas that are impacted by road building by the State Department of Transportation. In order for a stretch of stream to be a candidate for restoration work by the EEP, it must meet certain criteria. EEP is a key partner on the Mud Creek Watershed Council by evaluating stretches of stream to help identify areas for restoration through EEP funding and project implementation.

Tennessee Valley Authority: Assisted the EEP in evaluating stream sites by conducting a comprehensive watershed assessment, collecting additional stream and watershed data, including aerial photography and mapping.

University of North Carolina-Asheville, Volunteer Water Information Network (VWIN): monitors many stream sites in Western North Carolina for a wide range of water quality parameters. VWIN has monitored five sites within the Mud Creek watershed every month for over ten years, and another three sites for over four years. VWIN rates stream sites as excellent, good, average, below average, or poor.

To view reports from these studies and the Council's summary report, click here for links.
Budget Preparation Framework

I. Property tax remains at the FY12 rate of $.5136

II. Sales tax projections remain at FY12 levels

III. Expenditures were capped at the FY12 Adopted level of $105,047,232

IV. Fund Balance Appropriated was capped at the 4 Year Plan level of $3,359,749
Included in the Proposed Budget...

I. No property tax increase
II. $385 reduction in overall general fund budget
III. Full funding of County's Debt Service obligation of $14,542,173
IV. 2% Cost of Living Adjustment for all County employees (first since FY 08-09)
V. $1,073,884 – Available funding for Henderson County Public Schools Current Expense, or as the Board of Commissioners directs
VI. $36,818 - Available funding for Blue Ridge Community College Operating Expense, or as the Board of Commissioners directs

FY12-13 Proposed Budget

$105,046,847
Historical Budget Information
FY 11-12 Adopted to FY 12-13

FY 2011-2012 Adopted Budget  $ 105,047,232
FY 2012-2013 Proposed Budget  $ 105,046,847
Difference  $ 385

Debt Obligation as of July 1, 2012

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<tr>
<th>County Government</th>
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<tr>
<td>Henderson County Public Schools</td>
<td>$ 68,866,002</td>
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<tr>
<td>Blue Ridge Community College</td>
<td>$ 13,160,825</td>
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<tr>
<td>TOTAL</td>
<td>$ 111,114,090</td>
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To strategically utilize fund balance for the remainder of the 4 year plan...

- Total available fund balance over 12% as of July 1, 2011 less Sierra Nevada Incentive = $12,547,295

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<th>FY 2015</th>
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<td>Fund Balance</td>
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<td>$3,349,772</td>
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<td>Fund Balance Remaining</td>
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<td>$5,229,625</td>
<td>$1,879,853</td>
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