

## UNRBA Board of Directors March 24, 2004 Meeting Summary

Prepared March 26, 2004

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*Our mission: To preserve and protect the water quality in the Upper Neuse River Basin through innovative, cost effective and environmentally sound strategies and to create a coalition of local governments and stakeholders in a water resources partnership.*

### Introductions and Meeting Objectives

The Board of Directors of the Upper Neuse River Basin Association (UNRBA) met at 1:00 P.M. on Wednesday, March 24, 2004 in the Triangle J Council of Governments conference room. Becky Heron, Chair, began the meeting by asking Board members and others to introduce themselves. Chris Dreps presented the meeting objectives:

- UNRBA Budget;
- UNRBA Projects Update;
  - Progress on Watershed Evaluation Tool;
  - Progress on Site Evaluation tool;
  - Watershed Plan Implementation; and
  - UNRBA TAC Chair position.
- Duke Public Policy Study: Water Quality Protection in the Flat River.

Meeting attendees are listed below.

Name	Organization	E-mail address or phone
Becky Heron	Durham County	beckymheron@nc.rr.com
Kent Ray	City of Creedmoor	Kray@cityofcreedmoor.org
Cora Cole-McFadden	Durham City	<a href="mailto:Cocomac27@cs.com">Cocomac27@cs.com</a>
Jimmy Clayton	Person Count	<a href="mailto:jimmyb31@Juno.com">jimmyb31@Juno.com</a>
Matthew Winslow	Franklin County	<a href="mailto:Mwinslow@co.franklin.nc.us">Mwinslow@co.franklin.nc.us</a>
Tom Davidson	Soil & Water Conservation Dist.	<a href="mailto:Tcdavidson@nc.rr.com">Tcdavidson@nc.rr.com</a>
Ronald Alligood	Granville County	Grancomrs@granvillecounty.org
Janet Cowell	Raleigh	<a href="mailto:Jrcowell@mindspring.com">Jrcowell@mindspring.com</a>
Jack Day	Town of Stem	<a href="mailto:Jackieday@aol.com">Jackieday@aol.com</a>
Vivian Jones	Wake Forest	<a href="mailto:Joyce.wilson@ci.wake-forest.nc.us">Joyce.wilson@ci.wake-forest.nc.us</a>
Rick Rowe	Wake County	<a href="mailto:rrowe@co.wake.nc.us">rrowe@co.wake.nc.us</a>
Mike Coughlin	Wake County	<a href="mailto:jcoughlin@co.wake.nc.us">jcoughlin@co.wake.nc.us</a>
Dale Crisp	City of Raleigh	<a href="mailto:dale.crisp@ci.raleigh.nc.us">dale.crisp@ci.raleigh.nc.us</a>
Kevin Lindley	Orange County	<a href="mailto:klindley@co.orange.nc.us">klindley@co.orange.nc.us</a>
Steve Carpenter	Person County	<a href="mailto:Scarpenter@personcounty.net">Scarpenter@personcounty.net</a>
Nancy Newell	City of Durham	<a href="mailto:Nnewell@ci.durham.nc.us">Nnewell@ci.durham.nc.us</a>
Terry Rolan	City of Durham	<a href="mailto:trolan@ci.durham.nc.us">trolan@ci.durham.nc.us</a>
Heekyu Sohn	Duke University	<a href="mailto:Heekyu.Sohn@duke.edu">Heekyu.Sohn@duke.edu</a>
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Eben Polk	Duke University	<a href="mailto:Eben.Polk@duke.edu">Eben.Polk@duke.edu</a>
Marissa Archibald	Duke University	<a href="mailto:Marissa.Archibald@duke.edu">Marissa.Archibald@duke.edu</a>
Chris Dreps	UNRBA	<a href="mailto:dreps@tjcoq.org">dreps@tjcoq.org</a>

## **UNRBA Projects Update**

### **Budget**

Chris Dreps presented the draft proposed budget and dues for fiscal year 2005, attached as Appendix 1 at the end of these meeting notes.

The Board held a discussion of the dues scenarios. Chris provided options (shown in Appendix 1). The first option is to keep dues steady, considering that the dues were raised last year and that local governments are experiencing tough fiscal times.

Ron Alligood (UNRBA Vice Chair, Granville County) – Felt that dues should be held at \$86,242.

Becky Heron (UNRBA Chair, Durham County) – Agreed that the dues should be held to \$86,242.

Chris Dreps mentioned that Kenn Gardner (UNRBA Treasurer, Wake County), although not present today, has seen the budget and feels that dues should be held to \$86,242.

Vivian Jones (Wake Forest) – Thinks asking UNRBA to make up \$9,400 (money that would be lost if Person County discontinues support) is unacceptable and that local governments should hold themselves to their commitment to support the UNRBA.

Kent Ray (Creedmoor) – Agrees with Mayor Jones. Added that water is one of the most important issues facing the local governments and that we should continue supporting cooperative efforts.

Janet Cowell (Raleigh) – Added that this board should consider the long-term impacts of losing Person County as a partner in this Association. The loss of Person County could start downward spiral. Suggested that board members write individual letters.

Becky Heron – agreed that Board members should send letters to Person County. Asked Chris to provide contact information of Person County Commissioners to the UNRBA Board.

Janet Cowell – Motion to approve \$86,000 dues and send letters to Person County urging the to stay involved.

Chris Dreps – Agreed to send names & addresses of Person County Commissioners to the UNRBA Board members.

Cora Cole-McFadden (Durham City) – Should she and others visit Person County?

Jimmy Clayton (Person County) - Feels that visiting the Board might not be a good idea, but he agreed that letters would be a good idea. Mr. Clayton reminded the UNRBA that the Person County BOCC has not decided on the recommendation from the Person County Planning Board (withdrawal from the UNRBA).

Janet Cowell – this is simply a recommendation from planning board.

Chris Dreps - The Person County BOCC will decide by June, so now is the time to send letters to them requesting their continued support for the UNRBA.

**Motion to approve the budget of \$86,242 and make up any potential shortfalls with revenues from UNRBA projects passed unanimously. The UNRBA Board will revisit the budget issue at the next meeting. Once we know the decision from Person County, we will be better able to decide what the appropriate step is.**

### **Progress on Watershed Evaluation Tool (WET)**

Chris updated the Board on the progress of the WET project. This national pilot project will be a GIS based tool to be used by local governments, UNRBA, and resource agencies. The WET will automate many important watershed analyses using the USGS National Hydrography Dataset for the Upper Neuse ("smart streams"). Applications include planning to support development of "total maximum daily loads" for impaired streams, federal stormwater (phase II) planning, local watershed planning (e.g., NC Ecosystem Enhancement Program), and evaluation of catchment areas for monitoring and restoration potential.

The USGS and NC Ecosystem Enhancement Program have funded this project with \$150,000.

The WET Task Group met in December and identified desired tool functions and data needs. Since that meeting, the WET Task Group has ranked the tasks and USGS has created the digital elevation model that will be used in the WET. The next steps are to begin working on a water quality-monitoring plan for the Upper Neuse, to finish the digital elevation model, and to compile more layers.

The draft WET will be done in July, and this tool should be of great value for the local governments in the Upper Neuse. To learn more about the tool, see the "Projects and Activities" page of the UNRBA website ([www.unrba.org](http://www.unrba.org))

### **Progress on Site Evaluation Tool (SET)**

Chris Dreps provided an update of the SET (for more details on the SET, notes from 3-12-03 TAC meeting and the "Projects and Activities" page on [www.unrba.org](http://www.unrba.org)). The SET is a pre-design evaluation and screening tool that helps a site developer to consider site BMP configurations, effectiveness, and costs early in the process. The SET can facilitate stormwater "low-impact development" and retrofits. However, the SET is not a tool that will determine stormwater design for the site designer.

The UNRBA won two grants from NC Department of Environment and Natural Resources Division of Water Quality to assist with the development of the SET. These grants are (1) a \$40,000 grant from the State Nonpoint Source Grant Program (319 Program) and (2) a \$9,900 grant from the State 205(j) grant program.

Chris described the three tasks that the SET Task Group has begun working on.

- Task 1, Best Management Practice Menu and Removal Efficiency Assumptions
- Task 2, Determining whether the SET will utilize a hydrology target or will simply use the hydrology output of the tool as an educational tool
- Task 3, Matching the SET and Upper Neuse Plan modeling assumptions

### **Watershed Plan Implementation**

Chris Dreps presented an update of progress implementing the recommendations of the Upper Neuse Watershed Management Plan. Chris has begun working with several "local government implementation teams" from the UNRBA member Governments to define the objectives and set the tasks for implementation. Chris handed the group a description of the implementation process, the implementation teams, and a spreadsheet of the progress to date.

### **UNRBA TAC Chair position**

Chris informed the Board that Perry Sugg, the former UNRBA TAC Chair, has left Orange County to work for the NC Ecosystem Enhancement Program. The UNRBA needs to find another local government staff member to serve as TAC Chair. The major responsibilities include working with Chris Dreps to guide technical decisions, running TAC meetings, and presenting TAC decisions to the UNRBA Board of Directors.

### **Duke Public Policy Study**

Students from the Terry Sanford School of Public Policy have begun working on a policy study of water quality protection in the Lake Michie Watershed. The students are looking into the following policy question; "What can Durham County, Durham City, Person County, and Orange County do to protect water quality in the Lake Michie (Flat River) watershed in a manner that is fair to communities in the watershed?"

The students presented the policy question, their research approach, the policy problem, policy criteria for addressing the problem, basic strategies, and their preliminary conclusions. Chris Dreps pointed out that the basic questions and findings of the Lake Michie study could broadly apply to many watersheds in the Upper Neuse.

For details, see the handout in Appendix 2 to this meeting summary.

After the presentation, the following discussion occurred.

Chris Dreps asked about whether the group will conduct any cost-benefit analysis. The group responded that benefits not considered in a detailed way and that they will conduct a rough c-b analysis on preferred approaches.

Dale Crisp commented on growth in the watershed. If the population equivalent to another Durham moves into the watershed, we should see this as an opportunity for revenue to support watershed protection efforts.

Terry Rollin asked if the predictions consider the water supply watershed protection rules in place in Lake Michie's watershed. Chris Dreps responded that buildout scenarios in the Upper Neuse WSMP are based on WSWS protection and zoning ordinances. Basically, the Upper Neuse plan predicts that, if buildout occurs, the current WSWS ordinances will not protect Lake Michie enough to meet the desired targets for nutrients and chlorophyll *a*.

Steve Carpenter stated that development at buildout would require water & sewer, & this isn't happening.

Becky Heron asked if they are considering the policy of Transfer of Development Rights. Drew Cummings replied that although TDR is not technically legal, High Point and Guilford County have taken a similar, yet legally defensible "development density banking" approach.

Janet Cowell commented on the criteria presented, saying that they should include "equity" and technologically feasible & politically acceptable. She is willing to talk further with the students about these points.

The students mentioned that they had interviewed several local government staff, elected officials, and board members. They are almost finished with this phase of the project.

Chris Dreps--Since zoning & density, land protection, impervious surfaces caps are easier to oversee, could the group consider local funding options for supporting this type of "indirect" approach. The group responded that a danger in funding "indirect" approaches such as impervious surface limits, density caps, best management practices, and land protection is that local governments may become caught up in funding activities rather than funding water quality protection. If this occurs, there is a tendency to overlook water quality and focus on the number of activities funded.

Kent Ray mentioned that Creedmoor has created development feed to acquire lands critical to the watershed, including wetlands.

The project will finish in April, and the students will provide their results to Chris Dreps. Chris will present these at the next UNRBA board meeting.

### **Next Steps**

The next meeting of the UNRBA Board is scheduled for Wednesday, May 19 from 9:30 to 11:30 a.m. in the TJCOG offices.

## Appendices

### Appendix 1, Draft Proposed UNRBA Budget for FY 2005

#### BASE EXPENSES

	<b>FY 2005</b>	<b>FY 2004</b>
Salary (80% FTE)	\$37,818	\$36,363
+ Fringe	+ \$11,723	+ \$10,909
Water Resources Mgr.	\$ 5,729	\$ 3,407
Information Systems Mgr.	\$ 700	\$ 3,963
Information Systems	\$ 4,387	\$ 0
Indirect Cost	\$29,725	\$30,599
Education & training	\$ 500	\$ 0
Travel (workshops, local govt. meetings)	\$ 1,000	\$ 1,000
<b>Subtotal Base Expenses</b>	<b>\$90,582</b>	<b>\$86,242</b>

#### WATERSHED MANAGEMENT PLAN IMPLEMENTATION EXPENSES

Travel	\$ 525
Web support	\$ 4,387
Presentation materials	\$ 1,480
Subcontracts for research, implementation planning	\$36,408
Intern	\$ 7,200
<b>Subtotal Implementation Plan Expenses</b>	<b>\$50,000</b>

#### SITE EVALUATION TOOL PROJECT

Salary, Fringe, & Indirect	\$ 7,788
Travel	\$ 720
Supplies	\$ 1,000
Subcontractual (from state appropriation)	\$24,616
Subcontractual (from grants)	\$40,140
<b>Subtotal SET Expenses</b>	<b>\$74,264</b>
<b>Total UNRBA Expenses</b>	<b>\$214,846</b>

#### UNRBA REVENUE

Member government dues	\$86,242*	\$86,242
Site Evaluation Tool Grants	\$49,650	\$0
Remaining state appropriation (for Implementation)	\$92,781	\$84,792
<b>Total Revenue</b>	<b>\$228,673</b>	<b>\$171,034</b>

#### OTHER PROJECTS NOT IN BUDGET BENEFITING MEMBER GOVTS.

##### WATERSHED EVALUATION TOOL PROJECT (USGS and NC Ecosystem Enhancement Program)

	<b>FY 2005</b>
Value of USGS effort	\$ 75,000
NC EEP Match	\$ 75,000
<b>Subtotal WET Expenses</b>	<b>\$150,000</b>

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\* This figure represents the FY 2003-04 member government dues. FY 2004-05 member dues options are discussed on the back of this handout.

Options for setting dues

The purpose of UNRBA member dues is to maintain the base operating expenses of the Association. Base expenses have risen slightly in each of the Association's 6 years of operation, and member governments have only raised dues once (FY 2003-2004). If UNRBA costs increase by 5% each year, FY 2008-2009 base expenses will be \$110,103. This assumes that the UNRBA Coordinator (Executive Director) position continues at 80% FTE.

In addition, Person County's Planning Board has recommended that the BOCC vote to withdraw from the UNRBA. Person County's current dues are \$9,483 (11% of total UNRBA dues).

This year, the UNRBA proposes several options for member dues. These are listed below.

1. Maintain dues at current levels and all members continue paying dues. Do not create a mechanism for dealing with future rising expenses and uncertainty. Offset shortfall in base expenses with revenue from other projects (Site Evaluation Tool and Detailed Implementation Plan).
2. Maintain dues at current level, Person County withdraws, and UNRBA attempts to make up base revenue loss with time spent on other projects.
3. Increase dues of remaining members to make up for loss of Person County membership dues.
4. Increase member dues to meet current expenses (\$90,582) and all members continue paying dues. Do not create a mechanism for dealing with future rising expenses and uncertainty.
5. Increase member dues to meet current expenses (\$90,582). Establish a regular schedule of dues increases of 5% per year to meet base operating expenses.

**Appendix 2, Presentation on Lake Michie Watershed Policy Study**



## Policy Options to Protect Water Quality in the Flat River Watershed

An Analysis of Long-Term Options

Prepared for the Upper Neuse River Basin Association

By: Marissa Archibald, Drew Cummings, Jeff Grimes,  
Eben Polk, Andrea Reese, and Heekyu Sohn

## Policy Question

- How can local governments in the Flat River watershed protect water quality in a manner that is fair to communities in the watershed?

## Research Approach

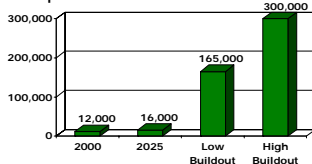
- Interviews
- Case studies

## The Flat River Watershed

- Supplies half of Durham's water
- Contained in five jurisdictions
- 170 square miles
- 12,000 residents

## Growth Projections

- Population



- Changes in Land Use
  - Decreasing forest and agriculture
  - Increasing residential and commercial

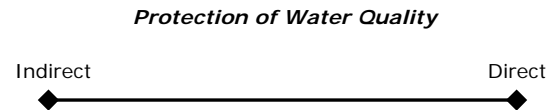
## Policy Problem: Future Degradation

- Current regulations will not prevent degradation of water quality in the Flat River watershed
- Stakeholders may feel it is a long term problem, distant enough to postpone action
- Water users and landowners are not in the same jurisdiction

## Six Criteria

1. Any solution must protect water quality  
*The ideal solution...*
2. Is acceptable to all stakeholders
3. Is perceived as worthwhile and cost effective
4. Is affordable and technically feasible
5. Provides flexibility to adapt to future needs and technologies
6. Improves local governments' capacity to solve future water quality problems

## Policy Spectrum



## Three Basic Strategies

1. Infrastructure
2. Land Use Limits and Practices
3. Pollution Limits and Controls

## Strategy 1: Infrastructure

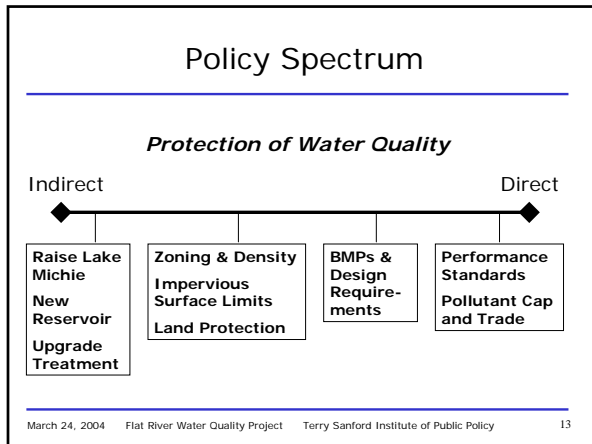
- Option 1: Upgrade Water Treatment
- Option 2: Raise Lake Michie Dam
- Option 3: New Reservoir above Lake Michie

## Strategy 2: Land Use Limits and Practices

- Option 4: Zoning and Density
- Option 5: Impervious Surface Limits
- Option 6: Targeted Land Protection
- Option 7: Best Management Practices (BMPs) and Design Requirements

## Strategy 3: Pollution Limits

- Option 8: Performance Standards
- Option 9: Market for Pollution Permits
  - Set nutrient and pollutant limit
  - Allocate permits
  - Allow buying and selling for flexibility and efficiency



- ## Water Quality Protection Process
- 
- Voluntary Local Action
    - Cooperative
    - Independent
  - Mandated Action
    - State / federal / court
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- ## Cooperative Processes
- 
- Negotiation to Protect Water Quality
    - Primary stakeholders - Person County, City of Durham, and Durham County
    - Third-party mediation
  - Compensation and Incentive Structures
  - Voluntary vs. Mandated Cooperation
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- ## Preliminary Conclusions
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- Design requirements and best management practices are an immediately feasible approach to water quality protection
  - Land acquisition and easements are feasible if funding can be located
  - Pollutant trading programs are direct, flexible, and increasingly feasible, and deserve further study
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- ## Next Steps
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- Continue interviews and soliciting expert opinion of options
  - Continue case studies
  - Continue to evaluate options
  - Consider *interim* and *long-term* feasibility of options
  - Final report to be submitted May 1, 2004
- YOUR FEEDBACK**
- March 24, 2004 Flat River Water Quality Project Terry Sanford Institute of Public Policy 17

- ## Contact Information
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## Questions?

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## Interviews to Date

- Tom Altieri, Orange County Planning Office
- Kimberley Brewer, TetraTech
- Scott Carpenter, Deputy Head of State Division of Water Quality
- Steve Carpenter, Person County Manager
- Bob Healy, Duke Professor
- Becky Heron, Durham County Commissioner
- Keith Luck, City of Durham Planner
- Sydney Miller, TJCOG Water Resources Program Manager
- Paula Murphy, Person County Planning Director
- Clarence Pointer, real estate agent in Person County
- Terry Rolan, Director of Environmental Services for the City of Durham
- Ernie Wood, Person County Planning Board