

Upper Rocky River/Clarke Creek Local Watershed Planning Group

Next Meeting:
Thursday, June 19
at the Davidson
Town Hall
2:00-4:00

Meeting Objectives

CDM will provide management recommendations for specific subwatersheds based on the ranking that was completed.

Group will begin discussion of management strategies for restoration and protection.

Preliminary Subwatershed Ranking Results, Brenan Buckley, CDM

Review of subwatershed ranking protocol

- Identify and measure appropriate watershed parameters
- Define 5 key categories of watershed parameters
- Assign scores for parameters
- Tally the scores for each category to complete the subwatershed ranking

The Five Major Categories include:

- Current Watershed Health
- Current Natural Resource and Habitat Value
- Watershed Regulations and Enforcement
- Future Risk to Watershed Functions
- Potential Restoration/Retrofit Opportunities

Each category is comprised of parameters that represent measured data from the data collection phase. Each parameter is assigned a score on a scale of 1 to 5 indicating its potential impact.

The scores assigned for each parameter may be based on:

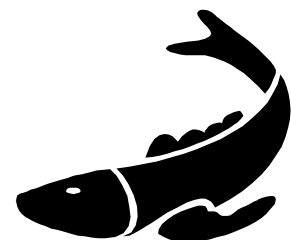
- Accepted threshold values that elicit certain watershed effects

This summary includes:

- Preliminary Subwatershed Ranking Results, Brenan Buckley, CDM
- Overview of best management practices that may be recommended for watershed management plan

WECO is: Christy Perrin
Patrick Beggs
Jason Jolley
Leon Danielson
Kim McClain

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- Relations to state standards (meets/exceeds)
- Planning Group Consensus (fishable/swimmable, level of acceptable risk, etc.)
- Number of preservation/restoration opportunities

Results of the Subwatershed Ranking Protocol will be used to help develop a management plan for the watershed that:

- Focuses on the areas that are most at risk now and in the future
- Allows for the application of local and state resources
- Identifies appropriate best management practices useful to combat continued degradation
- Provides a framework for continued watershed partnership

Brenan shared with the group maps of the subwatersheds scored for each of the 5 categories. The subwatersheds were shaded according to their resulting scores- subwatersheds with higher scores were shaded darker. Brenan's presentation with the maps will be posted at the WECO website at:

www.ces.ncsu.edu/WECO

Meeting participants were asked to consider the following questions:

- What questions do you have about the methodology used and the meaning of the results?
- How accurately do these results reflect what is happening in the watershed?

The Group had the following questions and suggestions for Brenan.

Q: What does a higher score reflect? Scoring reflects the health of the watershed, except for in the "potential resotration/retrofit opportunities", which shows where opportunities may exist. Darker shading means poorer watershed health. The purpose of the scoring is to show relative watershed health. It summarizes general trends, and provides information about where it may be a good idea

to focus resources.

If there are suggestions about how to better represent the data, CDM can do so.

Category: Watershed Regulations & Enforcement

Q: Help to understand why Cabarrus County scored low on watershed regs, when it doesn't permit floodplain development, encourages development in clusters, and requires buffers (on perennial waters)? How can the county improve?

A: This was a challenging category to measure, and this slide may be the most controversial.

A discussion entailed about how one can know what the ideal regulations are, particularly concerning riparian buffers.

Q: Have you looked at Huntersville's new Low Impact Development (LID) ordinance?

A: Yes, one positive aspect is that they require treating the 1 inch storm.

Huntersville has not seen many permits since their regulations passed.

C: If you suggest strategies that don't cost much, and are easy to implement, they will have greater appeal.

Category: Future Risk to watershed functions

Comment: Davidson is making future plans which will intensify development in some areas. While this map is based on current zoning, zoning could change.

C: Reducing densities (through low density zoning) may spread development out and create sprawl.

Category: Current Natural Resources and Habitat Value

Q: Is the Central Carolina land trust land not included?

A: Much of it isn't, because we didn't have acreage, only number of sites. Sometimes land trusts need to keep lands under negotiation

confidential. Andy Abrahamson is the contact for that Central Carolina lands trust- we will check with him.

C: Would rather see us target the areas that are currently bad and are probably going to get worse, instead of targeting easily accessible places that are likely to be done anyway.

Better to save good sites now, than in 5 years, because the good sites will be better right now than in 5 years, also the bad sites (bad from a preservation standpoint) might be more and more expensive if it is developable.

Hal mentioned that NCWRP gets a lot more credit for restoration than preservation. In the short run, we get more credit for restoration, but in his opinion it may be better to get more for preservation.

Q: Does this methodology provide more credit for headwaters in scoring?

A: Not on the map, but when sites are evaluated for restoration, yes.

One focus of NCWRP is to focus on headwater reaches (first and second order streams).

From Brenan: Past land uses such as agricultural practices, led to current watershed state. Silting from past agricultural practices are causing problems. First, second, and third order streams need attention due to these agricultural uses.

C: Existence of current preservation helps link to new opportunities.

C: Wetlands data from the 80's was used- not necessarily accurate

C: A contiguous buffer of 200-300 ft. could indicate preservation potential.

Category: Potential Restoration/Retrofit Opportunities

Comment: Some of this is based on public land ownership, and could be based on number of

parcel owners.

General questions:

Q: Can we get all these maps put together into one map that displays it all? It is hard to visualize all these maps at once. Or at least put the maps on one page/screen so it is easier to compare them.

A: Yes, we can do this, in some way. If we combine the scores, we will lose the nuances. Also, everything might end up averaging everything out and the whole watershed is "grey". We'll see what we can do.

Hal mentioned that NCWRP is considering looking at "debits" and "credits" for providing an overall score in a subwatershed.

Comment: Suggest when you present this information to individual local governments, just show information for that jurisdiction, rather than comparing them to other jurisdictions.

May Meeting Participants

William Allison, Iredell Planning
Jim, Borawa, NCWRC
Hal Bryson, NCWRP
Chris Challis, Kennedy Covington
Mark Fowlkes, NCWRC
Dave Grant, DLC, Davidson College
Lindsey Hobbs, Town of Davidson
Jeff Hieronymus, Charlotte Stormwater Svcs.
David Kroening, Mecklenburg WQ Program
Roger Lentz, Cabarrus County
Darrin Peine, Charlotte Stormwater Svcs.
Dennis Testerman, Cabarrus SWCD
Tom Yocum, NCDENR-DWQ

Overview of Watershed Best Management Practices

Brenan provided an overview of best management practices (BMPs) that may be suggested for various subwatersheds based on results of the subwatershed ranking.

BMP definition: anything to encourage better stewardship in the watershed, be it a physical construction, restoration, education, etc.

He also showed how the suggested BMPs address the group's goals for the watershed. This is also available in his presentation on the WECO website.

Suggested BMP;

Aquatic Buffers

Development Controls

- Comprehensive Land Use Planning
- Zoning Enforcement
- Low Impact Development
- Redevelopment, Sprawl Prevention

Floodplain Management

- Maintain floodplain in undeveloped state
- Buffer = floodplain
- Limit infringement
- Re-connect streams to overbank areas

Habitat Preservation

- Wetland Preservation
- Stream Preservation
- Buffer Preservation

Habitat Restoration

- Wetland restoration
- Stream restoration
- Riparian buffer reforestation

Land Conservation

- Conservation easements
- Natural Resource Sites
- Catawba lands Conservancy
- Parks and Greenway Creation?

Monitoring

- Water quality monitoring
- Benthic sampling
- Fecal source tracing
- Flooding complaint database

Non-discharge Management

- Septic System O&M program
- Sanitary sewer systems
- Centralized wastewater treatment plant
- Animal waste management
- Domestic animal waste management

Policy and Planning

- Watershed-specific management strategy
- Development of Land Use, Conservation Plans
- Inter-governmental cooperation
- Focus on priority subwatersheds

Runoff Controls

- Volume controls, stormwater BMPs
- Quality and Quantity management

Stewardship and Education

- Public awareness and advocacy
- Create research and educational sites
- Watershed stakeholders

NEXT STEPS Between Now and August/September 2003 for CDM:

- **Ground-truth the subwatershed rankings**
- **Develop a draft recommended watershed management plan tailored to specific concerns**
- **Provide an example management plan application to the group**
- **Complete the final report**