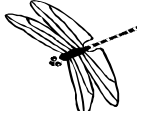


White Oak River Watershed Advisory Board



March 18, 2003 MINUTES

www.ces.ncsu.edu/WECO

For Monday, March 18, 2003 meeting

The next WORAB meeting is scheduled for:

Monday, June 9, 2003

7:00 p.m.- 9:00 p.m.

at the Carteret County building in Cedar Point

Agenda:

- ◆ Pettiford Creek 319 project: subwatershed risk analysis results, planning a community design workshop for locating Best Management Practices
- ◆ Update on BMP publicity at the Arts by the Sea festival
- ◆ Update on USACE study funding

Town of Swansboro Best Management Practices

The raingardens at Town Hall and Ward's Shore have been constructed and planted. Some minor construction was required at the Ward's Shore raingarden deck to bring it into American Disability Act (ADA) compliance. The permeable pavement site next to Century 21 is scheduled for construction in April.

Meeting participants suggested that we publicize the finished BMPs at the Arts by the Sea festival in June. WECO staff will work with the town of Swansboro to see if WORAB can set up a booth, and WORAB advisory Board members may be asked to volunteer some time at the booth. Local media will need to be contacted as well. We will be contacting WORAB members for assistance as needed.

Pettiford Creek Watershed Research

Michael Holmes, NCSU College of Design, provided a description of the work that is being done in Pettiford Creek. The researchers are completing a *risk analysis* of the landscape factors that have risk factors for water quality.

So far, the research team has:

- Collected GIS data sets (parcels, wetlands, soils, hydrology, zoning and land use)
- Linked bacteria "hot spot data" (from monitoring results) with the GIS database
- Linked the watershed survey data with the GIS database
- Developed a classification ranking for the watershed survey categories

The next step is to conduct the risk analysis, and to identify mitigation opportunities. The risk analysis involves providing a ranking to each of the watershed survey items. The volunteers who surveyed Pettiford Creek recorded answers for each of those items. Those items include:

Transport/conveyance

- Impervious Surface
- Vegetation Cover
- Storm Water System
- Storm Water Discharge
- Ditches
- Slope Type

Bacterial Sources

- Pets
- Wildlife
- Septic tanks

An example of how each of these items will be ranked for analysis follows. The item *storm water system* would be ranked the following way. During the survey, volunteers recorded the type of storm water system observed on each property. Each type of storm water system will given a weighting based on its risk to water quality (higher ranking being the greater risk). The different possible storm water systems are ranked as:

- 1-grassy swales
- 2- ditch
- 3- curb and gutter
- 4- storm drains

The other survey items will be provided with similar scorings.

To complete the analysis, the Pettiford Creek watershed is being divided up into smaller drainage (subwatershed) areas. The analysis will compile the information for all the survey items, and provide scores to the sub-basins based on the risk of landscape features to water quality in each subbasin. Each drainage area will receive its own ranking.

The research team will also look at mitigation opportunities in the subbasins as part of their analysis. Mitigation opportunities will depend upon:

- Creek location (parcels near the creek rank higher)
- Buffer width and type (parcels with direct discharge into creek rank higher)
- Ditch depth (parcels where ditches are deep rank higher)

The results

Discussion:

Michael noted that the analysis does not have digital topographical data, including slope data, to run in their model. Bill Norris informed him that this data is available from the state NRCS office (Dan Goode).

During the watershed survey a certain number of pets and wildlife were observed, but researchers know that what was seen does not represent the entire amount. Michael asked the group what wildlife was present in the watershed.

Answers include:

- Raccoons

- Squirrels
- Beavers
- Deer
- Year-round flocks of waterfowl (geese)
- Foxes
- Some alligators

Current research in NC is being conducted to examine ways to quantify how much bacteria is produced by different species. Todd mentioned that an NRCS Technical Guide that provides information on how much waste is produced by various species is available.

A meeting participant asked if monitoring data had been collected from the loop road beyond the bridge over Pettiford. The road flows into the creek, and drains a high concentration of development. It appears to be a high risk area for water quality. Michael will look into this.

The results of the risk analysis will be finished and presented at the May 12 WORAB meeting.

Timeline for EPA 319 Project in Pettiford Creek and Town of Swansboro

The EPA 319 grant project end date is June 2004. The following schedule is proposed between now and then:

April 2003 Permeable pavement construction, Ward's Shore Raingarden Sign made

May 12, 2003 Research results from Pettiford Creek (Risk Analysis of subwatersheds)

Summer 2003 Plan community workshop in Pettiford Creek. Publicize Swansboro BMPs

September 2003 Hold community workshop

October 2003 Results back from community workshop, set strategy for action

Winter and spring 2004 Implement strategy

June 2004 Project Completed

For more information about the White Oak River Watershed Advisory Board, or to be removed from this mailing list, please contact Christy Perrin at 919-515-4542.