

# **Technical Advisory Committee for the Raccoon Creek Partnership**

Meeting Minutes – 9/14/2011

Action Items are Underlined

In Attendance: Amy Mackey (RCP), Sarah Landers (RCP), Kaabe Shaw (ODNR-DMRM), Mike McAvoy (ODNR-DMRM), Natalie Kruse (RCP), Kenner Sims (ODNR), Kristin Kindler (RCP), Kimberly Brewster (RCP), Jen Bowman (OU Voinovich School), Jonathan Gray (Ohio U), and Liz Migliore (Ohio U)

The meeting was called to order at 9:06am. Meeting location: Voinovich School, The Ridges, Bldg 22

## **Agenda Item Number 1: Begin Meeting, Welcome, Introductions**

June minutes were not reviewed/approved because they were lost during Brian Blair's move.

## **Agenda Item Number 2: Introduce New Staff**

ODNR Intern: Kenner Sims

AmeriCorps Members: Kristin Kindler and Kimberly Brewster

Water Quality Specialist: Sarah Landers

## **Agenda Item #3: Diatom Assemblage Response – Jonathan Gray**

Jonathan Gray made a presentation on Algae Diatoms. His presentation was based on his research regarding whether an AMD stream can support transplanted diatoms. The stream used was Hewett Fork. Sites selected included: HF090, HF060, HF039, HF075, HF045. Diatoms were collected from Clear Creek. The methodology used was AMD-DIBI scoring. The sites were scored for species diversity, richness, and evenness.

During week 1 Clear Creek and HF190 were most similar and other sites indicated a decrease in scores. At 6 weeks Clear Creek and HF090 were more similar. Despite indications of recovery, the study still found impairment and the rate of biomass accrual was drastically impeded. HF060 and HF075 had lower iron levels and possible re-precipitation of iron at these sites or iron may serve as proxy to other metals. There was no linear gradient at sites downstream of doser.

Jen Bowman asked where tiles were placed. Jonathan responded that they were placed at riffles. There was discussion about the Hewett Fork sites 075, 060, and 045. It was brought up that the stream gradient flattens at these sites and there is more deposition. Jen also asked about the number of rain events during the study period. Jonathan responded that there were not many rain events during the study period from late June to September 2010. Further research may include metals analysis, or a future study may leave the biofilm tiles longer.

## **Agenda Item #4: AEP Project Updates – Jen Bowman**

In Hewett Fork, Lisa DeRose graduated and another student, Liz picked up working on this project. Jen Bowman and Natalie Kruse have been conducting data analysis on the Hewett Fork data. Jen

announced a number of Ohio University students that will be working on projects related to Raccoon Creek. There are three communications students taking photos and writing photo essays. Darcy will be taking still pictures video style, John will be taking photos at events, and Tyler will do a writing piece. There is a geology undergraduate student that is doing an alkalinity/acidity budget and conducting flow. Sediment samples were collected and sent to Ohio State University for analysis.

- **End conversation regarding new OU students -**

Jen announced some big changes for the watershed database. The website is being upgraded and expanding to encompass the entire coal region in Ohio. Greg Nageotte, Watershed Program Manager with the Ohio Department of Natural Resources, would like it to be offered to the rest of Ohio. However this would need support money and funding to cover administrative costs. AEP covers the costs associated with offering this service to the coal-bearing region. Discussion took place regarding developing content for the rest of Ohio to have the system ready for when the state can pay for the service.

Jen showed the group the new version of the watershed data website. Amy Mackey suggested that Jen add fields to enter landowner name, address, and phone number. Jen continued that the maps are updated in this new version of the website and include HUC 8, 10, 12. The maps include layers containing: public lands, roads, places, watersheds and hydrologic features, aerial photos, and river miles. This new system will be moved to the Ohio University servers at the end of December.

- **End watershed database discussion -**

Natalie Kruse presented two papers about Raccoon Creek recently at a conference in Germany. The papers were met with interest and excitement by conference participants. The papers included one addressing the biological response to the Carbondale Doser going offline in the summer of 2010 and the other was a master's thesis by Kim Brewster. Conference participants were impressed by the quantity of aluminum we have in the Raccoon Creek watershed. There was a full room for the doser project failure case and discussion regarding use of telemetry to determine the fullness of the doser silo; however Natalie noted that it would be too expensive.

### **Agenda Item #5: Watershed Coordinator Updates – Amy Mackey**

- Amy Mackey began that she has been hiring people since June. This includes the ODNR Intern, AmeriCorps members, and Water Quality Specialist. The Raccoon Creek crew recently completed maintenance on the Flint Run SAPs system and flushed valves.
- MAIS is complete for 2011 and 36 sites were completed. Analysis of the macroinvertebrates collected will be conducted this winter by Amy and Kelly Johnson will analyze the Hewett Fork sites.
- Fish sampling is scheduled for 20 sites total. The new electroshocking boat is complete and boats sites will begin as soon as the week of September 19<sup>th</sup>.

- On September 9<sup>th</sup> the Raccoon Creek crew went out to Pierce Run and picked up the flume from the Oreton seep. Amy suggested that the flume go to Harble-Griffith. Mike McAvoy interjected that he has been working on the Pierce Run design.
- Amy continued that East Branch Phase III post-construction sampling took place and during the next sampling event we will sample the overall SLB discharge, as well as at the 2 periscope pipes separately to compare the discharge of the two beds. Sampling was conducted there on August 17<sup>th</sup>, but only the overall discharge from the two beds was sampled.
- July 27<sup>th</sup> the Harble-Griffith tour took place and was attended by about 20 people, including a few local landowners (landowners were very interested in possible future phases of the project).

### **Agenda Item #6: Water Quality Specialist Updates – Sarah Landers**

Sarah Landers began her first Water Quality Specialist update by discussing Long Term Monitoring occurring at East Branch and West Branch during the previous few weeks. Sarah reported the pH at the mouth of East Branch to be 6.99 and the pH at the mouth of West Branch to be 6.69. Sarah has been taking construction photos at the Orland Gob Pile and Harble-Griffith. This winter Sarah is going to start working on the Little Raccoon Creek AMDAT and she will be evaluating current sampling data to see if there is any additional data needed to write the AMDAT. Sarah also needs more nitric acid from ODNR and was informed that Maryann is returning from vacation the following week and she could get some then.

### **Agenda Item #7: Current and upcoming AMD Project Updates – ODNR & All**

East Branch Phase I maintenance: Set to begin in October and is currently out to contract for next 6 weeks. East Branch Phase I : Bed 6 will be abandoned and will not undergo maintenance. The rest of the beds will undergo maintenance including some Monday Creek sites.

East Branch Phase II: Will be re-bid next spring/summer to replace the sand in the sand filters. The gradation of the original sand is wrong. This was not the contractor's fault, but the manufacturer's fault and now the sand filter is locked up. We need to get water moving between the sand filter and the slag bed. Northwood and Kern Hollow could potentially be fixed by digging a trench to move water from the sand filter to the slag bed. Amy suggested Raccoon Creek crew do this at Kern. Amy is to contact Mike when crew goes to Kern so he can come and evaluate the potential to dig a trench at Northwood as well.

Pierce Run dam maintenance: Plans for slurry wall are 75% complete. At this point Mike McAvoy has no idea how much this will cost. The job is going to be bid out and if the price goes too high then ODNR will reserve the right to let bids expire. If the bidding doesn't work out then ODNR could have to abandon the project. This is a system that needs to work year-round and there are two options if the bids are too high. Either it will go out for bid again in 4 weeks or more, or the culvert would be repaired for use at high flow.

Flint Run/Lake Milton: There was a low bid and the contractor is doing their due diligence. This year the maintenance on the dam will be completed in November, but the rest can wait. Today ODNR is going to recommend awarding the contractor and make it a November 1<sup>st</sup> start date.

Harble-Griffith: There are major delays because the contractor was not fully prepared for the project. The south spoil pile is being rough graded, but still needs topsoil and the borrow area has been mowed. ODNR is concerned whether vegetation can be established this year. The grading is going nicely.

Orland Gob Pile: The construction crew is moving from east to west and construction of the channel with the sumps is on hold until there is less water on site.

### **Agenda Item #8: New Business / Announcements - All**

Mike McAvoy began by talking about Middleton Run project. ODNR has most of the right of entries for exploratory work to do most of the project. They need to explore drilling but poking holes to figure out the amount of borrow at the sites. This is scheduled for the end of September. Construction limits need to be set and move forward. Landowner permission is still needed from the Cody's that live in Michigan. This project is going to be designed as a single phase and may be contracted out as three bids. The entire project could cost \$1.5 – \$2 million. Mike mentioned that we are ahead of the game and are still hoping for 2012 construction, possibly in June/July. The environmental assessment is next and conceptual designs will be created beginning in November through January. Raccoon Creek should apply for an OSM grant.

The Flint Run wetlands project should be a short, quick, and easy project. The beaver dams will be shored up and turned into berms. This should be done fast and could be done in late summer (Aug/Sept) 2012. Beaver dams will be surveyed and GPS identified.

Lake Latrobe: big map and aerial photo presented by Kaabe Shaw. Looking at the big map; noticing lots of cuts, ponds up gradient from Lake Latrobe (which we want to dam). We are not completely familiar with the mining in the area. The question is do we want to drain pools and reclaim sidewalls? We also need to examine why is Lake Latrobe dead? We don't even see plants in it. It was profiled and the pH was fine (5.5 pH). A strip pile reclaim drains down from the reclaim into the lake. We need water quality data about these ponds. If we de-water the mines and expose oxygen into underground mines then we could make a big problem. All of this depends upon where the water is draining. ODNR needs to go out and get samples. It is recommended to do this in a phased approach. For the 2012 design, samples need to be taken and the design will be worked on. This can be a winter activity. ODNR will make a drill request for Lake Latrobe and the impacts of de-watering need to be found out. The EA might be ok with the wetland, or we'll stay away from the wetland. Amy Mackey mentioned that one of the pits near Lake Latrobe contained salamander eggs and turtles, may have good water quality.

**End Meeting – Next meeting Thursday, December 15<sup>th</sup> - 9:00am – Ridges Bldg 22, Rm. 214 had to change date because the room was already reserved on the 14<sup>th</sup>!!**