Raccoon Creek TAC Meeting Minutes January 16, 2013

<u>Attendees</u>: Sarah Landers (Ohio Valley RC&D/RCP), Amy Mackey (OU Voinovich School/RCP), Mary Ann Borch (ODNR-DMRM), Kaabe Shaw (ODNR-DMRM), Ben McCament (ODNR-DMRM), Natalie Kruse (OU Voinovich School/RCP), Mike McAvoy (ODNR-DMRM), Jen Bowman (OU Voinovich School), Rebekah Korenowsky (RCP) and Darcy VanDervort (RCP) ACTION Items UNDERLINED

Agenda Item Number 1: Begin Meeting, Welcome, Introductions

Agenda Item Number 2: Review/Approve June Minutes

Agenda Item Number 3: Watershed Coordinator Updates - Amy Mackey

Amy has been working on quite a few reports: Harble Griffith 319 Semi-Annual Report, Watershed Coordinator Annual Report for 2012 and the Little Raccoon Creek AMDAT. <u>It</u> was brought up that a fiscal report including invoices needs to be turned in, and to ask Joyce for assistance with this. In February she will begin working on the Water Quality Specialist contract for 2013 and a final report of intern Renee Reber's work. Macroinvertebrate identification is to be completed by mid February and the data entered by mid March. She presented at the Water Management Association of Ohio Conference in November (Recovery in Raccoon Creek). On the CE3 website there are 2 new stories about Raccoon Creek. Amy also brought up that the Ohio Watershed Leaders (OWLS) Conference is considering holding next year's meeting in Southeast Ohio. The meeting will be held in late August and will provide a tour and lodging to attendees. Possible venues include Lake Hope and Burr Oak.

| WD: | | |
|-------------------------|----------------------------|--|
| <u>Site ID</u> | Pre-Con acid load (lb/day) | <u>Post-con acid load</u> <u>(lb/day)</u> |
| WB 084 HG trib | 150 | 7.18 |
| WB 086 HG trib | 70 | -4.19 |
| WB 094 HG trib | 124 | 4 |
| WB 050 Orland Discharge | 39.83 | -1.82 |
| WB 010 Mouth of WB | 24.67 | -61.98 |

Post-Construction monitoring at Harble-Griffith Reclamation Project and Orland Gob Pile has shown acid load reductions in the tributaries draining the reclaims and the mouth of WB:

Note: Negative values indicate a net alkaline loading.

It was agreed that monitoring at the Harble-Griffith Project should continue monthly for at least a year as written in 319 grant.

Noted that Harble Griffith in NPS should be treated like Middleton Run was – by combining the 3 discharging tributaries into one overall discharge.

It was noted that although the acid load reductions are good news, this data does not take into account metals and that there is still a lot of aluminum in West Branch. More analysis to come in the future. Post construction monitoring at the mouth of East Branch has shown a shift from net acidic loadings to net alkaline loadings after the installation of East Branch Phases I, II and III:

| <u>Site ID</u> | Pre-Con acid load (lb/day) | Post-con acid load (lb/day) |
|----------------|----------------------------|--------------------------------|
| EB 010 | 1,385 | -1,463 |

Agenda Item Number 4: RC Water Quality Specialist Updates & 2013 Monitoring Plans – Sarah Landers

<u>2012 water quality monitoring</u>: Most of the scheduled 2012 chemical monitoring was completed. High flow at Little Raccoon Creek in 2012 was not completed due to summer drought conditions and continued dry conditions (Expected to be completed within the month). Also not completed in 2012 were: Pre-construction for Middleton Run, East Branch Phase I post-maintenance or the Vinton County Airport (need a rain to measure runoff).

<u>2012 data:</u> Currently being entered and checked by Raccoon Creek AmeriCorps members: Rebekah and Darcy, with the water quality report to follow. It was noted that a data check and QAQC procedure write-up should be made and given to Ben to share with the other watersheds, which Rebekah and Darcy can also take care of. Jen will graph the 2012 data and produce a validation of ranges to check for outliers and mistakes.

<u>This season's interns</u>: Alie Hermanutz and Emily Logan from Hocking College Geo-Environmental Science program to work 1 day per week with water quality monitoring and Ian Kloos from Ohio University's Environmental Studies Certificate Program to work 3 hours per week on MAIS spreadsheets.

<u>Announcement</u>: The Raccoon Creek Water Trail Association has started a Kickstater program to print their water trail maps created by OU student, Karla Saunders.

<u>2013 Monitoring Plan</u>: Drafts of the plan are ready; Sarah will e-mail them after the meeting. By Sarah's estimates, the total 2013 sampling will cost \$77,480 for 606 samples. This number does not include dates where sampling events are combined. For example Harble-Griffith Post Construction monitoring can be done in conjunction with West Branch LTM and fewer samples will be taken. It was noted that it is important to keep a balance between required 319-grant sampling and other sampling to make sure important sampling gets done. Jen Bowman mentioned that NPS can be checked for unique dates to determine the number of sampling days per year and use that to estimate the future number of days per year.

Headwaters:

It was decided to add the Zaleski Wetland to the 2013 headwaters sampling after a fish kill in 2012. Wetland pH was in the 3-3.5 range. Add lab samples to the Harble Griffith Phase II Ilesboro Road sites and cut back on East Branch phase II sampling. Ben suggested to keep checking on the East Branch Phase II system and maybe only

take pH regularly to check for failures. He also noted that our monitoring plans can sometimes be a bit backwards in that we monitor heavily when projects are going well and then drop off as soon as projects start to fail.

Pierce Run Post Construction:

Final report commits us to sample monthly for 3 months and quarterly for 2 years. <u>Kaabe is going to triple check the Army Corps of Engineering permit to make sure.</u> Also need to check if the EPA will still conduct biological monitoring.

Elk Fork:

We are able to access the seep but not the tributary mouth. There is very minimal impact from upstream to downstream. There was a mine blowout from an underground mine along state route 50. However, the blowout only impacts Elk Fork at extremely low flows. Ben said that if it is not a priority, then don't sample, just check pH on Elk Fork at low flow.

Little Raccoon Creek:

Flint Run and Lake Milton sampling will stay the same. All other sites will have preand post- construction. It was suggested to change the project tributary sampling from four times to twice a year. More planning will be required to get high and low flow regimes.

Sarah will e-mail monitoring plans for review within the next week.

Jen Bowman's 2013 data analysis focuses on water bodies (East Branch / West Branch / Hewett Fork / Little Raccoon Creek) and she inquired as to how to slice up the main stem. She will also look at the recovered sections of stream and where to place priorities to maximize recovery. She will be looking at pH, net acidity and metals concentrations from the main stem and loadings from tributaries.

Agenda Item Number 5: Current and upcoming AMD Project Updates

Maintenance:

Short summaries of maintenance will be added to NPS using templates created for different project types. Jen Bowman has created a word document draft summary of the maintenance template tab in NPS. A maintenance tracking sheet will allow all maintenance to be recorded in one place. Ben McCament mentioned that we still need to look at cost for long term operating budgets. In the next NPS contract part of the aim will be to remove redundancy and add on to pages to update projects and data within the maintenance section and elsewhere. Beta-versions of site visits need to be scheduled to fit in with the current maintenance strategy.

Pierce Run Site Visit: Friday, February 8th at 9AM.

2012 Monitoring Plan:

Harble-Griffith Reclamation Project: Frost seed in February, replant trees. Final assessment of Harble-Griffith will be conducted at the end of June or beginning of July.

At Pierce Run, sedimentation will always be an issue, recommended to keep the flow at a minimum.

<u>At Orland the funder's name on the sign needs changed from Buckeye Hills RC&D to Ohio</u> <u>Valley RC&D. Kaabe Shaw will take care of this.</u> At Lake Milton it was decided to take the project signs down. It was also mentioned that the bipro looks good at Milton.

2013 Projects:

Middleton Run – Planned preparation. Army Corps of engineers may claim jurisdiction on the pits, Kaabe will find out later in the week. Ben mentioned that we might need a regional permit for AML because the nationwide permit may not work. Middleton Run could require an individual contract, which could be postponed till next year. This regional permit would cover AML in Ohio.

Flint Run Wetland Berms– In limbo. Drilling in floodplain, add rock berms and plastic sheet piling. No status report on the Office of Surface Mining grant, which has already been written and submitted by John Kellis, Ohio Valley RC&D. The timeline for this project is currently 2013.

2014 Projects:

Start looking at and working on permits for these projects in 2013 Rehab Buckeye Furnace Daniels Run Reclaim Illsboro Road Need to finalize 2015 projects by this summer. <u>Sarah and Amy begin looking at future</u> <u>projects in watershed.</u>

Other issues:

East Branch Phase II: Northwoods rock dam. <u>Kaabe will ask parks department by April</u>. We want to get this armored with B-rock.

Lake Milton: <u>Install a permanent depth stick so we can tell when Lake Milton level drops so</u> <u>low that suction is lost, Kaabe will ask Rob to get that.</u>

Jaymar: Needs elbow PVC joints. Possibly add more funding in Sarah's grant for equipment? Maintenance and observations on all site visits need to be sent across NPS site. <u>Kaabe said</u> that ODNR can give us some PVC joints and will need to check what size.

RCP should directly contact Mike about all maintenance issues.

Sarah will send out Northwood pictures of the rock dam damage which was previously included in the June 2012 TAC minutes.

Dundas/Mulga: This re-mining project is not going to proceed. Instead Buckingham Coal is to do PR for Dundas project. They would use waste rock and fines to fill in mines. Keep open for possibilities for the future, but no action presently.

Agenda Item Number 6: Vinton County Airport Mitigation and Mulga AML Updates

Vinton Airport: The engineer will create a channel with step pools for metals storage. <u>RCP</u> <u>will plan to take post rain event samples</u>. Ben advises that we should try not to get too involved with this project, however we can help with off-site mitigation.

Agenda Item Number 8: New Business / Announcements

Jen Bowman showed the group lots of new updates with the NPS system (www.watersheddata.com), most of which have been added to the maintenance section.

Sections have been added for: why maintenance was needed, what was the problem, what did the maintenance do, timeframe and cost of maintenance.

Mike McAvoy showed us a video example of the Autodesk University 2012 Civil View Lab Preview, which he would like to use to model high graphic images of Middleton Run and other watershed areas. When doing field work RCP should take short videos of what we are doing and send to Mike.

Agenda Item Number 7: AEP and LRC gage update (Jen Bowman)

AEP Biological Restorability Project: Kelly Johnson and Ed Rankin have created a regression model to predict the return of certain mayfly species based on a number of parameters. This model has been tested by OU student, Jessica Deeds, in Sunday Creek. The outcome of this model is an excel spread sheet in which you can enter a certain pH (or other parameter) and determine the probability of 5 key mayfly species being present. This model is based on the WAP data. This model allows us to determine where recovery is feasible and where projects would be most useful.

The five year LRC gauge (LR 0030) data shows the daily average pH trending upward slightly. Jen Bowman will plot trends of highs and lows to make a comparison. The other data has looked consistent over the last 5 years as well. Do we still need to collect this data for the next two years before all the LRC projects are updated? Maybe we could move our meters for specific reasons at other places (such as Buckeye Furnace)? It was mentioned that we cannot get high flow events in LRC anyways, and we might benefit from getting our meter out there in a different location. Amy mentioned that she did not think that we need to keep the meter in its current location for the next two years. It could be possible to obtain a portable 3-season sonde or less expensive mobile year-round systems to set-up elsewhere in LRC. After this year the meter will be removed from the Keystone Gage location.