

Technical Advisory Committee for the Raccoon Creek Partnership

Meeting Minutes – 1/13/2011

Action Items are Underlined

In Attendance: Amy Mackey (RCP), Natalie Kruse (RCP), Ben McCament (ODNR-DMRM), Jackie Haynal (US Forest Service), Pam Stachler (US Forest Service), Mary Ann Borch (ODNR-DMRM), Barb Flowers (ODNR-DMRM), Mike McAvoy (ODNR-DMRM), Regan Welch (ODNR-DMRM), Kaabe Shaw (ODNR-DMRM), Brian Blair (RCP), Kara Walton (RCP), Sarah Landers (RCP)

The meeting was called to order at 9:10am. Meeting location: Voinovich School, The Ridges, Bldg 22

Agenda Item Number 1: Begin Meeting, Welcome, Introductions

Reviewed and Approved January minutes – All

Amy Mackey brought a jump drive that contained presentations from the National Association of Abandoned Mile Land Programs (NAAMLPL) conference that was requested by Mitch Farley at the previous TAC meeting.

Mike McAvoy also has a jump drive of presentations and he will provide his to Mitch Farley rather than take Amy's.

Agenda Item Number 2: Watershed Coordinator Update – Amy Mackey

Amy Mackey reported that Kelly Capuzzi was going to come to the meeting but she was sick. Kelly informed Amy that there is a Captina Creek Watershed event on May 4th in St. Clairsville. This event will feature Jack Hanna and an opportunity for groups to have booths. The event is well attended, with lots of attendees. RCP will have a booth there.

Pam Stachler inquired if the event is put on by Ohio EPA.

Amy Mackey answered that she thought so, and maybe the name of the sponsoring organization would be in the event's title. The name of the event is unknown at this time and it was only described by Kelly Capuzzi to Amy as: the "Jack Hanna event". Amy continued that it might be organized by the ODNR Division of Wildlife. Last year the event was at another location and this year the event is moved to OU St. Clairsville campus.

Pam Stachler will contact Kelly Capuzzi to find out who is the event organizer/sponsor.

- End Jack Hanna Event Discussion -

Amy Mackey reported that she has been working on her 2011 work plan and 2010 report. Amy then updated the group on the progress and status of Ohio University MSES student, Kim Brewster's project for Middleton Run. Kim was planning on coming to the meeting but had class at the same time and

could not attend. Kim was conducting monthly sampling, but it was too dry in the summer and fall and there was no water. Kim sampled on December 15th and plans to sample in January, February, and March. Ms. Brewster is currently collecting field and lab data for pH, conductivity, dissolved oxygen, metals content, among other pertinent parameters. She is also conducting experiments on nearby coal spoil to determine remaining potential for leachate pollution. Mary Ann Borch inquired about soil leeching.

Natalie Kruse replied that these strip pit mine soils are the source of aluminum and Kim is looking at pollutant production.

Pam Stachler interjected that there is a large quantity of aluminum in the stratigraphy and asked if Kim Brewster has a baseline for non-strip pits.

Natalie Kruse answered that the strip pits are contributing "bucket-loads" of aluminum and the information is being collected to prioritize reclamation efforts for future projects.

- **End Kim Brewster and Middleton Run Discussion –**

Amy Mackey provided an update on the EPA tire clean-up project being led by Pete Thompson out of the Logan EPA office. In the Raccoon Creek area there have been 26,708 tires removed so far. This week they are going to State Route 554 to collect 500 tractor tires and 200 passenger tires. In Gallia they will collect another 300 passenger tires.

Pam Stachler asked if there is anyone looking at this issue in other watersheds.

Ben McCament responded that it is a statewide project, but Pete Thompson is focusing on Raccoon Creek.

Amy Mackey added they will come to any site with 100 tires or more (on Raccoon Creek, and Raccoon Creek only). And, Pete Thompson is doing this for Raccoon Creek, but each county in the state has a person.

- **End Tire Discussion –**

Amy Mackey had been working on identifying MAIS and she still has a few left to sort and she is entering them into a spreadsheet.

Amy Mackey announced that there are Hocking College Wildlife students that need to do service projects. The students previously worked as Division of Wildlife deer check-in stations, but since those are no more, the students need a volunteer activity. Each student needs to work 8 to 10 hours during the fall quarter. They could help with stream clean-ups, tree plantings, Carbondale doser channel cleaning, and can help with anything we need them to.

Mary Ann Borch asked if they could get in canoes and cut trail through the waterways.

Amy replied that the youth are not supervised and they are not going to be there working on the projects all at once.

- **End Hocking Wildlife student discussion -**

Amy Mackey updated the group on MPA student, Rob Wofter's project to develop and implement a communications and marketing plan for RCP. Rob created a plan and he is working to overhaul the RCP website and he is working on Facebook recruitment.

Amy Mackey reported on the Pierce Run post construction tour. There were 14 people on the tour and they were all impressed with the project. Amy is working on the final EPA reports for Pierce Run.

Agenda Item #3: AmeriCorps and Water Quality Specialist Update – Kara Walton, Sarah Landers, Brian Blair

AmeriCorps Members, Kara Walton and Sarah Landers passed out upcoming event flyers. Sarah announced that the winter Owl Prowl is scheduled for Friday, January 21st and the event will include hot chocolate, smores, a special presentation by Pat Quackenbush and his owls, and a hike to call owls.

Pam Stachler inquired how to get more information about upcoming RCP education and family activities and events.

Sarah Landers replied the RCP website is down and under construction for an undetermined period of time. Pam requested Sarah's email address after the meeting so they may communicate about upcoming events.

Kara Walton updated the group on the education committee meeting held in December, summer camps, and the progress made on the OEEF grant. The grant is to cover a stipend to hire a camp facilitator. The AmeriCorps will continue to look for grant funding to provide food for the summer camps. The grant will be submitted by Tuesday, January 18th.

Pam Stachler let the AmeriCorps know that she will put the upcoming events flyers in the break room and let Regina Martin know about the events.

Amy Mackey interjected that the Kroger Community Rewards program is going on. There was some discussion about how great the program is and how much money was derived from the program last quarter. Sarah Landers mentioned that it is easy to sign up using your Kroger card.

- **End AmeriCorps Update –**

Brian Blair began water quality updates for 2010 and explained that we were waiting for the rains and then the rains came and winter came suddenly. The only sampling that remains from 2010 is Little Raccoon Creek long-term monitoring. Brian plans to do this next week and move on to 2011 sampling.

- **End Brief Water Quality Monitoring Update -**

Agenda Item #4: 2011 Monitoring Plan – Brian Blair and All

(also includes information on current AMD project updates contributed by all)

Brian Blair passed out three documents and projected the first one on the wall via computer. These documents are the drafted 2011 Water Quality Monitoring Plans for Little Raccoon Creek Watershed, Raccoon Creek Middle Basin Watershed, and the Raccoon Creek Headwaters Watershed. First, Brian addressed the Little Raccoon Creek Watershed monitoring plan. Brian explained that there were not lots of changes to this plan in 2011 from 2010. Brian highlighted the Long Term Biological Monitoring section of the plan and asked the group if IBI sampling will happen in 2011.

Amy Mackey responded that Kelly Capuzzi told her that all of our hopes and dreams will come true this year and yes to IBI sampling.

Ben McCament added that a boat is needed.

After some discussion, the group conferred that a boat could either be contracted out or it might be possible to get access a boat or rent a boat.

Kaabe Shaw mentioned going up and down Flint Run

Brian Blair continued that there were 3 boat sites that did not get done in 2010 and we'll try to get them done this year. The long term monitoring sites will stay the same.

- End LTM Discussion about Table 1 –

Brian Blair pointed out in Table 2 that he does not know the location of the Buffer Run sites.

Ben McCament and Kaabe Shaw indicated they both know the locations.

Kaabe Shaw added that Buffer Run needs more alkalinity infused. Ben added that we need to sample sites downstream. Kaabe noted that in January he got the high flow of the tributary, but the low flow is needed. He will be going there on Monday, January 24th.

- End Buffer Run Discussion -

Ben McCament went to Lake Milton on January 14 to check on the plug and to see if water is going through the new system. The plug is still holding.

Ben McCament informed the group that the AMDT for Little Raccoon Creek will be updated so some of this sampling might be changed.

Mary Ann Borch was in charge of the Salem Road Sampling Sites in 2010. Brian Blair asked her if she would still like to be in charge of these sites in 2011 and offered to be in charge of them himself. Mary Ann responded that she would be happy if Brian could take over and she will take him to the sites the first time.

And then to Mulga Run; Brian Blair commented Lincoln Pit sampling plans are still the same. Mike McAvoy added that the water is already alkaline when it hits the steel slag leach bed and is not picking up any significant additional alkalinity from the project. Natalie Kruse interjected that the aluminum is precipitating and there is no net change. This is due to the presence of a limestone quarry upstream. Mike added that the Lincoln Pitt needs monitored to make sure it is not going acid, however, ODNR is no longer monitoring the project. Barb Flowers mentioned the AML enhancement and Kaabe followed that low flow was done on December 20th 2010 and we are waiting on data for the high flow.

-End Mulga Run/Lincoln Pit Discussion –

Brian picked back up with Flint Run and stated that there is no change in the sampling plan for Flint Run and Lake Milton and each step in the system is monitored. For Lake Latrobe there are no more pre-construction sampling events planned as there is a good history of data. Mike McAvoy reported that because of Pierce Run, the Lake Latrobe project got bumped to 2012. Ben McCament added to make sure to get a range of flows to calculate pre construction load. There could be an issue with flows and the flume is used and it is easy to dam there.

- End Little Raccoon Creek Watershed Monitoring Discussion –

Brian Blair moved on to the second water quality monitoring plan for 2011: Middle Basin Watershed. Brian informed the group that the long-term monitoring sites were left the same and there were no new sites. There are no big surprise projects and biological monitoring was left the same. Ben McCament asked whether ODNR or EPA do the main stem sites. Amy Mackey responded that EPA were going to do pre and post construction sampling, but only do 2 or 3 sites. Amy will contact EPA and find out which sites they are doing.

There was an MSES student that did a report on Elk fork and that report is complete. It was mentioned that it would be nice to monitor the tributary mouth. This is the site where the landowner will not respond to permission requests. Amy Mackey sent Kaabe to try to get a response from the landowner and Kaabe mailed a letter and right of entry form. Amy remarked that we can't monitor the tributary mouth and we probably won't get the right of entry. There isn't a lot to sample right now – Pierce Run is pushed back. Ben McCament added Pierce Run's EPA grant is over and the Army Corps committed to samples and there is a permit required and 5 years monitoring and an annual report. Kaabe has the sites and will send them to Amy (map and sampling plan).

Amy Mackey informed the group that there is a Pierce Run landowner with property near the mouth of Pierce Run that would allow us to do whatever. He came on the Pierce Run post construction tour. It could be possible to put in a wetland since the land wants to be a wetland. Maybe we can get Mike McAvoy and Regan Welch out to see it. It is a big flood plain and there is a gas line that runs through it. Mike McAvoy interjected that if the flood plain impacts to adjacent properties then they can't adjust. He then asked if it is mapped as a FEMA floodplain, because that has a much higher standard. If it is a county floodplain then it is easier to manage. Ben McCament answered that it is part of the Raccoon Creek floodplain, it is a huge valley, and the wetland could help remove metals/iron. Kaabe Shaw offered to look at historical data and Amy said that we need to look at plat maps. Ben asked about a

high flow wetland to divert but not a wetland in the whole creek. Amy interjected that the landowner wants to make terrace channels – highlands in the middle of island. Mike added not just make it a marsh.

- End Pierce Run Discussion –

Brian Blair then moved to the Raccoon Creek Headwaters management plan and he noted that this changed the most this year. Ben McCament asked if we have looked at this data lately and if not they it should be analyzed when there is time to see if anything jumps out.

Now on to Hewitt Fork/Carbondale II sampling. Amy Mackey informed the group that Nate Schlater cleaned the doser wheel in December and recently placed an order for calcium oxide for the doser. Amy announced that in February we will put a crew together to clear the doser channel again, but a date has not been set yet.

Someone asked how long the AEP project at Hewitt Fork will continue. Amy Mackey replied that it ends this summer – 1 year. Jen Bowman wanted to set up a meeting for biological sampling and therefore that might change in the sampling plan.

Brian Blair moved onto the Trace Run - Kennard Seep. This is a site where RCP and ODNR-DMRM are considering a project. Brian pointed out that there has been lots of sampling done here over the years. Therefore, no additional sampling needs done at this time – there is plenty of background data. Ben McCament informed the group that at the request of Mitch Farley (ODNR-DMRM) he is conducting a cost-benefit analysis on the expected Hewitt Fork recovery and the impact of having a second doser in the watershed.

Brian Blair continued that a Carbondale week was scheduled in 2010 to do recon for tributaries for use with a steel slag bed – but it was decided not to do this yet. Amy Mackey explained that the recon project was put on hold depending on the determination of whether a doser could go into Trace Run. Ben McCament added that recon could be for either project.

- End Hewett Fork/Carbondale II Discussion –

Brian Blair presented the monitoring plans for East Branch Phases I, II, III. Brian brought up the issue that the performance of the Phase I projects has decreased significantly and that they are scheduled for maintenance in 2011. Mike McAvoy interjected that Mitch Farley recommended doing them this year and that this is a priority, but other projects keep jumping in front of this one. Ben McCament asks about the status of the post construction monitoring for East Branch Phase II. Brian responds that there are levels of pH over 13. Brian skimmed through his field manual and reported that the previous week the field pH was 13.22 alkalinity and at the mouth of the tributary the pH was 9.27.

Mary Ann Borch requested that Brian create a semi-annual report of the status of performance for new projects. Brian Blair responded that he will do this.

Brian Blair continued that Phase III pre-project sampling is complete and the project is nearly complete with 95% finished and grading to do. Ben McCament suggested that once Phase III is complete to wrap the sampling in with the Phase II sampling.

- **End East Branch Monitoring Discussion –**

Brian Blair moved onto West Branch monitoring sites. Brian introduced the Harble Griffith project Phase I. The mouth was not sampled in 2010 and according to NPS it has not been sampled since 2006. Ben McCament and Amy Mackey will check to see if it has been sampled since 2006 and locate data. Amy added that we didn't do Fairview Road sampling, the EPA did that sampling. The EPA gave us data and Amy has the data.

Revised monitoring plans will be sent out.

- **End Brian Blair 2011 Monitoring Plan Review (including current project updates by all) –**

Agenda Item #5: Flint Run East System Analysis – Brian Blair

Brian Blair began that Mitch Farley requested an analysis of the Flint Run East system. Brian conducted the analysis and sent it to Ben McCament and Kaabe Shaw to look over. Brian discussed maintenance to replace slag in slag bed and to find a place to dispose of slag on the property. Ben McCament added that the slag is still providing alkalinity and it is net alkaline. The steel slag leach bed is armored and is passing alkaline water in the 1st year. Now it is working but there is a need to watch as it works over time. It is flushable and work well if the pipes are flushed 1x per year. Natalie Kruse asked if there are precipitates in the bed, or has the slag been exhausted? Brian answered that water flow is no problem and the bed follows Guy Riefler's curve of prediction for a steel slag bed. Natalie added that the old slag could be added to other sites with limestone. Mike McAvoy continued that we could dump the refuse slag in dead stream beds and it can dissolve and help.

Brian Blair continued that Mitch Farley asked him to determine if a wetland would be a useful addition. Kaabe Shaw brought out a large map of the area and pointed out that we don't sample the confluence because it is hard to get to. Kaabe suggested creating two new sites, a new downstream site and a new upstream site, from the area where we want to build a wetland to fix the data gap. Kaabe explained further that the confluence is a really hard site to get to. The goal is to scrub some more metals out but using wetlands, limestone plumes. Kaabe will begin this project in February. Mike McAvoy added that this is tied up with Lake Milton.

- **End Flint Run East System Analysis Discussion –**

Agenda Item #6: Harble Griffith 319 Grant Update – Amy Mackey, Mike McAvoy

Amy Mackey began that the preconstruction sample QAPP report was submitted and approved. In the spring there will be a pre-construction tour. An OSM grant has been suggested to Amy for Harble Griffith, even though we have one currently for the Orland Gob Pile. Mike McAvoy entered that he started working on the wetland plan last week and the day before he did the design for the entire

project, so now the grading and engineering is complete. Mike will crank out plans and specifications next week for dirt moving and hopes to bid out the project in April or May. Kaabe Shaw stopped Mike to let him know that we need to wait for the EA (Environmental Assessment) to get done. Amy brought up that the logging is being done now and directed Brian Blair to go take photos. Brian agreed to go take project photos. Ben McCament added that OSM needs to get authority to proceed and that it could cost between 1 to 1.2 million to move dirt at the site. Amy Mackey asked if the East Branch OSM grant needed to be closed before starting this one. It did not.

Ben McCament asked how soon can we review the design drawings done for grading? Mike McAvoy answered that they can be looked at it next week. The theory they are using is mass grading. The land will be graded and then it will be covered and reevaluate the need for lime channels. There is a good grade for channels just like the grant calls for, but would slow the project down. Ben is in favor of doing it, they put the channels into the grant to put limestone at the seeps but not too far down. Ben began drawing a diagram to show that the seeps line up with the sandstone layer and we don't know how direct the relationship is between the piles and how groundwater moves through the seeps. Mike added that there is a surprising amount of clay in the seam to dig up and use.

Pam Stachler asked why don't we want the channels if there is a 15% slope? Mike answered that we don't want to build it if we don't know that we need it. We don't know the impact of our reclamation. There will be some infiltration. If we aren't getting much flow then we can't predict how much water will still have access to the bottom area. Mike continued that we are sensitive about spending money and building stuff. Ben interjected that we need to follow the timeline of the grant and capture aluminum numbers with the high rain and see if it can push downstream. Mike added that it could push into the wetland, which we could run the sediment water into the wetland and this could enhance the wetland. Ben decided to look at doing this. Mike went further that we could map the discharge and there would be no output from the wetland. Amy Mackey interjected that we can't monitor output from a wetland. The solution would be to choose upstream and downstream sites. For the wetland we want standing water during the wet season and trees that can withstand water large amounts of time.

- **End Harble Griffith Discussion -**

Agenda Item #8: Lake Milton SLB/Lime Addition Update - ODNR

For Lake Milton, Regan Welch finalized plans and sent them and will go to Flint Run as a single project. We can't get Division of Wildlife Approval until we get Dam Safety approval. Mike McAvoy informed that group that they added lime to the channel last week and it keeps running. The plug in the pipe still works and the lake is draining, but now we need to keep as much in the pond and treat it as we can.

- **End Lake Milton Discussion -**

Agenda Item #9: 2010 Fish Sampling Results - Ben McCament

Ben McCament informed that group that we got data back from EPA. Here are some of the sampling results:

Raccoon Creek downstream of where East Branch and West Branch meet there is lots of sand and the habitat is not so great. This section scored a 30 IBI. Ben reviewed the IBI scale and explained that a score of 12 is dead and a score of 44 is the target for attaining warm water habitat designation. Three miles downstream the IBI was 36. This habitat is a little better and there are more fish down here. This section was dead in the 1990's. In Little Raccoon Creek, downstream of Mulga Run, the score was 36. The first year this was in the high 20's and it has stayed at 36 the last few years. There are lots of fish, lots of big fish – maybe this site has stabilized. This is a low gradient stream and low gradient streams have trouble getting up to a 44 because of riffles. This was the site where bowfin were found (not snakeheads). Amy Mackey was told that there may be bowfins in Lake Rupert and may have moved downstream from there. Continuing with the fish sampling results, downstream of Middleton Run the score was 30, but there was a low number of fish. This is why we are looking at Middleton Run. There were only about 9 species of fish found. In East Branch from Laurel Run to the mouth the IBI was 28; it was 24 in 2006. In the summer there was no mine drainage, only in the winter and spring. It went from 6 species of fish in 2006 to 13 species in 2010. It takes years to bring up an IBI and any increase in species diversity is good. This was too small of a site to take the mass of fish. An increase of 7 seems significant. The mouth of East Branch similar habitat – not good – beaver dam. West Branch, downstream of Orland the IBI = 12. Might not have found a fish there; the habitat was fine but the water was just acid. The two lower Hewett Fork sites were consistent and upstream the IBI decreased. King Hollow from a 24 to an 18 and around Waterloo from a 24 & 30 to a 17 & 12. This is due to when the doser was offline. The upstream control site, upstream of Carbondale, was consistent, even with low flow last year.

- End 2010 Fish Sampling Discussion –

Agenda Item #10: AEP Project Updates – ODNR and All

Natalie Kruse presented information regarding the AEP project. They are taking monthly samples at 6 Hewett Fork sites from Waterloo to the Moonville Tunnel until June. And they are also going to get above Carbondale to do all sites on Hewett Fork. They have been conducting storm water sampling at Waterloo and Rock Camp and will do this again in the spring. There is a learning curve in deploying the equipment. They have found a jump in metal loads and then a dilution effect from the storm water sampling. There is an AEP meeting this afternoon. AEP project biological and chemical monitoring will go on this year. Also this year they will ask AEP for more money or an OSM grant in 2011.

- End AEP Project Update –

Agenda Item #11: Current AMD Project Updates – covered during 2011 monitoring plan discussion – ODNR and All

Agenda Item #12: Upcoming/Future Project Updates – ODNR and All

Amy Mackey began this discussion and asked about Pierce Run. Mike McAvoy updated the group that they are currently drilling for soil samples and are investigating the saturated silt layer. The silt layer

acted just like it was supposed to that when it gets disturbed that it turns to goo. After Rock Run next week Mike will start the specs. to bid out the project. The stand pipes settled and separated and this was the result of flaws in the pipe joints. They have been chemically grouted and epoxy sealed. The control station will be used to monitor settlement since it was built on a high sand base and could settle more. This could be a late summer fix and it is a rather complex project so we may need to travel out of state for a contractor.

In regard to East Branch Phase II Mike McAvoy added that they projects are working well and Kern Hollow has more water than expected. At flood stage the sand filter is not able to handle the load so well. And East Branch Phase III is 95% complete.

For the Orland Gob Pile, Mike continued that the project is waiting on a thaw in the weather. Right now there is an influx of guys retiring – including the archeologist. We will need to hire a consultant and are currently creating a memorandum of understanding with the State Historic Preservation Office.

And finally, East Branch Phase IV will probably not happen.

- **End Upcoming/Future Project Updates –**

Agenda Item #13: New Business/Announcements - All

Amy Mackey: Brian Blair's Water Quality Specialist Contract expires in June. Contacted RC&D and was told to wait until spring. Don't want to wait until spring if the process takes too long. Suggested Amy should call Mitch Farley.

Update on Vinton County Soil and Water Conservation District? None knows the status since the levee was defeated. Brian Blair will be attending a meeting later that afternoon.

Meeting ended at 11:30 – Next meeting Thursday, March 31st – 9:00am – Ridges Bldg 22, Rm. 214