MEETING MINUTES

Riley-Purgatory-Bluff Creek Watershed District

September 22, 2014, Board of Managers Special Meeting and Public Hearing

PRESENT:

Managers:	Mary Bisek, Vice President	
	Jill Crafton, Treasurer	
	Perry Forster, President	
	Ken Wencl, Secretary	
	Leslie Yetka	
Administrator:	Claire Bleser	
Staff:	Michelle Jordan, RPBCWD	
	Joshua Maxwell, RPBCWD	
	Louis Smith, Attorney (Smith Partners)	
	Scott Sobiech, Engineer (Barr Engineering Company)	
Recorder:	Amy Herbert	
Other attendees:	Brandon Barnes, Barr Engineering Co.	Matt Lindon, Eden Prairie Resident; MPCA
	Bill Coppage, CAC; Bloomington Resident	Dennis Seeger, CAC
	Barry Dallavalle, Lake Lucy Homeowners Association; SWMLC	Liz Stout, City of Minnetonka
	Larry Koch, Chanhassen Resident	

1. Call to Order

President Forster called the RPBCWD Board of Managerôs Monday, September 22, 2014, Board of Managers Special Meeting and Public Hearing to order at 5:36 p.m. in the RPBCWD office at 14500 Martin Drive, Suite 1500, Eden Prairie, MN 55344.

2. Approval of the Agenda

President Forster requested adding to the agenda the administering of the oath of office, which would take place immediately after the approval of the agenda. Manager Yetka requested an update on the rules. Administrator Bleser requested the addition as a Board Discussion item an update on the Southwest Light Rail Transit (SWLRT).

Manager Crafton moved to approve the agenda as amended. Manager Yetka seconded the motion. Upon a vote, the motion carried 5-0.

3. Administering of the Oath of Office

Attorney Smith requested that President Foster and Manager Bisek stand and raise their right hands. Attorney Smith administered the oath of office of Manager of the Riley Purgatory Bluff Creek Watershed District. President Forster and Manager Bisek verbally completed the oath of office and upon completion were sworn into office for the next three years.

4. Public Hearing – Lake Susan Water Quality Improvement

Administrator Bleser explained that this project is designed to reduce phosphorous loading into Lake Susan and was identified in the Districtôs Lake Susan Use Attainability Analysis (UAA). She introduced Brandon Barnes to present the proposed project Lake Susan 2.12.

Mr. Barnes used a PowerPoint presentation to display maps of the possible locations for the different proposed improvements as well as to provide details about the five improvement options. He gave a short background on the Lake Susan UAA update done in 2013 and the feasibility study done in 2014. Mr. Barnes summarized the five Concept Designs/Best Management Practices investigated in the feasibility study:

1. Woodchip Bioreactor (west location)
2. Woodchip Bioreactor (east location)
3. Iron-enhanced Sand Filtration
4. Spent-lime Treatment
5. Iron-enhanced Sand Filtration (UAA-specified location)

Mr. Barnes went into more detail on each of the five options. He talked about **Concept Design 1**, which is the woodchip bioreactor in the west location, pointing out on the map the proposed location, describing the design and showing a visual of a woodchip bioreactor. Mr. Barnes stated that the estimated annual total phosphorous reduction with the implementation of this BMP is 32 pounds per year at an estimated annual cost per pound of removal of $150-$240. He reported the engineerôs estimate of probable cost for this concept design as $138,000.

He presented **Concept Design 2**, the woodchip bioreactor in the east location. He showed maps of the proposed location and described the differences in the shape of this design compared to Concept 1 and the reasons for the differences. He reported that the estimated annual total phosphorous reduction with the implementation of this BMP is 32 pounds per year at an estimated annual cost per pound of removal of $150-$230. He reported the engineerôs estimate of probable cost for this concept design as $133,000.

Mr. Barnes talked about **Concept 3**, the iron-enhanced sand filtration system, which utilizes the existing storm culvert. He described how the system works. Mr. Barnes reported that the estimated annual total phosphorous reduction with the implementation of this BMP is 22 pounds per year at an estimated annual cost per pound of removal of $350-$580. He reported the engineerôs estimate of probable cost for this concept design as $242,000.

He described **Concept 4**, the spent-time treatment, noting that it has a smaller footprint than the previously presented concepts and said that it also has less site impact than the other concepts. Mr. Barnes showed an image of a spent-lime treatment system. He reported that the estimated annual total phosphorous reduction with the implementation of this BMP is 45 pounds per year at an estimated annual cost per pound of removal of $140-

$230. He reported the engineerôs estimate of probable cost for this concept design as $200,000.

Mr. Barnes explained that the proposed location for **Concept 5** is a little to the north of the other proposed locations. He said that the site was identified and proposed in the UAA update. He provided more details on the project location and design. Mr. Barnes reported that the estimated annual total phosphorous reduction with the implementation of this BMP is 53 pounds per year at an estimated annual cost per pound of removal of $400-$670. He reported the engineerôs estimate of probable cost for this concept design as $739,000.

Mr. Barnes stated that based on cost-effectiveness regarding the cost of phosphorous removal and the extent of site impacts, he recommends Concept 4, the spent-lime treatment BMP.

There was discussion about the designs of the different concepts, and Mr. Barnes fielded questions. Mr. Barnes provided greater detail on the maintenance requirements, noting that each of the BMPs would require maintenance. He said that the life expectancy of materials for the bioreactor is 15 years and for the iron-enhanced sand filter it is 35 years. He explained that the spent-time treatment system has not been field tested but bench tests indicate a lifespan of materials of 100+ years. There was discussion of the maintenance of the BMPs.

President Foster opened the floor for public comments.

Larry Koch of 471 Bighorn Drive in Chanhassen asked for more detail on the amount of phosphorous that would be removed annually by the Engineer-recommended BMP and how the location for the project was determined. Mr. Barnes responded. Administrator Bleser added that the UAA determined where the greatest amount of phosphorous was entering Lake Susan, including both internal and external sources. She noted that the internal loading canôt really be dealt with until the heavy external sources are managed. Administrator Bleser explained that Lake Susan is impaired for phosphorous, which is why the District is targeting phosphorous. She stated that internal loading was identified as the largest phosphorous contributor to Lake Susan. She said that the subwatershed in which the projects presented tonight are proposed to be located was identified as the largest external contributor of phosphorous to Lake Susan.

Engineer Sobiech provided details requested by Mr. Koch, including that the UAA update completed last year estimated the total annual phosphorous loading into Lake Susan as 742 pounds. Engineer Sobiech explained that the UAA update targets a phosphorous loading reduction of 185 pounds per year in order to get the water quality of Lake Susan at a good enough level to be removed from the Impaired Waters List. He stated that the UAA identified the area being discussed tonight as a target area for implementing BMPs because the area contributes 16% of the annual phosphorous load into the lake.

Mr. Koch had a question about the proposed locations of the BMPs discussed tonight and wondered if there would be greater benefit and phosphorous reduction if the BMPs were placed in a different location than those proposed. President Forster and Engineer Sobiech explained why the selected locations for these BMPs would provide the best benefit in terms of phosphorous removal and site disturbance.

Matt Linden of 9026 Belvedere Drive in Eden Prairie asked about the pros and cons of the different concepts presented tonight. He asked about whether any of the BMPs could have disadvantages, such as toxicity or could damage the biota. Mr. Barnes responded that the potential downside of the woodchip bioreactors is that if it they donôt completely drain between storm events, there is the potential to produce methyl mercury. He said that the woodchip bioreactor also requires a fairly long contact period ï roughly 12 to 24 hours. Mr. Barnes said that the spent-lime treatment can discharge more water more continuously compared to the woodchip bioreactor. But, he pointed out, with the spent-lime treatment if the contact time is too long then there are pH concerns. He said that to mitigate that concern, the depth of material is limited to approximately one and one-half feet. Mr. Barnes stated that the iron-enhanced sand filter needs to dry out within 48 hours of a storm event or else it could release some

phosphorous back into the system. He explained that the iron-enhanced sand filtration system has to be large enough that the water is through it and the system dries out within 48 hours.

President Forster asked about the construction industry climate in terms of how busy it is and prices. Engineer Sobiech responded that if the project went out today for a bid, the project cost would be at the high end of the estimated cost range because contractors are so busy now. He added that this project is fairly small so ideas from the staff on how to control the cost include combining this project with the Lake Lucy spent lime treatment project, going out for bids in March or April when contractors are looking to fill their summer schedule, and providing a long enough construction window so that contractors arenôt rushed and trying to squeeze in the project.

Administrator Bleser commented that when the woodchip bioreactor was first being discussed, it wasnôt yet known how large of a footprint the project would require in this location. She said that the woodchip bioreactor wouldnôt be a good fit for the particular area identified for a BMP because of the overall large size of the footprint and the amount of vegetation that would need to be removed. She said that staff isnôt giving up on this BMP but instead is considering where else it could be effective. Administrator Bleser mentioned a possible other opportunity for implementing that BMP and said that there is a location in the City of Chanhassen near the current Target pond.

Manager Yetka asked about monitoring of the BMP. Administrator Bleser responded that the District has done some previous monitoring at the proposed BMP site and will incorporate the site into the Districtôs monitoring program.

Manager Crafton moved to close the public hearing. Manager Wencl seconded the motion. Upon a vote, the motion carried 5-0.

Manager Yetka moved to adopt Resolution 14-05 Ordering the Lake Susan Water Quality Treatment Project and utilizing concept 4 ï spent-lime treatment system - as presented. Manager Yetka read aloud the resolving paragraphs from the resolution. Manager Crafton seconded the motion. By call of roll, the motion carried 5-0:

Manager	*Yes*	*No*
Bisek	X	
Crafton	X	
Forster	X	
Wencl	X	
Yetka	X	

Engineer Sobiech summarized Task Order 8b ordering Barr Engineering to do the final engineering and design of a spent lime stormwater treatment system in the Lake Susan watershed. He said the work would entail doing soil borings, construction drawings, technical specifications, refining the engineerôs Opinion of Cost as needed throughout the design process, developing the necessary permitting, and developing a big package of plans and specifications to bring back to the Board of Managers for review and approval before the project goes out for bids

from contractors.

Engineer Sobiech explained that this task order includes construction administration and observation, meaning there would be a representative on site making sure that things are built according to the plans and specifications. He stated that toward the end of the project and after construction is complete, Barr Engineering will draft a construction memorandum that would highlight and summarize what happened during construction.

Engineer Sobiech said that he anticipates the 60% plans will be ready in December and the 90% plans will be ready by the middle of January. He continued by saying he anticipates asking the Board for approval in February for going out for project bids. He explained the bid timing and process and explained that once the bids come back and the Board reviews them, the Board can discuss them and then order an issuance to proceed or can decide to stop the project. Engineer Sobiech reported that if the project is ordered to be constructed, construction would occur sometime between April and October.

There was a short discussion of the soil boring task.

Manager Bisek moved to approve Task Order 8b. Manager Crafton seconded the motion. Upon a vote, the motion carried 5-0.

5. Lake Lucy Water Quality Improvement- Spent-lime Treatment

Administrator Bleser updated the Board on the discussions with residents, in particular with the two property owners who have the drainage easement between their properties in the area where the District is interested in doing the spent-lime treatment project. She reported that one of the property owners is reluctant about the proposed project and is concerned about the projectôs impact to particular trees on his property.

Administrator Bleser explained that staff now is looking at working with the other property owner and instead of the project being located entirely in the drainage easement, the District would need to either buy an easement off of a corner of that property ownerôs lot or buy a piece of that ownerôs property.

Administrator Bleser asked if the Board would be in favor of this new direction, and she noted that she does not know if the property owner would be receptive to the ideas. She said that this new direction is a financial question that hasnôt previously been proposed to the Board as part of this proposed project.

Engineer Sobiech remarked that staff has engineering drawings of the proposed project, but he said that better visuals, sketches, and renderings of what the completed project will look like could help the property owners envision the final project. He asked the Board to give staff direction to complete those visuals. Administrator Bleser asked for staff to have one more month to develop and present the visuals with both homeowners and to talk to the one homeowner about the possibility of buying an easement or piece of the homeownerôs property.

Manager Wencl recommended that other residents in the Lake Lucy area reach out to talk to the one homeowner.

Manager Wencl moved to direct staff to take one more month to work on this issue of the Lake Lucy spent-lime treatment project. Manager Crafton seconded the motion. Upon a vote, the motion carried 5-0. Engineer Sobiech added that this month is already included in the project schedule. There was a short discussion of the plan to do a press release in the future about both spent-lime treatment projects.

6. Purgatory Creek Restoration Project

Administrator Bleser stated that the District has used the Minnesota Board of Water and Soil Resources (BWSR) calculator to calculate to estimate the phosphorous load reduction due to the implementation of this project. She

said that the load would be reduced by approximately 30 pounds per year and the cost per pound of removal is approximately $800. Administrator Bleser said that this project would reduce the amount of sediment entering Purgatory Creek by 30 to 60 tons.

Administrator Bleser noted that one area that staff had previously understood to be a stormwater pond is actually a wetland mitigation site, so the project will remove this site ï site 25 ï from the project options. She also reported that Hennepin County Environmental Services (HCES) has encouraged the District to apply for the HCESôremediation funds if the project encounters hazardous waste.

Administrator Bleser explained that by removing site 25 from the project and assuming that HCES funds will be available to the District if hazardous waste is encountered, the project cost could potentially be less than $500,000.

There was discussion about the project.

Manager Bisek moved to approve Resolution 14-06 Ordering the Purgatory Creek Stabilization Project. She read aloud the resolving paragraphs from the resolution. Manager Crafton seconded the motion. By call of roll, the motion carried 5-0:

Manager	*Yes*	*No*
Bisek	X	
Crafton	X	
Forster	X	
Wencl	X	
Yetka	X	

Engineer Sobiech summarized Task Order 7b, ordering the completion of the engineering, design, and construction services to restore an approximately 1,800-foot reach of Purgatory Creek. Manager Crafton requested that the word ñandò be inserted into the resolution in the first sentence under Task 2-14 Project Management, so that the sentence reads: ñProject Management will continue to be a key component to help meet project milestones and will help to ensureé ò Engineer Sobiech and the managers agreed to the revision.

Manager Crafton moved to approve Task Order 7b with the revision as noted. Manager Bisek seconded the motion. Upon a vote, the motion carried 5-0.

7. Creek Streambank Restoration Action Strategies (CRAS)

Administrator Bleser said that during the Purgatory Creek restoration project hearing, the District heard a lot of questions about how the District looks at the three creeks and prioritizes sites for restoration. She explained that the District has a lot of studies and staff has walked a lot of the creek and ravine areas. Administrator Bleser said that the District hasnôt looked at the streambanks and prioritized them. She reported that the District has received the Purgatory Creek assessment from the City of Eden Prairie, but the District didnôt have all of this information last year when the District was setting its budget.

Administrator Bleser talked about how the streambanks in the District are in three different watersheds and how there isnôt an overall prioritization of streambank restoration areas. She responded to managersô questions. President Forster remarked that this would be an avenue worth pursuing because it brings science into the process. Manager Yetka asked if staff is planning to use an existing protocol for assessing streambanks or if staff is going to develop a protocol.

Administrator Bleser stated that the District has the Bluff Creek TMDL and its associated implementation plan and the District has the assessment of Lower Riley but not Upper Riley. She said that this work would evaluate those sites and assess the sites as severe, moderate, or worth monitoring. She went into further details about assessing streambanks and the range of detail that could be undertaken.

Mr. Lindon reported on the MPCAôs upcoming new eutrophication standards for rivers and noted that they are more complex. He said that there will be three response variables.

Administrator Bleser talked about where funds for the CRAS work would come from. She explained that there is money available from what was budgeted for this year to pay the UMN grant because the District completed the payment of that grant last December. Administrator Bleser recommended staff look at options and bring those back to the Board.

President Forster commented that he likes to look at options and requested that staff bring multiple options in front of the Board.

Manager Crafton moved to approve staff looking into options and bringing them back to the Board. Manager Bisek seconded the motion. Upon a vote, the motion carried 5-0.

8. Hydrology and Hydraulics Model

Administrator Bleser reported that Mr. Barnes has been very involved in looking at the hydrology and hydraulics model and has found multiple flaws. She provided more details and requested direction from the Board for staff to work with District Counsel to prepare a letter to CH2M HILL based on the findings as presented in the Barr Engineering memo.

Manager Wencl recommended that the letter include how much it has cost the District to correct the errors in the model. President Forster recommended that District Counsel look at the wording in the contract to find out what opportunity that the District has to address the problems. Manager Crafton moved to direct District Counsel to prepare a letter seeking remedy and based on the findings in Barr Engineeringôs memo. Manager Bisek seconded the motion. Upon a vote, the motion carried 5-0. Administrator Jester said that she will get both Barr Engineeringôs costs and CH2M HILLôs costs to District Counsel.

9. Bluff Creek Restoration Update

Administrator Bleser reported that the Bluff Creek Restoration Project is one of the other District projects for this year and the Board will soon receive a report on the project. She pointed out that the estimated project cost has increased over the original estimate. Administrator Bleser said the reason for the change is that the original estimate included a fish passage through the culvert but no solution was included to make sure that the fish passage would maintain water through the extent of the 200-foot culvert. She said that also because of the rain events this year, additional erosion has occurred on the streambanks.

Administrator Bleser said that the cost is now estimated to be $280,000 instead of the original estimate of $187,500. She said that the City of Chanhassen is planning to contribute $16,250 toward the cost.

Engineer Sobiech said that staff has contacted the Hennepin County Regional Railroad Authority (HCRA) because ultimately it owns that culvert. He said he thinks it is worth continuing to pursue communicating with the HCRA and seeing if it is willing to kick in some dollars because part of the project is to repair the end of its culvert.

10. Rules Update

Administrator Bleser reported that last week the Eden Prairie City Council held its council meeting and discussed differing opinions on the Districtôs authority to have rules. She updated the Board on that meeting. Administrator Bleser listed the six issues that are remaining concerns of the Eden Prairie City Council about the rules.

Attorney Smith pointed out that the important message in this update is the good coordination and working-relationship development that Administrator Bleser is doing with the city staff. Attorney Smith detailed issues that his office and the Attorney for Eden Prairie have discussed and are in agreement on. He said that there is need for more discussion about what happens when the District updates its plan and how quickly it triggers and obligation by the City to update its standards. Attorney Smith added that BWSR is working on rules to provide more detail on that issue. He said the bottom line is that all of this really should be about having a cooperative relationship, getting to an agreement about standards and how each local community adopts those, and finally identifying what is the right regulatory framework.

11. Southwest Light Rail Transitway Update

Administrator Bleser reported that the 30% design has been presented and it has the SWLRT going all the way to Mitchell Road. She provided more details and said that the project will be aligning in the Purgatory Creek Recreation Area, so the District will keep a close eye on this. Administrator Bleser said that District staff has asked to meet with the project engineers to hear more specifics and to avoid surprises at the 50% design phase. She said staff is waiting to hear back from the engineers.

12. Board Updates

Manager Wencl requested that the District incorporate into one of its education events a presentation on landscaping and planting for bees.

Manager Wencl asked for an update on the carp and the fish barrier. Engineer Sobiech said that the barrier just got put in place and some modifications need to happen to the top of it from a public safety perspective. He said that now it is a matter of deciding on the best management strategies. There was more discussion about possible management strategies.

13. Upcoming Events

- **Board Meeting**, Wednesday, October 1, 2014, District Office, 7:00 p.m.

14. Adjournment

Manager Crafton moved to adjourn the meeting. Manager Yetka seconded the motion. Upon a vote, the motion carried 5-0. The meeting adjourned at 8:17 p.m.

Respectfully submitted,

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Ken Wencl, Secretary