



Capitol Region Watershed District

1410 Energy Park Dr., Suite 4 St. Paul, MN 55108
Phone: (651) 644-8888 Fax: (651) 644-8894 www.capitolregionwd.org

Regular Meeting Minutes of the Capitol Region Watershed District (CRWD) Board of Managers, for **Wednesday, October 21, 2009, 6:00 p.m.** at the office of the CRWD, 1410 Energy Park Drive, Suite 4, St. Paul, MN 55108.

I. Called to Order at 6:00 p.m. (President, Robert Piram)

A) Attendance

- Robert Piram
- Joe Collins
- Seitu Jones
- Mike Thienes
- Marylyn Deneen

Others Present

- Mark Doneux, CRWD
- Dawn Nelson, CRWD
- Forrest Kelley, CRWD
- Anna Eleria, CRWD
- Elizabeth Beckman, CRWD
- Melissa Baker, CRWD

Matt Loyas, CRWD

- David MacMillan,
Ramsey County Attorney
- Todd Shoemaker,
Wenck Associates
- Bob Wiegert, M & P Associates
- Bill Barton, CAC Member

B) Review, Amendments and Approval of the Agenda

Manager Piram asked for additions or changes to the Agenda. There were no additions or changes to the Agenda.

The Board adopted the Agenda as presented by consensus.

II. Public Comment – For items not on the Agenda.

No public comment.

III. Permit Applications

A) Permit # 08-020 Town and Country Club Certificate of Completion (Kelley)

Forrest Kelley noted permit 08-020 Town and Country Club has been completed and is ready to be closed out. A final inspection was conducted. All soils have been stabilized and proper installation of permanent BMPs verified with as-built plans. Mr. Kelley said a Maintenance Agreement for the onsite stormwater management practices was submitted to the District.

Motion 09-10-09: *Approve Certificate of Completion for permit 08-020 Town and Country Club and authorize return of \$4,400 surety.*

Deneen/Jones
Unanimously Approved

B) Permit #09-027 Frogtown Square (Kelley)

Forrest Kelley reviewed CRWD Permit #09-027 Frogtown Square. Mr. Kelley said the applicant is NEDU, LLC. Mr. Kelley said the project is demolition of existing buildings and construction of a new multi-use development on the northeast corner of Dale Street and University Avenue. Mr. Kelley said this project has 1.43 acres of disturbed area, 1.27 acres of proposed impervious surface and the proposed stormwater management is an underground stormwater infiltration system. Mr. Kelley said the standards are all met. Mr. Kelley said the staff recommendation is to approve the permit with five conditions.

Motion 09-10-10: *Approve Permit #09-027 Frogtown Square with five conditions.*

1. *Receipt of \$6,350 surety and maintenance agreement.*

2. *Provide inlet protection for existing catchbasins in Dale St. and University Ave.*
3. *Revise sump depth of MH 102 on sheet C-2. The sump elevation is 879.90 on C-2 and 877.90 in the detail on sheet C-3.*
4. *Revise MH 101 details on sheet C-3 or the Stormtech outlet diameter in the HydroCAD model. The detail indicates a 12" outlet pipe while the HydroCAD model indicates an 18" pipe.*
5. *Submit a copy of the NPDES permit application.*

Collins/Jones

Unanimously Approved

C) Permit #09-028 Gillette ACC (Kelley)

Forrest Kelley reviewed CRWD Permit #09-028 Gillette ACC. Mr. Kelley said the applicant is Gillette Children’s Specialty Healthcare. Mr. Kelley said the project is construction of a new office and specialty care building on the northeast corner of Jackson Street and University Avenue. Mr. Kelley said this project has 1.1 acres of disturbed area, 0.68 acres of proposed impervious surface and the proposed stormwater management is underground stormwater infiltration systems. Mr. Kelley said this is phase one of their total development plan. In the future they plan to install new parking. Mr. Kelley said the staff recommendation is to table the permit with four conditions.

Motion 09-10-11: *Table Permit #09-028 Gillette ACC with four conditions.*

1. *Receipt of \$3,400 surety and maintenance agreement.*
2. *Submit a copy of the NPDES permit application.*
3. *Indicate specific locations for inlet protection on the SWPPP. Include existing catchbasins on University Ave. or Jackson St.*
4. *Submit detailed plans of the underground storage system that correspond to the proposed HydroCAD model.*

Thienes/Deneen

Unanimously Approved

D) Permit Program/Rules Update (Kelley)

Mr. Kelley said there is one new permit Health East Ambulance Facility and Gillette ACC will return the next meeting.

IV. Special Reports – Stormwater BMP Performance Assessment and Cost-Benefit Analysis, Melissa Baker, CRWD Water Resource Technician and Matt Loyas, CRWD Water Resource Technician

Administrator Doneux noted that the Board received summary materials in their packets. Administrator Doneux also noted that staff will be presenting at the Water Resource Conference on Monday, October 26th. Administrator Doneux introduced Melissa Baker and Matt Loyas. Ms. Baker started and gave an overview of the project. Capitol Region Watershed District in partnership with CRWD cities and others have been designing and implementing stormwater best management practices (BMPs) throughout the watershed district to minimize the impacts of stormwater and improve the water quality of CRWD water resources. CRWD also operates and maintains select BMPs and assesses their effectiveness in stormwater volume reduction and pollutant removal. The Stormwater BMP Performance Assessment and Cost-Benefit Analysis presents actual 2007 and 2008, modeled, and projected performance results and maintenance data and analysis on select BMPs monitored and/or maintained by CRWD. Results were presented for BMPs constructed as part of the Arlington Pascal Stormwater Improvement Project (APSIP). Staff has completed a performance analysis of the APSIP BMPs using monitoring and modeled data. A cost-benefit analysis of the APSIP BMPs was also completed resulting in volume reduction and pollutant removal costs for those BMPs. Mr. Loyas continued the presentation and outlined the BMP project area, described the BMPs and drainage areas, and monitoring efforts for this project. From April to November of 2007 and 2008, CRWD collected water quality and quantity data for stormwater BMP structures to determine their effectiveness in reducing

pollutant loading and also in reducing the volume of stormwater runoff. The BMPs monitored include: Arlington Hamline Underground Storage Facility (AHUG), Como Park Regional Pond (operational in 2008 only) and 8 underground infiltration trenches. Mr. Loyas noted that eight rain gardens were monitored to determine peak water levels during storm events in 2007 and 2008. The rain gardens monitored include: Arlington-McKinley, Asbury North, Asbury South, Frankson-McKinley, Hamline Midway, Pascal Center, Pascal North and Pascal South.

Ms. Baker returned to complete the presentation. Ms. Baker outlined the total solids loading calculation, P8 modeling, BMP operation and maintenance, and the cost benefit analysis. Ms. Baker noted that the Arlington Pascal Stormwater Improvement Project had a project capital cost of approximately \$2.7 million, which includes the costs of construction, design, and bond interest. Ms. Baker further described the monitored and modeled APSIP BMP performance results.

APSIP BMP Monitored Performance Results

Ms. Baker said the APSIP BMPs have performed very well. In the 2007 and 2008 monitoring seasons, AHUG was the most efficient of the BMPs. AHUG had 100% volume reduction and total phosphorous (TP) and total suspended solids (TSS) removal efficiencies in both years. In 2007 and 2008, Trench 5 had volume reduction efficiencies of 97% and 99% respectively. Trench 4 had a higher volume reduction efficiency in 2008 (95%) than in 2007 (73%). 2008 was the first year of operation for the Como Park Regional Pond and it performed better than expected. The pond was more efficient at removing TSS (83%) than TP (45%). It also reduced stormwater volume by 27%.

APSIP BMP Modeled Performance Results

In 2007, all APSIP BMPs, except for the Como Park Regional Pond which was not operational, were very efficient at infiltrating stormwater runoff and removing TP and TSS; all had volume reduction and TP and TSS removal efficiencies between 88% and 100%. AHUG had the highest volume reduction and pollutant removal efficiencies of the BMPs. The infiltration trenches had higher removal efficiency for TSS than for volume or for TP.

In 2008, AHUG, the infiltration trenches, and the rain gardens were all very efficient at infiltrating stormwater runoff and removing TP and TSS; all had volume reduction and TP and TSS removal efficiencies between 96% and 100%. The Como Park Regional Pond was efficient at TSS removal (83%) but had moderate TP removal efficiency (45%). The pond was not designed for stormwater infiltration but in its first year of operation the pond had a higher than expected volume reduction removal efficiency of 27%. However, this is not to be expected in subsequent years as debris and sediment accumulation will seal the pond and prevent infiltration.

The 2007 volume reduction and TP and TSS removal efficiencies for AHUG met the projected annual efficiencies. The volume reduction and TP and TSS removal efficiencies for the infiltration and rain gardens were slightly less than the projected efficiencies. In 2008, the APSIP BMPs generally performed better than expected. Volume reduction and TP and TSS removal efficiencies for all APSIP BMPs met or exceeded the projected efficiencies.

The 2007 total APSIP TP load reduction was 46 pounds (lbs) and was below the 2003 APSIP predicted annual TP load reduction of 77 lbs. However, all BMPs were not operational. The 2007 TP load reduction for AHUG exceeded its predicted annual TP load reduction and the 2007 TP load reductions for the underground infiltration trenches and the rain gardens were less than the predicted reduction. The 2008 APSIP TP load reduction of 75 lbs was slightly less than the 2003 predicted project reduction.

The amount of settleable solids captured by pretreatment devices connected to AHUG and the infiltration trenches and settleable solids captured by the BMPs themselves was significant in 2007 and 2008. In 2007, settleable solids captured by the pretreatment units accounted for half (48%) of the total solids load to all

APSIP BMPs. In 2008, settleable solids captured by the BMP themselves accounted for 71% of the total solids load to all the BMPs.

APSIP BMP Operation and Maintenance

Ms. Baker said overall, BMP operation and maintenance (O & M) costs and total hours spent maintaining BMPs decreased from 2007 to 2008. The projected O & M costs for AHUG, Como Park Regional Pond, and infiltration trenches are expected to be fairly consistent with 2008 O & M costs. The O & M cost for the rain gardens is expected to decrease in subsequent years.

The volume reduction and pollutant removal costs are directly affected by year-to-year fluctuations in annual operating costs and annual stormwater volume and pollutant reductions by each BMP. BMPs such as the rain gardens have higher volume reduction and TP removal costs than other BMPs. However, the role the rain gardens play in public education and outreach, aesthetics, and wildlife habitat should also be taken into consideration.

In 2007, the infiltration trenches had the lowest volume reduction and total solids removal cost of the APSIP BMPs. AHUG had the lowest TP removal cost. In 2008, the Como Park Regional Pond had the lowest TP and total solids removal and volume reduction costs of the APSIP BMPs. Projected volume reduction and TP and total solids removal costs were generally greater than those in 2007 and less than those in 2008.

Anna Eleria distributed a Como 3 analysis update to the Board for comparison. Discussion occurred. The Board thanked Ms. Baker and Mr. Loyas for their work and the presentation.

V. Action Items

Consent Agenda

Manager Piram asked for a motion to approve the October 21, 2009 Consent Agenda as presented.

Motion 09-10-12:

- A) Approve Minutes of the October 7, 2009 Regular Meeting as presented.*
- B) Approve Accounts Payables for \$102,228.53 and the Accounts Receivable for \$56,000.26 for the month of September 2009 and direct Board President and Treasurer to endorse and disperse checks for payment.*
- C) Approve Hamline Midway Coalition Stewardship Grant with reimbursement funding not to exceed \$545.00 subject to the following conditions:*
 - 1. Hamline Midway Coalition must secure permission from the City of Saint Paul to construct a rain garden on park property;*
 - 2. CRWD and the Hamline Midway Coalition must approve and enter into a Cooperative Agreement;*
 - 3. Any changes to project plans must be approved by the CRWD; and*
 - 4. All conditions must be met and the project completed within one year after project approval.*

Jones/Deneen

Unanimously approved

Discussion

D) Saint Paul Community Education Grant (Beckman)

Ms. Beckman said on October 5, 2009 CRWD received a grant request from St. Paul Public Schools Community Education (SPPSCE) to offer 1.) three rain barrel workshops to St. Paul residents in spring and summer 2010; and 2.) 19 half-day camp scholarships for Environmental Explorers camp in summer 2010. Ms. Beckman explained that for the rain barrel workshops, grant funds will be used to reduce the fee and costs of Verde Strategies' provision of three rain barrel workshops as a SPPSCE Adult Enrichment offering

in spring 2010. Ms. Beckman explained that by subsidizing these costs, the income barrier will be diminished and residents of a wider income range will have the opportunity to participate. Workshops will be held at Homecroft Early Learning Center, Como Senior High School, and Ramsey Junior High School. All sites are located within CRWD, and the three workshops will serve up to 120 residents who will pay a \$32 participation fee.

Ms. Beckman explained that for the Camp scholarships, the grant will also be used to provide 19 half-day camp scholarships for youth from low income families to attend Environmental Explorers camp at a cost of \$110 each. Through experiments, observation and hands-on discovery, Environmental Explorer campers learn about our local water resources what they can do to protect them. They are encouraged not only to explore, but to become stewards. CRWD funded this program in 2009, and provided programming for one day of water quality monitoring at Como Lake.

Motion 09-10-13: *Approve the St. Paul Public Schools Community Education project with reimbursement funding not to exceed \$6,000.00 subject to the following conditions:*

- 1) *The CRWD and St. Paul Public Schools Community Education must both approve and enter into a Cooperative Agreement;*
- 2) *Changes to rain barrel education or camp programming must be reviewed by CRWD; and*
- 3) *All conditions must be met and the project completed by December 31, 2010.*

Deneen/Collins

Unanimously approved

Ms. Beckman said she received a request from a teacher at an environmental charter school that just opened this year near Harriet Island named River's Edge Academy inquiring about the Stewardship Grant Program. Ms. Beckman asked the Board if they would consider funding a rain garden outside the District. Manager Piram said the school should submit an application and additional information about the students and the Board will consider it.

E) DNR Conservation Partners Legacy Grant Program (Eleria)

Ms. Eleria said the Minnesota Department of Natural Resources (DNR) is accepting proposals until November 3, 2009 for projects that protect, restore or enhance prairies, wetlands, forests, or habitat for fish, game or wildlife. The maximum individual award is \$400,000 and the minimum match is 10% of the total project cost, which can be cash or in-kind services in any combination. Ms. Eleria said staff will request a \$54,000 grant for the development of the Willow Reserve Restoration Plan that is consistent with the adopted Loeb Lake and Willow Reserve Management Plan. This amount is 90% of the total cost of the project, which would cover the costs associated with hiring a consultant for the technical and writing portions of the project. CRWD would provide an in-kind match of labor to coordinate the stakeholder group and development of the restoration plan. CRWD will seek additional partners for the project including the City of Saint Paul and the District 6 Planning Council. Ms. Eleria said there is one condition and that is that the District receives approval from the City of St. Paul. Ms. Eleria said staff has a meeting tomorrow morning with the City of St. Paul Public Works and Parks and Recreation staff.

Motion 09-10-14: *Authorize submission of the proposal for the Willow Reserve Restoration Plan to DNR's Conservation Partners Legacy Grant Program subject to the following condition: the City of Saint Paul, the land managers of Willow Reserve, approves this project.*

Deneen/Jones

Unanimously approved

VI. Unfinished Business

A) Cleveland Randolph Groundwater Study Update (Kelley)

Mr. Kelley said CRWD staff held a Cleveland Randolph Groundwater neighborhood meeting last Monday October 12th at the Hillcrest Recreation Center. There were approximately 25 people. Kelley said staff has received about 350 surveys out of the 1600 that were mailed. Manager Piram noted that both Forrest Kelley and Dan Solas did a great job at the meeting and the residents were very involved. Mr. Barton noted that there was an article in the Highland Villager about the Groundwater Study.

B) Central Corridor Light Rail Transit Stormwater Update (Kelley)

Mr. Kelley said District staff has been meeting with the consulting team, Barr Engineering, EOR, Inc and Wenck and Associates almost weekly reviewing additional BMPs that can be implemented throughout the corridor. Staff reviewed with the Board the current proposed cross section of the tree trench plan. Staff also reviewed technical considerations for what items would be considered under the cost cap. Those elements included the infiltration trench below the overflow elevation, pervious pavers and structural soil required to receive up to two inches of runoff from the sidewalk area. Staff then reviewed the current concepts for additional BMPs along the corridor. Manager Collins asked if this would be outside of the right-of-way. Mr. Kelley said no this would be within the public right-of-way and within the construction limits of the central corridor. Administrator Doneux also clarified that going forward CRWD funding would be used exclusively for the additional BMPs and City funding could be applied towards the tree trench concept and/or additional BMPs. The Board concurred with this approach.

C) Watershed Management Plan Update (Doneux)

Administrator Doneux noted that staff distributed the draft 2010 Watershed Management Plan (WMP) for the first required 60-day review period. The comment period ends December 24, 2009. Administrator Doneux said there is no action for the Board until after the 60-day review period. There will be a Special Board meeting in January 2010 for staff to review the comments with the Board.

VII. General Information

A) Administrator's Report

Administrator Doneux noted that three high profile projects; Central Corridor, BMP Report and the WMP Plan have taken a lot of staff's time and wanted the Board to understand that some of the small projects have been set aside briefly.

B) CAC Update (Manager Thienes)

Manager Thienes said Karen Solas from the Friends of the Mississippi River gave a presentation on the Gorge Stewards Program. There was a Central Corridor Light Rail Transit Update and a Gottfried Pit Lift Station Improvement Project update. Manager Piram asked if the City of Roseville signed off on Gottfried Pit yet. Administrator Doneux said not yet, he did not think it had come to their council yet.

VIII. Meeting Agenda Review

Wednesday, November 4, 2009 Regular Meeting Agenda Review

IX. Adjournment – 8:20 p.m. adjourned by consensus.

Respectfully submitted,

Dawn Nelson