



APPROVED July 13, 2011

# Capitol Region Watershed District

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Citizen Advisory Committee Meeting

Wednesday May 11, 2011 – 7:00 p.m.

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## CAC Members Present:

David Arbeit, Janna Caywood,  
Steve Duerre, Michael  
MacDonald, Shirley Reider,  
Mike Trojan, Michelle Ulrich,  
Jerome Wagner, Gwen  
Willems

## Members absent with notice:

Ted McCaslin

## Others Present:

CRWD Manager Mike Thienes  
Dawn Nelson, CRWD Staff  
Matt Loyas, CRWD Staff

## Welcome, Announcements, and Updates

Shirley Reider opened the meeting at 7:00 p.m. with a request for announcements. Ms. Reider announced that the committee received Jim Cotner's resignation and requested a card thanking him for his dedication to the committee. Ms. Nelson provided the committee with a card for everyone to sign. Mike MacDonald announced that the District 10 Como Community Council is trying to conduct a turtle study at Como Lake. Mr. MacDonald said there are a group of people that are counting turtles at the lake.

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

Jerome Wagner recommended a film at the University of Minnesota about urban runoff. Anyone interested in more information on the film can contact Dr. Martin from the University. Mr. Wagner reiterated his desire to have the Board discuss revising the District's mission statement.

## Approval of Agenda

Ms. Reider asked for additions or changes to the Agenda. There were no additions or changes to the Agenda.

**CAC 11-05-01 Motion:** *To approve the CAC May 11, 2011 agenda as provided.*

Arbeit/Duerre

Unanimously approved

## Approval of the April 13, 2011 CAC Minutes

Ms. Reider asked for additions or changes to the April 13, 2011 CAC Minutes.

**CAC 11-05-02 Motion:** *To approve the CAC April 13, 2011 CAC Minutes as provided.*

Arbeit/Wagner

Unanimously approved

## Items for Review and Comment Requested by the Board of Managers

### 2010 Water Monitoring Report, Matt Loyas, Water Resource Technician

Mr. Loyas reviewed the 2010 draft Monitoring Report. Mr. Loyas stated he would review the monitoring locations, monitoring methods, the data analysis, monitoring results, and the proposed 2011 Monitoring. Mr. Loyas said from late March through December 2010, CRWD collected water quality and flow data from storm sewers, stormwater ponds, lakes and BMPs at 15 stormwater sites. Of those 15 sites, nine sites were full monitoring stations where both water quality and flow data were collected. Four major subwatersheds in CRWD; East Kittsondale, Phalen Creek, Saint Anthony Park, and Trout Brook, had full monitoring stations.

The other full monitoring stations collected data from portions of two major subwatersheds, Saint Anthony Park and Trout Brook. Como 7, Villa Park, Trout Brook – West Branch, and Trout Brook – East Branch are located within Trout Brook subwatershed while Sarita is located within the Saint Anthony Park subwatershed. Samples were collected during both baseflow (dry weather) and stormflow (wet weather) and were analyzed for a suite of water quality parameters including nutrients, sediment, metals, and bacteria. Of the remaining six sites, two were flow-only stations at Como Lake and Lake McCarrons and four were water level recording stations at four stormwater ponds located in the Trout Brook subwatershed. Mr. Loyas said Ramsey County Public Works Department monitored water quality of the four lakes in CRWD on a monthly or bi-monthly basis from May through September. The lakes were monitored for a suite of water quality parameters including nutrients, water clarity, and chlorophyll *a*.

Mr. Loyas said 2010 was a record-breaking year for precipitation based on historical averages. Compared to other monitoring years, 2010 had the highest recorded rainfall totals. Five monitoring sites were monitored throughout the entire year and collected an average of 355 days of data each. These five sites collected data for three of the four major subwatersheds. Sites not monitored for the entire year collected an average of 205 days of data each.

Mr. Loyas said in general, CRWD major subwatersheds had greater flow and higher phosphorus and sediment loads and yields in 2010 than in previous years. Trout Brook subwatershed generated the highest discharge and Total Phosphorous (TP) and Total Suspended Solids (TSS) loads in CRWD with Phalen Creek and St. Anthony Park subwatersheds producing the next highest TP and TSS loads. Most of this pollutant loading occurred during storms rather during dry weather conditions. On a per acre basis, the water export was highest from Phalen Creek subwatershed compared to the other major subwatersheds. Trout Brook subwatershed had the second highest water yield. In terms of pollutant concentrations and yields, East Kittsondale had highest flow-weighted average concentrations of TP and TSS in 2010, but the concentrations were moderate in comparison to other monitoring years. In East Kittsondale, land use and activities produced higher pollutant loading per acre of land and per inch of runoff than other subwatersheds.

Mr. Loyas said for the most part, CRWD was more polluted for TP and TSS than the Mississippi River and minimally impacted streams in this ecoregion with CRWD monitoring sites having higher flow-weighted average concentrations. While East Kittsondale subwatershed had the highest TP and TSS flow-weighted average concentrations, Trout Brook subwatershed had the lowest flow-weighted concentrations.

Mr. Loyas noted that besides phosphorus and sediment being pollutants of concern in CRWD, metals and bacteria issues were identified in 2010. During storm events, the average lead and copper concentrations at all monitoring sites except one were higher than the state standards. Average zinc concentrations during storms at five monitoring sites were higher than the state standard.

Mr. Loyas said nearly all samples from every site during storm events in 2010 exceeded the maximum standard for *E. coli* bacteria with many concentrations much higher than the maximum standard, several greater than 72,700 mpn/100mL. Conversely, during dry weather, all monitoring sites except East Kittsondale met the maximum standard for *E. coli* bacteria. However, beginning in late May, all dry weather *E. coli* samples were consistently below the maximum standard for the East Kittsondale Sites. It was at this time that the source of high bacteria concentrations immediately dropped and no other dry weather bacteria samples have been found to exceed the standard in 2010.

Mr. Loyas said in comparison to stormwater from other urbanized areas in the country, CRWD had higher median concentrations for numerous pollutants including bacteria, total suspended solids, total phosphorus,

total Kjeldahl nitrogen, copper and lead. Median concentrations of ammonia, nitrate+nitrite and cadmium were lower in CRWD than in other urban communities.

Mr. Loyas said because of the extremely wet monitoring season, all four lakes experienced increased total phosphorus and chlorophyll *a* concentrations, which was especially apparent in Crosby Lake. Only Como Lake did not meet the state eutrophication standard, which is based on total phosphorus and chlorophyll *a* concentrations and water clarity (secchi depth).

Mr. Loyas said based on the results and findings of the 2010 monitoring program, CRWD makes several recommendations for 2011. CRWD will continue to document illicit discharges, collect water additional water quality data, and work with the City of Saint Paul to eliminate other potential sources of pollution. CRWD will also further investigate the data from the six years of monitoring better identify relationships between portions of the subwatersheds, the variations from year to year, and the differences in discharge and pollutant loading between baseflow and stormflow.

## **Discussion**

### **Como Lake Neighborhood Network, Community Clean ups, Janna Caywood**

Janna Caywood provided an update on the Como Lake Curbside Clean up. Ms. Caywood said the Como Lake Neighbor Network (CLNN) is a group of Como Lake residents that got together in July 2009 to learn about the Lake and what residents could do to help with the algae problem. In early 2010 they learned from Freshwater Society about a program called "Community Cleanups for Water Quality." The program, developed by Friends of the Minnesota Valley, shows local residents how to engage their fellow neighbors in a community effort to cleanup up leaves and grass clippings from street curbs and boulevards, thereby preventing the debris from washing down storm drains and into local waters. Organics in stormwater contribute significant amounts of phosphorus to lakes and rivers, fueling the excessive growth of noxious algae blooms.

CLNN applied for and was awarded a Stewardship Grant for \$610 from CRWD to conduct a 2010 cleanup effort in Como. CLNN tweaked the model to make it specific to Como Lake and the Como neighborhood and changed the name to "Como Lake Curbside Cleanup." CLNN organized their first cleanup in April 2010 in a 30 block area east of the lake. They created a brochure that explained Como's algae problem, invited neighbors to take part by cleaning their own stretch of curb and boulevard, and delivered the brochures to neighbors' doors. Ms. Caywood noted that the City of Saint Paul partnered with CLNN by providing bag pickup for the spring 2010 clean up. District 10 Community Council also partnered and helped promote the event to neighbors. Ms. Caywood said 150 bags were filled by Como neighbors from the 30 block project area. That's 30 pounds of phosphorus and 30,000 pounds of algae prevented.

Following this success, Ms. Caywood said CLNN had another clean up in October 2010 that covered the same 30 block area, plus added 10 more blocks. Ms. Caywood said 450 bags were filled by Como neighbors from the 40 block project area which is 90 pounds of phosphorus and 45 tons of algae prevented. CLNN's partners in Fall 2010 included CRWD, District 10, City of Saint Paul, Conservation Corps MN Youth Outdoors, Como Park Senior High and Freshwater Society, and the residents living in the project area.

Ms. Caywood said Freshwater Society was so pleased with these results that they partnered with CLNN, CRWD (who provided a partner grant), Conservation Corps MN, and the University of Minnesota's Water Resources Center to do a neighborhood study of Como residents that is known as a Knowledge, Attitude and Practices (KAP) study; a door-to-door survey in the Como neighborhood about urban stormwater pollution

and its effect on Como Lake. The baseline survey was conducted in March 2011 and will be conducted again after the Fall 2011 clean up.

A third cleanup was organized by CLNN in April 2011. One major difference from 2010, Ms. Caywood said, was the City of Saint Paul did not collaborate on bag pickup so the project area east of the lake was shrunk to 25 blocks and bag pickup was organized entirely by the neighbors of CLNN. New blocks south and west of the lake were added to the brochure distribution in April 2011, but neighbors were not organized in these areas to provide collaborative bag pickup, which resulted in fewer neighbors participating from those areas CLNN thinks. Partners for the April 2011 cleanup included CRWD, City of Saint Paul, District 10, Youth Outdoors, Freshwater Society, Citizens League, Black Bear Crossings, Abetto's Deli, Veolia, Ramsey County, Water Resource Science grad students. And the residents of Como. Ms. Caywood said there were donations this year including Veolia donating a roll off bin to collect the debris and take it to composting. Abettos donated pizzas for the celebration after the clean up. And Black Bear Crossings donated 30 gift certificates for free Como Lake paddle boat rides for neighbors who helped with the day's events. Weather challenges hampered the Spring 2011 cleanup and the original date of April 16th was changed to April 30<sup>th</sup> because of snow. Ms. Caywood said 172 bags were filled by Como neighbors from a 25 block project area. That is 34.4 pounds of phosphorus and 17.2 tons of algae prevented.

In closing, Ms. Caywood said as she talks with her Como neighbors about this community effort to prevent phosphorus from Como Lake it has become apparent there are many residents who do not have a clear idea of what the citizen role is in taking care of Como Lake. Many feel it is primarily government's role to "maintain" the lake, though they cannot be specific on what this entails. Her Como neighbors are, however, in agreement, with a few notable exceptions, that resident have a shared responsibility with government to keep debris away from curbs and out of storm drains. She is interested in exploring this issue of "perceived role" further.

Discussion occurred and the committee agreed that this should be explored further. David Arbeit suggested a full CAC meeting be devoted to this topic. He also suggested we invite Karlyn Eckman to talk about the KAP survey and responses received from the Como neighbors. Shirley Reider agreed that the committee should continue the discussion.

## **Staff and Program Updates**

### **CRWD Logo Update, Dawn Nelson**

Ms. Nelson said the existing District logo was created in 1998 and designed mostly for use on print materials, such as letterhead, newsletters and brochures where inclusion of CRWD's contact information with the logo was deemed necessary.

Dawn Nelson said at the May 4<sup>th</sup> Board meeting the Managers reviewed and approved a draft request for proposals (RFP) for logo design services. Upon approval from the Board, CRWD staff will disseminate the RFP to graphic designers or design firms recommended by CRWD Managers and staff. Ms. Nelson said she didn't know the timeframe for the selection of the design firm but was positive that logo selections will be provided to the CAC for their input.

### **Board of Managers and CAC Observer Update**

Manager Thienes reviewed recent Board actions including a special report on the 2010 Water Monitoring Report by Matt Loyas. There was a special meeting April 18<sup>th</sup> with the City of Saint Paul to discuss RSVP Projects. The Board approved the 2011 Special Grants, the 2011-2012 Green Corps application and the RFP

*"Our mission is to protect, manage, and improve the water resources of the Capitol Region Watershed District."*

to update the CRWD logo. There was a special report on the U of M Capstone Project, Villa Park Subwatershed Study by students of the University.

**Discussion - New & Old Issues**

No discussion.

**June 8, 2011 Agenda Overview**

Ms. Nelson said the WMP summary may be ready for the next meeting. Mr. Arbeit asked for an update on current projects.

**Adjourn** – The meeting adjourned at 9:08 pm by consensus.

Respectfully submitted,

Dawn Nelson

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