1. CALL TO ORDER and ROLL CALL

2. CITIZEN FORUM ON NON-AGENDA ITEMS - Citizens may address the Commission about any item not contained on the regular agenda. A maximum of 15 minutes is allowed for the Forum. If the full 15 minutes are not needed for the Forum, the Commission will continue with the agenda. The Commission will take no official action on items discussed at the Forum, with the exception of referral to staff or a Commissions Committee for a recommendation to be brought back to the Commission for discussion/action.

3. APPROVAL OF AGENDA

4. CONSENT AGENDA
   A. Approval of Minutes - September 15, 2016 Commission Meeting
   B. Approval of October 2016 Financial Report
   C. Approval of Payment of Invoices
      i. Keystone Waters, LLC – September 2016 Administrator Services
      ii. Keystone Waters, LLC – September Meeting Materials Distribution Expenses
      iii. Barr Engineering – September 2016 Engineering Services
      iv. Triple D Espresso – October 2016 Meeting Refreshments
      v. Weneck – September 2016 WOMP Monitoring
      vi. Lawn Chair Gardener – September 2016 Educational Services
      vii. Kennedy Graven – August 2016 Legal Services
      viii. LCMIT – Bond Insurance Coverage
      ix. ECM Publishers – Public Hearing Notice Publications (2)
   D. Approval to Set November/December TAC Meeting

5. BUSINESS
   A. Receive Update on Minnesota Buffer Initiative from Board of Water and Soil Resources
   B. Consider Technical Advisory Committee Recommendations
      i. MDNR Buffer Map
      ii. Checklist of BCWMC Policy Implementation by Cities
      iii. Guidance for Using Request for Proposals (RFP) Process
      iv. Engineering Pool
      v. Schaper Pond Effectiveness Monitoring
   C. Consider Request from Administrator to Attend Minnesota Association of Watershed Districts Annual Conference

6. COMMUNICATIONS
   A. Administrator’s Report
      i. Reminder of Wednesday November 16th BCWMC Meeting
   B. Chair
C. Commissioners
   i. Update on Bassett Creek Greenway Corridor Discussions, Minneapolis
   ii. Report on Clean Water Summit
   iii. Report on Water Resources Conference
   iv. Report on Westwood Nature Center Event
D. TAC Members
E. Committees
   i. APM/AIS Committee – Meeting Materials
   ii. Administrative Services Committee – Upcoming Meeting 11/4
F. Legal Counsel
G. Engineer

7. INFORMATION ONLY (Information online only)
   A. CIP Project Updates: Now Available Online http://www.bassettcreekwmo.org/projects
   B. Grant Tracking Summary and Spreadsheet
   C. Water Links Fall Newsletter - https://content.govdelivery.com/accounts/MNHENNE/bulletins/16822da
   D. West Metro Water Alliance September Meeting Minutes
   E. WCA Notice of Decision for Exemption, Plymouth

8. ADJOURNMENT

Upcoming Meetings & Events
- **BCWMC APM/AIS Committee Meeting:** Tuesday October 25th, 8:30 – 10:00 a.m., Community Room, Golden Valley Byerlys
- **BCWMC Administrative Services Committee Meeting:** Friday November 4th, 8:30 – 10:30 a.m., Council Conference Room, Golden Valley City Hall
- **BCWMC Regular Meeting:** Wednesday November 16th, 8:30 a.m., Council Conference Room, Golden Valley City Hall

Future Commission Agenda Items list
- Address Organizational Efficiencies
- Finalize Commission policies (fiscal, data practices, records retention, roles and responsibilities, etc.)
- Presentation on joint City of Minnetonka/ UMN community project on storm water mgmt
- State of the River Presentation
- Presentation on chlorides
Bassett Creek Watershed Management Commission

AGENDA MEMO
Date: October 12, 2016
To: BCWMC Commissioners
From: Laura Jester, Administrator
RE: Background Information for 10/20/16 BCWMC Meeting

1. CALL TO ORDER and ROLL CALL
2. CITIZEN FORUM ON NON-AGENDA ITEMS
3. APPROVAL OF AGENDA – ACTION ITEM
4. CONSENT AGENDA
   A. Approval of Minutes – September 15, 2016 Commission meeting- ACTION ITEM with attachment
   B. Approval of October 2016 Financial Report - ACTION ITEM with attachment
   C. Approval of Payment of Invoices - ACTION ITEM with attachments (online) – I have reviewed the following invoices and recommend approval of payment.
      i. Keystone Waters, LLC – September 2016 Administrator Services
      ii. Keystone Waters, LLC – September Meeting Materials Distribution Expenses
      iii. Barr Engineering – September 2016 Engineering Services
      iv. Triple D Espresso – October 2016 Meeting Refreshments
      v. Wenck – September 2016 WOMP Monitoring
      vi. Lawn Chair Gardener – September 2016 Educational Services
      vii. Kennedy Graven – August 2016 Legal Services
      viii. LCMIT – Bond Insurance Coverage
      ix. ECM Publishers – Public Hearing Notice Publications (2)
   D. Approval to Set November/December TAC Meeting – ACTION ITEM no attachment – The Technical Advisory Committee should meet in November or December to continue their discussion and make recommendations on the use of MIDS performance standards for linear projects.

5. BUSINESS
   A. Receive Update on Minnesota Buffer Initiative from Board of Water and Soil Resources (BWSR) – INFORMATION ITEM with attachment – In June 2015 Governor Dayton signed a Water Quality Buffer Initiative into law. The law requires a perennial vegetative buffer—50 feet wide along public waters and 16.5 feet wide on public ditches. BWSR staff will provide an overview of the law and how it will be implemented in municipal areas. An overview of the law and the “MS4” (i.e., city) exemption policy are included in meeting materials. The “buffer map” will also be discussed with Item 5Bi below.
   B. Consider Technical Advisory Committee (TAC) Recommendations – ACTION ITEM with attachments - The TAC met on October 6th to discuss a variety of topics. Please see their recommendations in the attached memo along with a separate document, the “city checklist,” included for item 5Bii.
      i. MDNR Buffer Map
      ii. Checklist of BCWMC Policy Implementation by Cities
      iii. Guidance for Using Request for Proposals (RFP) Process
      iv. Engineering Pool
      v. Schaper Pond Effectiveness Monitoring

1
C. Consider Request from Administrator to Attend Minnesota Association of Watershed Districts (MAWD) Annual Conference – ACTION ITEM with attachment (full document online) – I am seeking approval to attend the MAWD conference December 1 – 2 in Alexandria, MN again this year including the pre-conference workshop on the “Art of Facilitation” ($85), conference registration ($185), one night’s lodging ($99), mileage ($154), and time attending sessions (approximately 16 hours or $1,072) for a total of $1,595. These costs would fit within the “Administrator” budget line.

6. COMMUNICATIONS
   A. Administrator’s Report – INFORMATION ITEM with attachment
      i. Reminder of Wednesday November 16th BCWMC Meeting
   B. Chair
   C. Commissioners - INFORMATION ONLY no attachments
      i. Update on Bassett Creek Greenway Corridor Discussions, Minneapolis
      ii. Report on Clean Water Summit
      iii. Report on Water Resources Conference
      iv. Report on Westwood Nature Center Event
   D. TAC Members
   E. Committees - INFORMATION ONLY no attachments
      i. APM/AIS Committee – Meeting Materials
      ii. Administrative Services Committee – Upcoming Meeting 11/4
   F. Legal Counsel
   G. Engineer

7. INFORMATION ONLY (Information online only)
   A. CIP Project Updates: Now Available Online http://www.bassettcreekwmo.org/projects
   B. Grant Tracking Summary and Spreadsheet
   C. Water Links Fall Newsletter - https://content.govdelivery.com/accounts/MNHENNE/bulletins/16822da
   D. West Metro Water Alliance September Meeting Minutes
   E. WCA Notice of Decision for Exemption, Plymouth

8. ADJOURNMENT

   Upcoming Meetings & Events
   • BCWMC APM/AIS Committee Meeting: Tuesday October 25th, 8:30 – 10:00 a.m., Community Room, Golden Valley Byerlys
   • BCWMC Administrative Services Committee Meeting: Friday November 4th, 8:30 – 10:30 a.m., Council Conference Room, Golden Valley City Hall
   • BCWMC Regular Meeting: Wednesday November 16th, 8:30 a.m., Council Conference Room, Golden Valley City Hall
1. CALL TO ORDER AND ROLL CALL

On Thursday, September 15, 2016, at 8:32 a.m. in the Council Conference Room at Golden Valley City Hall (7800 Golden Valley Rd.), Chair de Lambert called to order the meeting of the Bassett Creek Watershed Management Commission (BCWMC) and asked for roll call to be taken.
Administrator Jester reported that she was trying a new caterer for meeting refreshments that’s located across the street and would be providing non-disposable plates, cups and utensils. She said that she is happy to take comments on the coffee or refreshments.

2. CITIZEN FORUM ON NON-AGENDA ITEMS

No comments from citizens.

3. APPROVAL OF AGENDA

**MOTION:** Alt. Commissioner Tobelmann moved to approve the agenda. Commissioner Welch seconded the motion. Upon a vote, the motion carried 9-0.

4. CONSENT AGENDA

**MOTION:** Commissioner Mueller moved to approve the consent agenda. Alt. Commissioner Scanlan seconded the motion. Upon a vote, the motion carried 9-0.

The following items were approved as part of the consent agenda: the August 18, 2016, Commission Meeting Minutes, the September 2016 Financial Report, the payment of invoices, the purchase of bond insurance per the Joint Powers Agreement, and the comment letter on the Mississippi Watershed Management Organization’s 2016 Minor Plan Amendment.

The general and construction account balances reported in the September 2016 Financial Report are as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Checking Account Balance</td>
<td>$583,933.86</td>
</tr>
<tr>
<td>TOTAL GENERAL FUND BALANCE</td>
<td>$583,933.86</td>
</tr>
<tr>
<td>TOTAL CASH &amp; INVESTMENTS ON-HAND (9/06/16)</td>
<td>$2,857,413.93</td>
</tr>
<tr>
<td>CIP Projects Levied – Budget Remaining</td>
<td>$3,970,569.69</td>
</tr>
<tr>
<td>Closed Projects Remaining Balance</td>
<td>($1,113,155.76)</td>
</tr>
<tr>
<td>2011-2015 Anticipated Tax Levy Revenue</td>
<td>$6,710.47</td>
</tr>
<tr>
<td>2016 Anticipated Tax Levy Revenue</td>
<td>$601,430.96</td>
</tr>
<tr>
<td>Anticipated Closed Project Balance</td>
<td>$505,014.33</td>
</tr>
</tbody>
</table>
5. PUBLIC HEARING

A. Receive Comments from Member Cities and Public on the Proposed 2017 Capital Improvement Program (CIP) Projects

Chair de Lambert opened the public hearing at 8:35 a.m. Commission Engineer, Jeff Weiss, gave a brief presentation with an overview of the Plymouth Creek Restoration Project and the Bassett Creek Main Stem Erosion Repair Project. Regarding the latter, Mr. Weiss indicated that there was no new information on when redevelopment will actually take place at the Fruen Mill site and whether or not the CIP project will be accomplished at the same time. He noted that if the project timing doesn’t line up, that during the CIP project, some concrete would be removed from the Fruen Mill streambank in order to slope back the bank and add some vegetation. He reported the Main Stem Erosion Repair Project is estimated to cost $340/linear foot which is higher than most projects due to contaminated soils and the narrow corridor where the work will take place.

Administrator Jester noted that both CIP projects will not only improve water quality by reducing erosion but will also improve instream and near stream habitat for aquatic life.

Regarding the Plymouth Creek Restoration Project, there was consensus that coordination was needed with the Plymouth Parks Department and that engaging the disc golfing community would be advantageous. It was acknowledged that signage would be needed within the park and that some disc golf holes may need to be realigned.

There was a question about the high costs of the projects and the ability for the Commission to hold costs down. Engineer Weiss noted that there would be little if any savings in constructing the projects together because of the distance between the projects. Administrator Jester reminded Commissioners that they were applying for $600,000 worth of grant funds for the two projects and that the feasibility studies already identified the most cost effective restoration and stabilization practices.

Dave Stack with Friends of Bassett Creek asked why there was such little vegetation along Plymouth Creek. Mr. Weiss indicated that the banks are very shaded by the overhead canopy and that heavy foot traffic doesn’t allow vegetation to become established.

There were no other comments or questions from the public or member cities.

Chair de Lambert closed the public hearing at 9:07 a.m.

6. BUSINESS

A. Consider Approval of Resolution 16-08 Ordering 2017 Improvements

Administrator Jester reviewed the language of the resolution indicating that by approving the resolution the Commission would officially order the two 2017 CIP projects (Plymouth Creek Restoration Project and Bassett Creek Main Stem Erosion Repair Project), designate member cities responsible for project construction, make findings pursuant to MN Statutes 103B.251, certify the costs of the projects to Hennepin County, and approve the agreements with the responsible cities. She reviewed the table in 6Aiii, which shows the costs for various aspects of the two projects including feasibility studies; Commission administration, legal and engineers costs; construction and design. She noted that the maximum levy request of $1,303,600 for 2017 that was forwarded to the County in May, was an appropriate final 2017 levy amount and that it would fund the final portion of the Northwood Lake Project and the first portion of the two 2017
projects, as shown in the table in 6Aiii.

Administrator Jester noted that the Commission will apply for $600,000 in county and state grant funding for the two 2017 projects. If no grant funding is awarded, she noted that over $947,000 in 2018 levy funds would be needed to finish the two 2017 CIP projects. She reported that it may be difficult to fund the entire 2018 CIP project (dredging Bassett Creek Park Pond and Winnetka Pond) if the Commission wishes to keep the levy at approximately $1.3M. However, she also noted there are several options for funding the 2018 project and more will be known after the feasibility study for that project is complete.

Commissioner Welch moved to amend the agreements with the City of Plymouth and the City of Minneapolis to read in Section 2: “….Minor changes that do not deviate from the direction of the Commission and do not materially change either the effectiveness of the Project to meet its intended purposes or the environmental impacts of the Project may be approved by the City, in consultation with the Commission Administrator, without requiring approvals by the Commission.” [Additions shown in italics.] Seconded by Commissioner Mueller. Upon a vote, the motion carried 9-0.

Commissioner Welch moved to adopt Resolution 16-08. Seconded by Commissioner Mueller. Upon a vote, the motion carried 9-0.

B. Consider Attendance at Aquatic Invaders Summit

Administrator Jester noted that a 2-day conference or summit on aquatic invasive species is planned for early October in St. Cloud. She asked if there were Commissioners that might be interested in attending or if the Commission would like to send her due to their current committee’s consideration of aquatic plant management and aquatic invasive species (AIS). She noted the breakout sessions of the conference weren’t set yet. She that she asked the Commission Engineer and partners such as Three River Park District (TRPD) and the City of Plymouth if they were sending staff to the conference. TRPD and Barr Engineering had noted they are sending staff to similar AIS conferences and workshops but not to the summit in St. Cloud.

Commissioner Welch moved to authorize attendance at the Aquatic Invaders Summit by the Administrator, as appropriate. Seconded by Commissioner Elder. Upon a vote the motion carried 9-0.

7. COMMUNICATIONS

A. Administrator’s Report

Administrator Jester noted that besides her written report, she reminded the Commission that the November Commission meeting will be held on Wednesday the 16th. She also noted that Len Kremer from Barr Engineering would be honored for his decades of service to the Commission during the November meeting. Commissioners listed other, former Commission members that should be invited to the November meeting to help honor Len.

Administrator Jester also updated the Commission on the Blake School Field Trip scheduled for September 29th and visiting Northwood Lake, the Main Stem restoration project through Wirth Park, the Wirth Lake outlet structure, and the Fruen Mill site.
B. Chair
   No comments

C. Commissioners
   Commissioner Hoschka reminded Commissioners to be aware of possible email scams with
   emails appearing to come from other Commissioners and asking for sensitive information or
   money.

D. TAC Members
   No comments.

E. Committees
   No comments

F. Legal Counsel
   No comments

G. Engineer
   Commission Engineer Chandler reported that the Commission Engineer is and will be reviewing
   updates to city’s floodplain ordinance per the new watershed plan. She noted that these will be
   administrative reviews unless something significant comes up within the review.

8. INFORMATION ONLY (Available at http://www.bassettcreekwmo.org/document/meeting-
   materials-minu/meeting-materials/july-21-2016)
   A. CIP Project Updates: Now Available Online http://www.bassettcreekwmo.org/projects
   B. Grant Tracking Summary and Spreadsheet
   C. Hennepin Co. Natural Resources Opportunity Grant Application Submission – Plymouth
      Creek Restoration Project
   D. WCA Notice of Exemption – Plymouth
   E. WCA Notice of Decision by BCWMC – 1143 South Shore Drive, Medicine Lake
   F. WCA Notice of Decision by BCWMC – 10715 South Shore Drive, Medicine Lake
   G. Hennepin County Input Session September 29th (morning or evening options, Brookdale
      Library, Brooklyn Center) “Envisioning the future of environmental education for youth”
      http://www.hennepin.us/business/work-with-henn-co/envisioning-future-environmental-
      education
   H. Clean Water Summit September 22nd, Minnesota Landscape Arboretum, Register at
      http://www.arboretum.umn.edu/2016cleanwatersummit.aspx
   I. State of the (Mississippi) River Report Launch and Presentation September 22nd, Science
      Museum of Minnesota, St. Paul. Free to register at http://fmr.org/events/2016/09/22/state-
      river-launch
   J. Water Resources Conference, October 18 – 19, St. Paul RiverCentre,
      http://www.wrc.umn.edu/news-events/waterconf

9. ADJOURNMENT - Chair de Lambert adjourned the meeting at 9:43 a.m.

___________________________             __________________________
Signature/Title           Date    Signature/Title           Date
**Bassett Creek Watershed Management Commission General Account**  
**General Fund (Administration) Financial Report**  
**Fiscal Year: February 1, 2016 through January 31, 2017**  
**MEETING DATE: October 20, 2016**

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<tr>
<th>BEGINNING BALANCE</th>
<th>6-Sep-16</th>
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<tr>
<td><strong>General Fund Revenue:</strong></td>
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<tr>
<td>Interest less Bank Fees</td>
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<tr>
<td>Met Council - LRT Grant</td>
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<td><strong>Permits:</strong></td>
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<tr>
<td>Loucks BCWM 2013-33</td>
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<td>Reimbursed Construction Costs</td>
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<td><strong>Total Revenue and Transfers In</strong></td>
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<td><strong>DEDUCT:</strong></td>
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<td></td>
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<td><strong>Checks:</strong></td>
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<tr>
<td>2895 Barr Engineering Sept Engineering</td>
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<tr>
<td>2896 Kennedy &amp; Graven Aug Legal</td>
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<td>2897 Keystone Waters LLC Sept Administrator Meeting Materials</td>
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<tr>
<td>2898 Triple D Espresso Oct Meeting</td>
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<td>2899 Wenck Associates Sept Outlet Monitoring</td>
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<td>2900 ECM Publishers PH Notice</td>
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<td>2901 Lawn Chair Gardener Newsletter/columns</td>
<td>800.00</td>
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<td><strong>Total Expenses</strong></td>
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<td><strong>ENDING BALANCE</strong></td>
<td>11-Oct-16</td>
<td>545,568.45</td>
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</table>
## Bassett Creek Watershed Management Commission General Account

### General Fund (Administration) Financial Report

**Fiscal Year:** February 1, 2016 through January 31, 2017  
**MEETING DATE:** October 20, 2016

### (UNAUDITED)

#### 2016 / 2017

<table>
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<tr>
<th>2016 / 2017</th>
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<tr>
<td>10,000</td>
<td>0.00</td>
<td>4,500.00</td>
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<tr>
<td>2,648.00</td>
<td>22,397.00</td>
<td>(22,397.00)</td>
</tr>
<tr>
<td>0.00</td>
<td>0.00</td>
<td>27,055.00</td>
</tr>
<tr>
<td><strong>REVENUE TOTAL</strong></td>
<td>582,400</td>
<td>4,348.00</td>
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#### EXPENDITURES

### ENGINEERING & MONITORING

| TECHNICAL SERVICES | 120,000 | 10,663.00 | 79,277.57 | 40,722.43 |
| DEV/PROJECT REVIEWS | 65,000 | 10,466.97 | 75,955.85 | (10,955.85) |
| NON-FEE/PRELIM REVIEWS | 15,000 | 330.00 | 9,020.38 | 3,979.62 |
| COMMISSION AND TAC MEETINGS | 13,000 | 300.00 | 9,020.38 | 3,979.62 |
| SURVEYS & STUDIES | 25,000 | 2,184.62 | 20,954.82 | 4,045.16 |
| WATER QUALITY/MONITORING | 76,000 | 5,171.70 | 34,645.65 | 41,354.35 |
| SHORELAND HABITAT MONITORING | 6,000 | 0.00 | 1,157.00 | 4,843.00 |
| WATER QUANTITY | 11,500 | 2,082.36 | 6,829.22 | 4,670.78 |
| WORMS INSPECTIONS -EROSION CONTROL | 1,000 | 0.00 | 0.00 | 1,000.00 |
| ANNUAL FLOOD CONTROL INSPECTIONS | 10,000 | 0.00 | 0.00 | 10,000.00 |
| REVIEW MUNICIPAL PLANS | 2,000 | 1,798.50 | 1,294.50 | (194.50) |
| **ENGINEERING & MONITORING TOTAL** | 361,500 | 34,678.32 | 266,681.69 | 94,818.31 |

### ADMINISTRATION

| ADMINISTRATOR | 62,000 | 4,822.00 | 37,795.08 | 24,204.92 |
| LEGAL COSTS | 18,500 | 875.60 | 8,181.02 | 10,318.98 |
| AUDIT, INSURANCE & BONDING | 15,500 | 113.00 | 14,606.00 | 894.00 |
| FINANCIAL MANAGEMENT | 3,200 | 0.00 | 77.60 | 3,122.40 |
| DIGITIZE HISTORIC PAPER FILES | 5,000 | 126.00 | 2,167.00 | 4,233.00 |
| MEETING EXPENSES | 2,200 | 109.38 | 1,209.04 | 990.96 |
| **ADMINISTRATION TOTAL** | 131,400 | 6,210.41 | 72,125.12 | 59,274.88 |

### OUTREACH & EDUCATION

| PUBLICATIONS/ANNUAL REPORT | 2,500 | 0.00 | 1,246.50 | 1,253.50 |
| WEBSITE | 3,500 | 0.00 | 2,047.03 | 1,452.97 |
| PUBLIC COMMUNICATIONS | 2,500 | 1,012.00 | 1,128.39 | 1,371.61 |
| EDUCATION AND PUBLIC OUTREACH | 22,500 | 800.00 | 19,651.03 | 2,848.97 |
| WATERSHED EDUCATION PARTNERSHIPS | 15,500 | 0.00 | 12,000.00 | 0.00 |
| **OUTREACH & EDUCATION TOTAL** | 46,500 | 1,812.00 | 27,572.95 | 18,927.05 |

### MAINTENANCE FUNDS

| EROSION/SEDIMENT (CHANNEL MAINT) | 25,000 | 0.00 | 0.00 | 25,000.00 |
| LONG TERM MAINTENANCE (moved to CF) | 25,000 | 0.00 | 0.00 | 25,000.00 |
| **MAINTENANCE FUNDS TOTAL** | 50,000 | 0.00 | 0.00 | 50,000.00 |

### TMDL WORK

| TMDL IMPLEMENTATION REPORTING | 20,000 | 0.00 | 16,482.00 | 3,518.00 |
| **TMDL WORK TOTAL** | 20,000 | 0.00 | 16,482.00 | 3,518.00 |

### TOTAL EXPENSES

| 609,400 | 42,700.73 | 382,861.76 | 226,538.24 |
## October 2016 Financial Report

**Cash Balance 9/6/16**

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<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>1,865,413.93</td>
</tr>
</tbody>
</table>

**Total Cash** 1,865,413.93

**Add:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Revenue (Bank Charges)</td>
<td>63.35</td>
</tr>
<tr>
<td>RBC Investment Interest</td>
<td>2,875.44</td>
</tr>
<tr>
<td>RBC Investment Interest</td>
<td>1,562.74</td>
</tr>
<tr>
<td>RBC Investment Interest</td>
<td>1,437.72</td>
</tr>
</tbody>
</table>

**Total Revenue** 5,812.55

**Less:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIP Projects Levied - Current Expenses - TABLE A</td>
<td>(693.50)</td>
</tr>
<tr>
<td>Proposed &amp; Future CIP Projects to Be Levied - Current Expenses - TABLE B</td>
<td>(7,458.54)</td>
</tr>
</tbody>
</table>

**Total Current Expenses** (8,152.04)

**Total Cash & Investments** 2,857,413.93

**Add:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Revenue (Bank Charges)</td>
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</tr>
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<td>1,562.74</td>
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<td>RBC Investment Interest</td>
<td>1,437.72</td>
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</table>

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**Less:**

<table>
<thead>
<tr>
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<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIP Projects Levied - Current Expenses - TABLE A</td>
<td>(693.50)</td>
</tr>
<tr>
<td>Proposed &amp; Future CIP Projects to Be Levied - Current Expenses - TABLE B</td>
<td>(7,458.54)</td>
</tr>
</tbody>
</table>

**Total Current Expenses** (8,152.04)

**Total Cash & Investments On Hand** 10/11/16 2,855,074.44

## TABLE A - CIP PROJECTS LEVIED

<table>
<thead>
<tr>
<th>Description</th>
<th>Approved Budget</th>
<th>2016 YTD Expenses</th>
<th>INCEPTION To Date Expenses</th>
<th>Remaining Budget</th>
<th>Grant Funds Received</th>
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<tbody>
<tr>
<td>Lakeview Park Pond (ML-8) (2013)</td>
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<td>0.00</td>
<td>11,589.50</td>
<td>184,410.50</td>
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<td>561.00</td>
<td>3,427.00</td>
<td>130,928.84</td>
<td>859,071.16</td>
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<td>Schaper Pond Enhance Feasibility/Project (SL-1)(SL-3)</td>
<td>612,000</td>
<td>0.00</td>
<td>213,668.55</td>
<td>303,263.45</td>
<td>308,736.55</td>
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<td>Briarwood / Dawnview Nature Area (BC-7)</td>
<td>250,000</td>
<td>0.00</td>
<td>230,401.91</td>
<td>250,000.00</td>
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<td>91,037.82</td>
<td>71,962.18</td>
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<td>Main Stem 10th to Duluth (CR2015)</td>
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<td>0.00</td>
<td>105,042.00</td>
<td>1,397,958.00</td>
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<td>Honeywell Pond Expansion (BC-4)</td>
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<td>1,433,740</td>
<td>132.50</td>
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<td>1,991,659.81</td>
<td>3,967,010.19</td>
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**Total** | 5,958,670 | 693.50 | 1,111,935.75 | 6,710.47 | 601,430.96 | (503,794.32) | 1,928,045.00 |
### TABLE B - PROPOSED & FUTURE CIP PROJECTS TO BE LEVIED

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<th></th>
<th>Approved Budget - To Be Levied</th>
<th>Current Expenses</th>
<th>2016 YTD Expenses</th>
<th>INCEPTION To Date Expenses</th>
<th>Remaining Budget</th>
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</thead>
<tbody>
<tr>
<td><strong>2017</strong></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>2018 Levy 282,643</td>
<td></td>
<td></td>
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<tr>
<td>Plymouth Creek Restoration (CR-P)</td>
<td>2017 Levy 400,000</td>
<td>1,064,472</td>
<td>461.00</td>
<td>16,092.50</td>
<td>65,504.63</td>
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<td>2018 Levy 664,472</td>
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<td>3,445.42</td>
<td>84,080.42</td>
<td>176,164.43</td>
<td>1,751,880.57</td>
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<td>Bassett Creek Park &amp; Winnetka Ponds Dredging (BCP-2)</td>
<td>2018 Levy 282,643</td>
<td>4,013.12</td>
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<td>17,999.16</td>
<td>(17,999.16)</td>
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<td>17,999.16</td>
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<td>102,079.58</td>
<td>199,446.39</td>
<td>1,728,598.61</td>
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### BCWMC Construction Account

**Fiscal Year:** February 1, 2015 through January 31, 2016

**October 2016 Financial Report**

### TABLE C - TAX LEVY REVENUES

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<th>County Levy</th>
<th>/ Adjustments</th>
<th>Current Received</th>
<th>Year to Date Received</th>
<th>Inception to Date Received</th>
<th>Balance to be Collected</th>
<th>BCWMO Levy</th>
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<td>620,569.04</td>
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<td>2,012.35</td>
<td>895,000.00</td>
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<td>75.30</td>
<td>754,187.05</td>
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<td>850,815.57</td>
<td>233.54</td>
<td>850,699.77</td>
<td>115.80</td>
<td>862,400.00</td>
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<td><strong>Total</strong></td>
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<td><strong>8,278.00</strong></td>
<td><strong>79,835.50</strong></td>
<td><strong>233,619.27</strong></td>
<td><strong>1,145,753.73</strong></td>
<td><strong>862,400.00</strong></td>
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### OTHER PROJECTS:

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<th>Project</th>
<th>Approved Budget</th>
<th>Current Expenses / (Revenue)</th>
<th>2016 YTD Expenses / (Revenue)</th>
<th>INCEPTION To Date Expenses / (Revenue)</th>
<th>Remaining Budget</th>
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<tr>
<td>TMDL Studies</td>
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<td>27,234.85</td>
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<td>0.00</td>
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<td>27,234.85</td>
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<td>Flood Control Long-Term</td>
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<td>Less: State of MN - DNR Grants</td>
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<td>1,145,753.73</td>
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(UNAUDITED)
## CIP Projects Leveled

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<tr>
<td>Feb 2016 - Jan 2017</td>
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<td>91,037.82</td>
<td>105,042.00</td>
<td>13,953.98</td>
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<tr>
<td>Project Balance</td>
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<td>308,736.55</td>
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</tbody>
</table>

## Levy/Grant Details

- **2009/2010 Levy**
- **2010/2011 Levy**
- **2011/2012 Levy**
- **2012/2013 Levy**
- **2013/2014 Levy**
- **2014/2015 Levy**
- **2015/2016 Levy**
- **2016/2017 Levy**

### Levy/Grant Details

- **MPCA Grant-CWP** (Total $300,000)
- **BWSR Grant- BCWMO**
- **DNR Grants-IT Maint**

### CIP Projects Leveled

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<tbody>
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### Bassett Creek Construction Project Details

#### Proposed & Future CIP Projects (to be Levied)

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<td>2,669,275.62</td>
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</table>

#### Levy/Grant Details

- **Bassett Creek Construction Project Details**
- **Proposed & Future CIP Projects (to be Levied)**
- **Other Projects**
- **TMDL Studies**
- **Flood Control Emergency Maint**
- **Flood Control Long-Term Maint**
- **Channel Maint**
- **Totals - All Projects**

**Levy/Grant Details**

- **2009/2010 Levy**
- **2010/2011 Levy**
- **2011/2012 Levy**
- **2012/2013 Levy**
- **2013/2014 Levy**
- **2014/2015 Levy**
- **2015/2016 Levy**
- **2016-2017 Levy**

- **Construction Fund Balance**
  - **BWSR Grant - BCWMO**
  - **MPCA Grant-CWPGrant**
  - **DNR Grants-LT Maint**
  - **DNR Grant**

- **Total Levy/Grants**
  - **BWSR Grants Received**
In June of 2015, Governor Dayton signed into law a new buffer initiative aimed at enhancing protection of Minnesota’s waters. The law was further clarified in 2016, and policies are currently being developed by the Board of Water and Soil Resources (BWSR) to implement the law.

What is a buffer?
A buffer, also known as a riparian filter strip, is vegetated land adjacent to a stream, river, lake or wetland. Buffers help filter out phosphorus, nitrogen, and sediment, and are an important conservation practice for helping keep water clean.

Where are buffers required?
Under the law, buffer widths will be:

- An average of 50 feet, minimum of 30 feet, on public waters, as determined by the Department of Natural Resources (DNR)
- A minimum of 16.5 feet on public drainage systems, as determined by the local Drainage Authority (usually the County or Watershed District)
- Soil and Water Conservation Districts (SWCDs) will identify other watercourses for inclusion in the county or watershed district water plan, who will then determine appropriate water quality actions for those watercourses.
- Alternative Water Quality Practices which provide a comparable water quality benefit are allowed on Agricultural lands.

The DNR recently released its statewide buffer map, which allows landowners to determine whether they are impacted by the Buffer Law. The DNR Buffer Protection Map can be found here: http://dnr.state.mn.us/buffers/index.html
How will the program work?

BWSR is working to get program details developed. Landowners may install buffers on their own at any time before the implementation deadlines. SWCDs will provide technical assistance and answer questions about financial assistance options. Landowners also have the option of working with their SWCD to determine if other alternative practices aimed at protecting water quality can be used.

Is there financial assistance available?

Yes. The 2015 Buffer Law relies on long-standing federal, state, and local programs to provide financial and technical support to landowners to implement buffers or alternative water quality practices. Landowners may use federal Farm Bill resources, such as the Conservation Reserve Program (CRP), Continuous CRP, and the Environmental Quality Incentives Program to get buffers installed. State resources include programs such as the Reinvest in Minnesota (RIM) easement program, Conservation Cost-Share, and the Minnesota Agricultural Water Quality Certification Program (AWQCP). The BWSR Board recently approved a policy that all farms who are certified under the AWQCP are deemed compliant with the buffer law requirements.

What’s the timeline?

The new law specifies:

- November 1, 2017: Buffers in place on all public waters
- November 1, 2018: Buffers in place on all public drainage systems

Who is responsible for enforcement?

Counties and Watershed Districts have the option to choose whether to be the enforcement agency for the Buffer Law. If they elect not to do so, BWSR is responsible.

Where do I go for more information?

Contact your local SWCD for more information about buffers and local requirements. For more information on the new buffer law, please visit: [www.bwsr.state.mn.us/buffers/](http://www.bwsr.state.mn.us/buffers/). The DNR map and more information about their process can be found at [http://dnr.state.mn.us/buffers/index.html](http://dnr.state.mn.us/buffers/index.html).
Policy

It is the policy of the Board of Water and Soil Resources that:

1. NPDES/SDS Program municipal separate storm sewer system (MS4) permittees are not required to take any action regarding this exemption.

2. Actions that meet the “water resources riparian protection” provision of M.S. 103F.48, Subd. 5 (4) include, separately or in combination:
   a. Perennially rooted vegetation as prescribed in M.S. 103F.48, Subd. 3(a), or
   b. Alternative riparian water quality practices as prescribed in M.S. 103F.48, Subd. 3(b), or
   c. Projects with comparable water quality protection provided by MS4 managed or sponsored infrastructure.

3. NPDES/SDS Program municipal separate storm sewer system (MS4) permittees that choose to take action to support this exemption must:
   a) have implemented a MS4 permittee sponsored project(s) which provide water quality protection comparable to a buffer for the parcel seeking the exemption; and
   b) provide evidence of (a) to the landowner and the respective SWCD.

Background

This policy provides direction to cities, townships, watershed districts, soil and water conservation districts (SWCD), counties and landowners regarding the implementation of Minnesota Statutes 103F.48, subdivision 5(4). This provision provides an exemption to landowners from the requirements of the Buffer Law if the following conditions are met:

(1) The land is subject to a NPDES/SDS Program municipal separate storm sewer system (MS4) permit; and
(2) Water resources riparian protection is provided; and
(3) The site is not inconsistent with the requirements of the state shoreland rules.

A MS4 permit does not have water resources riparian protection as a required component of the permit and the MS4 permit does not provide water resources riparian protection for areas outside the infrastructure subject to and managed by the MS4 permittee. Therefore, a MS4 permittee is not expected to provide water quality protection comparable to the buffer protection as part of the permit.

The Minnesota Pollution Control Agency (MPCA) oversees the NPDES/SDS Programs and can provide information on entities regulated under this program including specific requirements for each permit.
Policy Need:

1) Landowners need to know if the MS4 Permittee has or is planning an infrastructure project with water quality protection comparable to the buffer protection for their parcel.

2) The MS4 needs to know that they may be able to help landowners with cultivated lands achieve eligibility for an exemption from the buffer law requirements by accomplishing a project with comparable water quality protection.

3) SWCDs need to know, for progress tracking and compliance validation, if an infrastructure project with water quality protection comparable to a buffer for a parcel is being provided by the MS4 permittee.

Statutory Basis.

- Section 103F.48 Subd. 5(4)(i). Exemptions
- Section 103F.48 Subd. 7. Corrective Actions
- Section 103B.101 Subd. 12(a). Administrative Penalty Orders
- Section 103F.48 Subd. 9. Appeals and Validations of Penalty Orders
MEMO

To: Bassett Creek Watershed Management Commissioners  
From: BCWMC Technical Advisory Committee  
Date: October 11, 2016  

RE: TAC Recommendations

The BCWMC Technical Advisory Committee met on October 6th and discussed a variety of topics. They forward the following recommendations for the Commission's consideration.

TAC Members and Others at 10/6/16 TAC Meeting:

Liz Stout, Minneapolis  
Jeff Oliver, Golden Valley  
Derek Asche, Plymouth  
Erick Francis, St. Louis Park  
Richard McCoy, Robbinsdale

Megan Albert, New Hope  
Mark Ray, Crystal  
Susan Wiese, Medicine Lake  
Laura Jester, Administrator  
Karen Chandler, Engineer

1. Minnesota Water Quality Buffer Initiative Map

In June 2015 Governor Dayton signed a Water Quality Buffer Initiative into law. This law requires a perennial vegetative buffer—50 feet wide along public waters and 16.5 feet wide on public ditches. In July of this year, the official buffer map was published by the DNR which shows the waters and drainageways subject to the buffer law. The map includes all of the BCWMC’s priority waterbodies plus 12 additional DNR public waters. The map is online here: [www.dnr.state.mn.us/buffers](http://www.dnr.state.mn.us/buffers).

The Law recognizes that “other watercourses” (such as streams or ditches; not lakes or wetlands) which are not found on the DNR Buffer Protection Map may benefit from installation of buffers or alternative practices to protect and improve water quality. Hennepin County is seeking input from watershed organizations regarding whether or not “other watercourses” should be included on the map. [http://www.bwsr.state.mn.us/buffers/policy/Approved/6_Other_Watercourses%20.pdf](http://www.bwsr.state.mn.us/buffers/policy/Approved/6_Other_Watercourses%20.pdf)

**Recommendation:** The TAC reviewed the map and recommends that the Commission provide input to the County stating that there are no additional watercourses within the BCWMC that should be included on the buffer map.
2. Checklist for BCWMC Policy Implementation by Cities

Policy #107 in the 2015 BCWMC Watershed Plan (Section 4.2.10) states: The BCWMC will annually evaluate member cities’ compliance with the goals and policies of this Plan (see Section 5.1.1.6). The BCWMC will take appropriate administrative or legal action in response to non-compliance.

Staff developed the attached checklist, which was reviewed and discussed by the TAC. TAC members acknowledged that use of the checklist was likely the easiest way to gather the information and noted much of the information requested is already compiled for other city reports. The TAC noted that although the “optional items” should remain on the checklist, that cities shouldn’t be required to address those items.

**Recommendation:** The TAC recommends that the BCWMC use the checklist to gather input from the cities on the implementation of BCWMC policies, without requiring cities to complete the “optional items” section of the list. The TAC further recommended that the checklist be sent to cities in early December of each year for feedback on that calendar year’s activities such that data could be compiled in the first quarter of the following year and used in the BCWMC annual report.

In a related discussion, the TAC recommended that the Commission Engineer develop a list of items for member cities that are required to be included in local water management plans.

3. Request for Proposal Guidance

At their meeting on August 18th, the Commission approved the Budget Committee’s recommendation to get input and recommendations from the TAC on a process and/or policy related to when and how to go through an RFP process.

The TAC discussed various aspects of Commission activities and the RFP process including the benefit of the historical perspective of the Commission Engineer and the cost savings that might be realized by using different firms. The TAC noted how new and different projects could warrant using a RFP process. Regarding water monitoring activities, Mr. Oliver noted the benefit of the continuity of service of the Commission Engineer while Mr. Asche noted that the Commission already uses data collected by other organizations (such as Three Rivers Park District) indicating that using other firms to perform routine monitoring shouldn’t pose a problem. There was discussion about how the monitoring data are used and the fact that an annual detailed monitoring report may not be necessary as long as trends over time are being analyzed on a regular basis.

The TAC forwards the following recommendations to the Commission:

**Recommendations:**

a. The following projects, programs, or activities should ONLY be performed by the Commission Engineer:
   - Flood Control Project inspections
   - Development reviews
   - CIP project reviews (50% plans, 90% plans, final plans)
   - XP-SWMM model maintenance and updates
   - P8 model maintenance and updates
• Watershed-wide total maximum daily load study (TMDL)
• Local water management plan reviews- except when Barr Engineering develops the local water management plan for the city. In this case, the TAC recommended using a different firm to review the city’s plan but does not recommend using an RFP process for this simple task.

b. The types of projects that could warrant seeking proposals from others include:
• Routine lake monitoring
• Routine stream monitoring
• WOMP sample collection & equipment maintenance
• WOMP flow analysis and data analysis
• Specific studies (such as localized TMDLs, CIP effectiveness monitoring, AIS pathways analysis, subwatershed analysis, resource management plans, etc.)

The TAC further recommends using a multi-year contract for routine monitoring and to consider refining water monitoring reports.

c. Consider using a multi-year or automatically renewing contract for routine, annual work.

d. Consider refining water monitoring report format so that it’s more succinct and useful.

e. Do not use a project cost threshold to determine when to use the RFP process but instead consider each project individually.

f. Direct BCWMC Administrator to draft RFPs with assistance from city staff and others, as needed.

g. Allow the TAC to review and help refine the RFP before it’s distributed (for technical projects).

h. Allow the TAC to review and make recommendations on responses to RFPs (for technical projects).

4. Engineering Pool

The TAC considered and discussed the use of the Commission’s Engineering Pool (which currently consists of Wenck Associates, WSB & Associates, SEH & Associates, and Barr Engineering). TAC members noted that different firms have strength in different areas which is generally known by TAC members and they expressed a desire for more flexibility in helping choose firms from which to seek proposals.

**Recommendation:**

The TAC recommends that the Commission end its use of an engineering pool and instead seek proposals from qualified firms on a project by project basis with input from the TAC.
5. Schaper Pond Effectiveness Monitoring

At the June 28th TAC meeting, the TAC recommended using the Commission Engineer to perform the Schaper Pond effectiveness monitoring in 2017 and to use the project’s remaining CIP funds. At their August 18th meeting, the Commission approved the use of CIP funds for the study but did not assign an engineering firm nor specify a funding amount for the project.

Recommendation:

The TAC reiterates its recommendation to use the Commission Engineer for the Schaper Pond Effectiveness Monitoring Project and recommends a funding amount (not to exceed) $44,000 to match the estimated project cost in the Commission Engineer’s original proposal.
<table>
<thead>
<tr>
<th>Item No.</th>
<th>Activity</th>
<th>Plan Reference</th>
<th>City Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Appoint one commission and one alternate commissioner and attend commission meetings.</td>
<td>5.1.2-1</td>
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<tr>
<td>2</td>
<td>Appoint a technical advisor to the TAC and encourage the technical advisor to attend BCWMC meetings.</td>
<td>4.2.10-119; 5.1.2-2</td>
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<td>3</td>
<td>Contribute annually to the BCWMC general fund.</td>
<td>5.1.2-8</td>
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<td>4</td>
<td>Inform developers and other project applicants regarding BCWMC requirements.</td>
<td>4.2.10-120; 5.1.2-3</td>
<td></td>
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<td>5</td>
<td>Issue permits following procedure consistent with the BCWMC Plan and Requirements Document. Member cities shall permit only those projects that conform to the policies and standards of the BCWMC. Member cities shall not issue construction permits, or other approvals, until the BCWMC has approved the project.</td>
<td>4.2.10-121; 5.1.2-3</td>
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<td>6</td>
<td>Member cities shall continue managing erosion and sediment control permitting programs and ordinances as required by their NPDES MS4 permit and the NPDES Construction Stormwater General Permit. Member cities shall perform regular erosion and sediment control inspections for projects triggering BCWMC review and subject to BCWMC erosion and sediment control standards. Member cities shall report compliance to the BCWMC.</td>
<td>4.2.4-51; 4.2.4-54</td>
<td></td>
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<td>7</td>
<td>Prepare a Local Water Management Plan, which must: - satisfy content requirements of MN Rule 8410 and MN Statutes 103B.235 Subd. 2 - describe existing and proposed city ordinances, permits, and procedures addressing erosion and sediment control - assess the need for periodic maintenance of stormwater infrastructure under city jurisdiction - assess the need for waterbody classification system and/or adopt the BCWMC waterbody classification system</td>
<td>4.2.4-55; 5.1.2-4; 5.3.1.1</td>
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<td>8</td>
<td>Submit updates to local water management plans, comprehensive land use plans, and other plans to the BCWMC to evaluate consistency with floodplain standards and the Flood Control Project.</td>
<td>4.2.2-40</td>
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<td>9</td>
<td>Update city ordinances or other official controls to conform to and implement the requirements of the BCWMC and the policies presented in the BCWMC Plan within 2 years of the adoption of the BCWMC Plan. Affected ordinances/controls may include erosion and sediment control; wetland management; floodplain/zoning; stormwater management, and others.</td>
<td>5.1.2-5; 5.3.1.1</td>
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<td>10</td>
<td>Implement minimum building elevations at least 2 feet above the BCWMC-defined flood level for new and redeveloped structures (see Requirements Document)</td>
<td>4.2.2-29</td>
<td></td>
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<td>11</td>
<td>Require rate control consistent with the Flood Control project system design; require stormwater runoff leaving development and redevelopment sites to be equal to or less than the existing rates for the 2-year, 10-year, and 100-year event.</td>
<td>4.2.2-31</td>
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<tr>
<td>12</td>
<td>Maintain ordinances consistent with BCWMC floodplain standards and submit ordinance updates to the BCWMC for review.</td>
<td>4.2.2-39</td>
<td></td>
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<td>13</td>
<td>Inform the BCWMC regarding updates to city ordinances or comprehensive plans that will affect stormwater management. Stormwater management elements of the member cities’ comprehensive plans must conform to the BCWMC Plan.</td>
<td>4.2.10-113</td>
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<td>14</td>
<td>Not allow the drainage of sanitary sewage or non-permitted industrial wastes onto any land or into any watercourse or storm sewer discharging into Bassett Creek</td>
<td>4.2.1-15</td>
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<td>Category</td>
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<td>15</td>
<td>15</td>
<td>Maintain and enforce buffer requirements adjacent to priority streams for projects that will result in more than 200 years of cut or fill, or more than 10,000 square feet of land disturbance. Buffer widths adjacent to priority streams must be at least 10 feet or 25 percent of the distance between the ordinary high water level and the nearest existing structure, whichever is less (see Requirements Document).</td>
<td>4.2.5-64</td>
</tr>
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<td>16</td>
<td>16</td>
<td>Maintain and enforce buffer requirements adjacent to wetlands for projects containing more than one acre of new or redeveloped impervious area. Average minimum buffer widths are required according to the MnRAM classification (or similar classification system) (see Requirements Document)</td>
<td>4.2.6-68</td>
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<td>17</td>
<td>17</td>
<td>Develop and implement wetland protection ordinances that consider the results of wetland functions and values assessments, and are based on comprehensive wetland management plans, if available. For wetlands classified as Preserve or Manage 1, member cities shall implement standards for bounce, inundation, and runout control that are similar to BWSR guidance; member cities are encouraged to apply standards for other wetland classifications.</td>
<td>4.2.6-66</td>
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<tr>
<td>18</td>
<td>18</td>
<td>Manage wetlands in accordance with the WCA. The BCWMC will assist the member cities with managing wetlands in accordance with the WCA, as requested.</td>
<td>4.2.6-69</td>
</tr>
<tr>
<td>19</td>
<td>19</td>
<td>Manage abandoned or transferred public ditches that are not on the trunk system, but are currently part of municipal drainage systems.</td>
<td>4.2.7-77</td>
</tr>
<tr>
<td>20</td>
<td>20</td>
<td>Administer shoreland regulation and are required to adopt MDNR-approved shoreland ordinances, in accordance with the MDNR’s priority phasing list.</td>
<td>4.2.8-80; 5.3</td>
</tr>
<tr>
<td>21</td>
<td>21</td>
<td>Adopt State buffer and/or shoreland management requirements for public waters in incorporated areas, if and when they are promulgated.</td>
<td>4.2.8-89</td>
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<td>22</td>
<td>22</td>
<td>Inventory, classify and determine the functions and values of wetlands, either through a comprehensive wetland management plan or as required by the Wetland Conservation Act (WCA).</td>
<td>4.2.6-65</td>
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<td>23</td>
<td>23</td>
<td>Maintain a database of wetland functions and values assessment results.</td>
<td>4.2.6-65</td>
</tr>
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<td>24</td>
<td>24</td>
<td>Share groundwater elevation data, where available, with the BCWMC.</td>
<td>4.2.3-50</td>
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<td>25</td>
<td>25</td>
<td>Provide BMP information to the BCWMC to allow updates to the BCWMC watershed-wide PB water quality model.</td>
<td>4.2.1-16</td>
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<td>26</td>
<td>26</td>
<td>Annually inspect wetlands classified as Preserve for terrestrial and emergent aquatic invasive vegetation, such as buckthorn and purple loosestrife, and attempt to control or treat invasive species, where feasible</td>
<td>4.2.6-72</td>
</tr>
<tr>
<td>27</td>
<td>27</td>
<td>Formally notify the Commission Engineer regarding their completed maintenance and repair actions on any of BCWMC Flood Control Project features.</td>
<td>Approved TAC recommendation (policy pending)</td>
</tr>
<tr>
<td>28</td>
<td>28</td>
<td>Perform the initial response to an emergency involving BCWMC Flood Control Project features, as the BCWMC is not set up to perform these emergency management and response services.</td>
<td>Approved TAC recommendation (policy pending)</td>
</tr>
<tr>
<td>29</td>
<td>29</td>
<td>Perform maintenance, repair and replacement of road crossings, and their corresponding conveyance structures, that were installed as part of the Flood Control Project (unless there is another road authority).</td>
<td>4.2.2-23; Approved TAC recommendation (policy pending)</td>
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<td>Item No.</td>
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<td>30</td>
<td>Perform routine maintenance and repair of the FCP features. Routine maintenance and repairs are defined in (source pending). The Commission will reimburse cities for maintenance and repairs that are over $25,000. Cities are expected to inform the Commission in advance (e.g., two years) of their request for reimbursement.</td>
<td>4.2.4-24; Approved TAC recommendation (policy pending)</td>
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<tr>
<td>31</td>
<td>Report water quality monitoring results to the Commission.</td>
<td>4.2.1-11</td>
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<tr>
<td>32</td>
<td>Adopt performance goals, triggers, and flexible treatment options consistent with MIDS and review projects for conformance with MIDS water quality treatment standards</td>
<td>4.2.1-13</td>
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<tr>
<td>33</td>
<td>Educate residents regarding the importance of implementing BMPs to protect groundwater quantity and quality</td>
<td>4.2.3-49</td>
<td></td>
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<tr>
<td>34</td>
<td>Implement best management and good housekeeping practices to minimize chloride loading to surface water and groundwater resources, utilizing emerging technology, as appropriate</td>
<td>4.2.1-17</td>
<td></td>
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<tr>
<td>35</td>
<td>Remove streets, utilities, and structures from the 100-year floodplain.</td>
<td>4.2.2-37</td>
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<td>36</td>
<td>Complete comprehensive wetland management plans as part of their local water management plan or as an implementation task identified in their local water management plan. Completed comprehensive wetland management plans shall be submitted to the BCWMC for review and comment.</td>
<td>4.2.6-65</td>
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<tr>
<td>37</td>
<td>Use MnRAM for all wetland assessment and classification, but are not required to perform reassessments using the MnRAM for wetlands already assessed</td>
<td>4.2.6-67</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Pursue wetland restoration projects, as opportunities allow.</td>
<td>4.2.6-73</td>
<td></td>
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<tr>
<td>39</td>
<td>Participate in wetland monitoring programs (e.g., Wetland Health Evaluation Program).</td>
<td>4.2.6-74</td>
<td></td>
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<tr>
<td>40</td>
<td>Petition Hennepin County to transfer authority over public ditches in the BCWMC to the member cities (per MN Statute 383B.61)</td>
<td>4.2.7-75</td>
<td></td>
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<tr>
<td>41</td>
<td>Develop and maintain water-related recreational features (such as trails adjacent to waterbodies and water access points), with consideration for buffers, use of pervious surfaces, and other best management practices to reduce runoff</td>
<td>4.2.8-82</td>
<td></td>
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<tr>
<td>42</td>
<td>Consider opportunities to maintain, enhance, or provide new open spaces and/or habitat as part of wetland creation or restoration, stormwater facility construction, development, redevelopment, or other appropriate projects</td>
<td>4.2.8-85</td>
<td></td>
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</tbody>
</table>
Minnesota Association of Watershed Districts
2016 Annual Meeting & Trade Show
December 1-3, 2016

2016 MAWD Pre-Conference Sessions - December 1, 2016
- Minnesota Drainage Workshop
- Basic Watershed Board Management Workshop
- Understanding the Art of Facilitation: Effective Practices for Public Processes
Basic Watershed Board Management Workshop
This workshop will be presented by BWSR staff and watershed district administrators. Open to new and experienced managers.

Agenda:
9:00 AM Welcome, Introductions, and YOUR chance to shape the agenda

Watershed Districts, BWSR, and the World
Your WD is just one organization in a world full of state, federal, non-profit, citizen, and municipal interests with their own mandate to work for the public good. It really helps to know why you exist and what others around expect you to do and not do.

Watershed Districts’ Legal Powers and Purposes
Managers have their own compact chapter of law—MN Statutes Ch. 103D. You can also play a big role in public drainage systems codified in MS 103E. The bottom line is that you can do quite a bit with the help of your staff if you choose to. We’ll cover basic authorities, expectations, funding abilities, and even water management districts (stormwater utilities).

The Value of Your Watershed Management Plan
Every organization on the planet from the Cub Scouts to the US Army has some sort of strategic plan to guide them. WD plans set priorities, outline tactics, and explain where the tax money will come from. You’ll hear a bit about the process, more on what goes in these things, and then find YOUR plan’s proposed actions. Plans with details help attract outside funding which your taxpayers will appreciate.

LUNCH
Your Role as Leader
Your county appointed you to the Board and probably expects you to make sure the organization does more than just exist. This section covers a few skills managers need to make the organization you lead excel—after all, it’s your name on the board of directors... There are plenty of examples of districts that have had things go south on them. You don’t want to go there. We’ll share some horror stories if time allows.

Government Basics – the Open Meeting Law, Data Practices Act
We won’t have an attorney on hand so our ability to go deep on these topics is low. This area has had a lot of manager interest so we’ll do our best—then tell you to have your attorney provide a refresher for you. Suffice it to say, the public and private sectors operate differently. (Hold secret strategy meetings if you want to learn the hard way...)

What Haven’t We Covered?
We have covered many required topic areas. There are still others that contribute to the art of "boardsmanship". Any remaining time before we adjourn will be used to address questions you still have and to share a few stories from the trenches...

Adjourn 4:00 PM

Register on page 14
Welcome Reception

8:00 PM   Trade Show Floor
Exhibitors, food and prizes

Seminar C: Addressing increased flows in the Minnesota River watershed
Presenters: Steve Woods, Carrie Jennings, Brian Bohman, Freshwater Society
Southern Minnesota rivers have exhibited a significant increase in annual flows over the last several decades. The Lower Minnesota River Watershed District (LMRWD) manages the lower 35 miles of the Minnesota River, from Carver to the confluence with the Mississippi. This narrow reach is like the bottom of a funnel and bears the brunt of what happens upstream in 90% of the rest of this primarily agricultural watershed. The district is responsible for maintaining a navigable channel to the port in Savage from which agricultural products reach their market and agricultural chemicals are delivered. In 2016 LMRWD engaged the Freshwater Society to synthesize what is known about changes in flow and demonstrate how increased sedimentation in this reach has been the unintended result of land-management practices. There have been other attempts to facilitate consensus on management strategies but existing organizations and structures are of insufficient scale and the problems seem to vary depending on location in the watershed. However the over 13,000 eroding parcels along bluffs in the upper watershed and the .5” of sediment layered each year in the channel in the lower watershed have a common cause: increased flows. The LMRWD is interested in facilitating the creation of more upstream water storage to address both of these issues.

Seminar D: Staff Development: Stormwater Pond and Wetland Performance Study in the Ramsey-Washington Metro Watershed District
Presenters: Erin Anderson Wenz, Barr Engineering Company
Tina Carstens, Administrator, Ramsey-Washington Metro Watershed District
When inadequately maintained, the water quality treatment performance of stormwater ponds and wetlands in urbanized areas can degrade over time due to sedimentation. To help member cities prioritize pond and wetland assessment efforts for maintenance, the Ramsey-Washington Metro Watershed District (District) conducted a modeling exercise that utilized existing water quality (P8) models of the District to (a) determine the relative water quality impact of modeled stormwater ponds and wetlands on downstream water bodies and (b) estimate how quickly ponds and wetlands may be filling in due to sedimentation. By comparing and ranking the relative water quality impact and rate of sedimentation of all modeled ponds and wetlands, an assessment prioritization list was created for all four hundred ten (410) modeled ponds and wetlands within the District. Assessment prioritization lists were distributed to member cities and will be used to help guide pond and wetland maintenance efforts. Additionally, a volume sensitivity analysis was performed on the top thirty highest priority ponds and wetlands in the District to generate a cost-benefit analysis for sediment management (i.e., dredging). Modeled pond and wetland storage volumes were reduced to simulate the impact of sedimentation, and a cost benefit analysis was performed based on the change in pollutant (phosphorus) removal and cost to dredge the sedimentation volume. The cost-benefit of sediment management was then compared to other capital improvement projects within the District. The assessment prioritization methodology, sediment management cost-benefit analysis and feedback on the tool from member cities will be presented.

Understanding the Art of Facilitation: Effective Practices for Public Processes

9:00 AM -3:30 PM (lunch and breaks provided)

Too often we our spend our precious time, money, and energy trying to convene people who are central to our work, such as neighborhood groups, lake associations, professional staff, and decision-makers. We need them to be knowledgeable and interested, but getting them to stay engaged is often challenging.

This workshop will immerse participants in the art of facilitating groups and group dynamics, as well as fostering leadership from within to address the water issues we face. We’ll explore worldview, reflective listening, asking powerful questions, and embracing creative chaos.

Participants will leave with concrete skills and practices that can be used to educate and engage audiences, support program development, foster creative problem solving, and foster community engagement in your work.

Presenters: Peggy Knapp, Director of Programs – Freshwater Society
Leslie Yetka, Program Manager – Freshwater Society
Jen Kader, Program Manager – Freshwater Society
2016 MAWD PRE-CONFERENCE SESSIONS
Arrowwood Conference Center - Alexandria
Thursday, December 1 - 9:00 AM to 4:00 PM

For Managers, Administrators, Staff, Key Partners and local and state government officials

Name/Title: ___________________________  Organization: _______________________________________
Address: __________________________________________ City: ______________  Zip Code: __________
Phone: ______________  Email: ___________________________

Pre-Conference Seminar Registration - Please return this form before November 18.

Please select one seminar
☐ Minnesota Drainage Workshop  $85
☐ Basic Watershed Board Management Workshop  $85
☐ Understanding the Art of Facilitation: Effective Practices for Public Processes  $85

Includes workshop, registration packet, coffee breaks and lunch.

Credit card registration at mnwatershed.org

Advanced Registration is recommended - on-site registration subject to availability.

Lodging: Rooms reserved (one night $98.23 with tax) for Wednesday, November 30, 2016 at Arrowwood Phone: 320-762-1124 for reservations. Please reference the MAWD Pre-Conference Sessions.

Cancellations: Refund only if cancellation received by November 25, 2016. Substitutes may be sent.

Registration questions please call 651-452-8506 or email: pegbohn@gmail.com.

Friday, December 2, 2016 Programming
7:30 AM  Resolutions Committee Meeting
8:00 AM  Registration  Trade Show Floor  Tennis Center
8:00 AM  MAWD Trade Show  Tennis Center
7-9:00 AM  Breakfast  Tennis Center

8:00 AM  Plenary Session - Strategic Plan Committee Report
Presiding: President Lee Coe
President’s Report  Lee Coe
Secretary’s Report  Barbara Haake
Treasurer’s Report  Craig Leiser
Strategic Plan Committee Report & Consideration - Craig Leiser & Perry Forster
Recommended Budget  Craig Leiser
BWSR Report  John Jaschke, Director

9:15-10 AM  Association of District Administrators Technical Sessions
Seminar A: Bixby Park Water Quality Improvement Project
Presenters: Mike Kinney, Comfort Lake-Forest Lake Watershed District
Completed in 2016, the Bixby Park Water Quality Improvement Project involved the modification of an existing ditched wetland complex in Bixby Park, Forest Lake. The project increased the interaction between the natural floodplain and the wetland, increased water storage capacity of the wetland, and improved wildlife habitat by restoring disturbed wetland areas with native vegetation. Models suggest that the project will reduce downstream phosphorus loading by 206 lbs/yr and total suspended solids by 55,000 lbs/yr. These reductions will help restore and protect Comfort Lake, and by extension, the St. Croix River drainage basin. This project was inspired by a 2010 petition from Chisago County to develop a regional stormwater management facility for the treatment of phosphorus-laden urban runoff from the City of Forest Lake. The project was funded by a Clean Water Fund Grant in 2014 for the amount of $306,760. To ensure the project’s integrity, the District developed a cooperative agreement with the City of Forest Lake to implement the project on city-owned land, and worked closely with them throughout the entire process. To inform the public of this major project, the District submitted a detailed press release to local newspapers, and informational project fact sheets were mailed to nearby homeowners. The footage from two UAV flights documenting the project site were shared on the District’s social media accounts.

SEMINAR B. Examining the Red River Algal Community to Understand Eutrophication in High Turbidity Waters
Presenters: Julie Blackburn and Bruce Wilson, RESPEC
The International Red River Board (IRRB) identified excess nutrients as an important issue in the Red River due to the hyper-eutrophic conditions in Lake Winnipeg as well as the degraded water quality of the river itself. The IRRB determined that the best approach to developing nutrient targets for Red River of the North (RRN) would be to understand the biological stressor-responses for nutrients, suspended sediments and other parameters. Experts provided input on the development of a conceptual stressor-response model and determined that phytoplankton and periphyton were the most appropriate biological community for the study. A lack of data prompted the development of a plan for collecting periphyton, phytoplankton, and water quality data from 30 sites from the headwater to the mouth of the RRN. Overall, a stressor effect from excess nutrients was documented for both the quantity and quality of the algal community and observed throughout the gradient of the river. However phytoplankton results indicated a reduced abundance due to excessive turbidity (light limitation) in portions of the river. The response of the periphyton community to the nutrient gradient resulted in delineating nutrient targets of 0.15 milligrams per liter (mg/L) for TP and 1.15 mg/L for TN as nutrient criteria for the Red River of the North. Exploration of watershed effects in the stressor-response model indicate anthropogenic disturbances may be more critical than water quality parameters in determining algae variance.
### Friday, December 2, 2016 Programming continued

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>9:30 AM</td>
<td><strong>Spouses’ Event - Bake &amp; Take Holiday Cookies</strong></td>
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<tr>
<td>10:00 AM</td>
<td>Break - MAWD Trade Floor</td>
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<td>10:30 AM</td>
<td>2016 Resolutions Committee Report</td>
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<td>11:30 AM</td>
<td>Regional Caucuses</td>
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<td>Administrators Meeting</td>
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<td>12:15 PM</td>
<td>Buffet Luncheon</td>
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<td>DNR Watershed District of the Year</td>
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<td>BWSR Watershed District Employee of the Year</td>
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### Don’t Wait - Register for the MAWD Annual Meeting & Trade Show Today!!!

### Saturday, December 3, 2016 Programming

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>8:00 AM</td>
<td><strong>Plenary Session - Watershed District Buffer Enforcement</strong></td>
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<tr>
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<td>Presenters: David Weirens &amp; Tom Gile, BWSR</td>
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<td>Watershed District buffer compliance enforcement, including jurisdiction election, compliance enforcement responsibilities, the BWSR APO and enforcement plan, watershed district rule review, and related topics will be covered.</td>
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<td>10:00 AM</td>
<td>Break - MAWD Business Meeting continued</td>
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### 2:00 - 2:45 PM  Concurrent General Session II

**Seminar A:** One Watershed One Plan – Recent Experiences of Two Watershed Districts

**Presenters:**
- Tara Ostendorf, Administrator, North Fork Crow River Watershed District
- Margaret Johnson, Administrator, Middle Fork Crow River Watershed District
- Rachel Olm, Houston Engineering, Inc
- Mark Deutschman, Houston Engineering, Inc

The North Fork Crow River Watershed District (NFCRWD) and the Middle Fork Crow River Watershed District (MFCRWD) are engaged in the North Fork Crow River, One Watershed One Plan Pilot. The pilot includes five counties (Kandiyohi, Meeker, Pope, Stearns and Wright), five Soil and Water Conservation Districts, two Watershed Districts and one Joint Power entity (the Crow River Organization of Waters). The intent of One Watershed One Plan, is to align watershed planning on major watershed boundaries with prioritized, targeted and measurable plans developed and implemented locally. The groups participating in pilot projects were also intended to provide insights in how this approach would work across different geographies and combinations of local governments. The perspectives of recent experiences of the NFCRWD and the MFCRWD will be shared and examined during this presentation. Although the Board of Water and Soil Resources provided initial guidance to those completing the pilots, a considerable number of details needed resolution during the planning process. Some of these details included the organizational structure used to complete the plan, the definitions and structure of the plan, the process used to prioritize resource concerns, the relationship to state planning process (e.g., the Watershed Restoration and Protection Strategy), gaps in information and data, and the structure used to implement the plan.
The first update of the Minnesota Public Drainage Manual (MPDM) since it was published in September 1991 is nearing completion. The Legislature provided funding to the BWSR in 2014 to update the MPDM along with the Understanding Minnesota Public Drainage Law (UMPDL) document. Through a competitive process, a partnership of Houston Engineering, Inc. and Rinke Noonan Attorneys was contracted to lead the update process, in coordination with BWSR. This project involves substantial updating of the MPDM, with input, review and comment provided through a Project Advisory Committee (PAC) and four chapter subcommittees of stakeholders, as well as communication with the stakeholder Drainage Work Group. The updated MPDM is to be available on the BWSR website in a Wiki format to enable easy searching of the document, and future maintenance of the MPDM.

The Story Map concept, which allows interactive maps to be combined with narrative text, images, and multimedia content in a highly mobile-enabled platform, has resulted in a static and awkward product. To provide a more seamless storytelling experience better suited to communicating with the public, ESRI recently introduced the Story Map concept. Geographic information systems (GIS) have long been used as a tool by watershed organizations for planning and communications purposes, from the days of maps drawn on mylar to advanced webmapping technology. Whether maps were placed in hard copy format in flood control feasibility studies or embedded on a watershed's website to show their water resources of concern, the integration of GIS and the narrative often resulted in a static and awkward product. To provide a more seamless storytelling experience, better suited to communicating with the public, ESRI recently introduced the Story Map concept, which allows interactive maps to be combined with narrative text, images, and multimedia content in a highly mobile-enabled platform. A Story Map to tell the story of one watershed, a 2,100-acre urban watershed that includes Fridley, Columbia to be combined with narrative text, images, and multimedia content in a highly mobile-enabled platform. A Story Map to tell the story of one watershed, a 2,100-acre urban watershed that includes Fridley, Columbia Heights, and Hilltop was developed. The Story Map helps the public connect themselves and their neighborhood with their water resource (the Mississippi River) and stormwater infrastructure (much of it buried).

GIS as an educational tool: ESRI Story Maps Tell the Watershed Story

Presenters: Stephanie Johnson, PhD, PE, Mississippi Watershed Management Organization Nathan Campeau, PE, Barr Engineering Co.

Geographic information systems (GIS) have long been used as a tool by watershed organizations for planning and communications purposes, from the days of maps drawn on mylar to advanced webmapping technology. Whether maps were placed in hard copy format in flood control feasibility studies or embedded on a watershed's website to show their water resources of concern, the integration of GIS and the narrative often resulted in a static and awkward product. To provide a more seamless storytelling experience, better suited to communicating with the public, ESRI recently introduced the Story Map concept, which allows interactive maps to be combined with narrative text, images, and multimedia content in a highly mobile-enabled platform. A Story Map to tell the story of one watershed, a 2,100-acre urban watershed that includes Fridley, Columbia Heights, and Hilltop was developed. The Story Map helps the public connect themselves and their neighborhood with their water resource (the Mississippi River) and stormwater infrastructure (much of it buried).

MWMO Outreach staff plan to use this tool and narrative in the organization's Stormwater Park and Learning Center and at neighborhood events to educate their residents about the importance of clean water, complete with a call to action.

6:00 PM Social Hour - Cash Bar

7:00 PM Association Banquet MAWD Awards Entertainment

Charlie Roth

Featuring the music of Charlie Roth, an internationally acclaimed American folk musician with roots in Lac qui Parle County. American, Folk, Blues, Country, Celtic, Charlie Roth is a unique blend of all these genres. What Charlie is best at is telling a story with his rich baritone vocal, acoustic guitar, rack harmonica, and foot percussion. His fifth album ‘Broken Ground’ reached up to 86 on the Euro Americana charts and continues to get air play all over the world.

Friday, December 2, 2016 Programming continued

Seminar C: Updated Minnesota Public Drainage Manual

Presenters: Tim Gillette, BWSR

Larry Kramka, Houston Engineering

Seminar D: Staff Development: GIS as an educational tool: ESRI Story Maps Tell the Watershed Story

Presenters: Stephanie Johnson, PhD, PE, Mississippi Watershed Management Organization Nathan Campeau, PE, Barr Engineering Co.

GIS as an educational tool: ESRI Story Maps Tell the Watershed Story

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Friday, December 2, 2016 Programming continued

Seminar B: Developing a Stormwater Reuse Irrigation Assessment Planning Tool to Reduce Reliance on Groundwater

Presenters: Phil Belforii (Rice Creek Watershed District), Catherine Nester (Rice Creek Watershed District), Mark Deutschman (Houston Engineering, Inc.), Rachel Olsn (Houston Engineering, Inc.), Kate MacDonald (Houston Engineering, Inc.), Drew Kessler (Houston Engineering, Inc.)

The majority of communities in the Twin Cities metropolitan area rely on groundwater as their primary public water supply. In recent years, there has been growing concern over the sustainability of pumping groundwater at current and projected rates and its effect on groundwater supplies in the area. Using a Clean Water Fund grant from the Board of Water & Soil Resources, the Rice Creek Watershed District has developed a watershed-scale planning tool (Stormwater Reuse Irrigation Assessment) to identify and prioritize potential locations suitable for stormwater reuse irrigation projects. Identifying and prioritizing potential reuse sites provides the opportunity to increase implementation of these projects, with the ultimate goal of reducing groundwater consumption. Using the tool, technically feasible sites are identified through a calculated ratio of the total contributing drainage area to the minimum drainage area required for sufficient runoff to meet the irrigation demands of the site. Sites that are identified as technically feasible are then prioritized using qualitative criteria that identify possible impacts (beneficial and adverse) of potential sites. The assessment was designed and is intended to be available for statewide use.

Seminar C: Runoff-Based Drainage Assessment GIS Application

Presenters: Charles Fritz & Grit May, International Water Institute Zach Herrmann and Jun Yang, Houston Engineering

The Runoff-Based Assessment Model provides drainage authorities with an alternative to assess ditch maintenance and repair costs. The method uses geographic information systems (GIS), terrain analysis methods, and available geospatial data to assist with their ditch management and sediment contribution to the ditch system. The method was applied in three MN pilot ditch systems to compare and contrast parcel assessment results from traditional viewing methods.

Seminar D: Staff Development: Urban School Retrofits: Sending Stormwater to Detention

Presenters: Charles Fritz & Grit May, International Water Institute Zach Herrmann and Jun Yang, Houston Engineering

Capitol Region Watershed District (CRWD) has worked with several schools to install innovative stormwater management projects that improve water quality and provide education opportunities for students. Installing stormwater treatment at urban schools can be challenging due to limited space, large impervious areas, maintenance requirements, and the need to preserve usable space for students. Overcoming these challenges requires planning and participation from the school community. Through grants and design assistance CRWD was able to work with four urban schools to retrofit stormwater BMPs on challenging sites. The BMPs provide benefits beyond stormwater management including improved aesthetics, wildlife habitat, and reduced urban heat island effect. The sites included: Central High School – permeable pavers, tree trenches, rain gardens, and underground infiltration gallery with water sampling wells; Great River School – parking lot converted to play space (pavement left in place to cap contaminated soil), rainwater harvesting for irrigation, and proprietary underground membrane filter system; Twin Cities German Immersion School – underground rate-control structure upgraded to infiltration system, multiple rain gardens, and permeable rubberized outdoor play surface; Haremee Elementary – Multiple rain gardens including conversion of parking lot island to treat large parking lot. These projects demonstrate how stormwater treatment at schools can occur even with severe site constraints. School retrofits improve water quality and provide real world demonstrations that can be integrated into the curriculum for a variety of subjects. The success of recycling programs is largely due to students learning about its importance in school, and that success can be replicated with stormwater!
Friday, December 2, 2016 Programming continued

3:15 - 4:00 PM Concurrent General Session III

Seminar A: Evaluating Floodplain Vulnerability and Communicating Flood Risk
Presenters: Brandon Barnes, Barr Engineering
Claire Bieser, Riley Purgatory Bluff Creek Watershed District

Flooding or not flooding? Are we prepared for the future? RPBCWD developed flood profiles the late-1970s that considered full development to anticipate future impacts on the flood elevations in an effort to protect residents. However, recently NOAA released updated precipitation frequency estimates (Atlas 14) where the 100 year, 24 hour rainfall depth in RPBCWD increased by approximately 25%. Predictions of future rainfall depths indicate the 100-year precipitation depth will likely continue to increase from 7.4 to 10.2 inches (or more) of rain in 24 hours. Assessment results identified resilient areas (i.e., flood risk to structures and crossings was not sensitive to change in rainfall depths), and areas where flood elevations are sensitive to rainfall depths. Flood-risk figures were developed in partnership with local municipalities to inform communities of current and estimated future flood risk. Local municipalities have found the figures helpful and would like to further engage with the District to build on the initial evaluation. This information should be presented to the RPBCWD and local municipalities a water management tool that looks at how future climate change can impact infrastructure but also helps the District and municipalities to identify locations for flood risk mitigation projects.

Seminar B: Drainage Records Modernization - GIS Database
Presenters: Brian Fischer, HEI

The BWSR has supported drainage records modernization for Chapter 103E drainage systems for many years, including coordinating development of Drainage Records Modernization Guidelines, Sep. 2008 and providing cost-share to drainage authorities for this purpose, when available. The stakeholder Drainage Work Group has promoted drainage records modernization, including the guidelines and cost-share. Drainage records modernization efforts to date began the development of GIS databases for managing Chapter 103E drainage system records. A 2014 LCCMR grant to BWSR enabled development of a GIS database template for use by drainage authorities, updating of the Drainage Records Modernization Guidelines and development of a statewide GIS database for hydrographic data about Chapter 103E drainage systems. This project builds upon experience and products developed through prior drainage records modernization efforts and is compatible with DrainageDB. The database template and updated guidelines will provide a consistent, high quality database for use by Chapter 103E drainage authorities and staff. The statewide database will provide a repository for hydrographic data about Chapter 103E drainage systems provided by users of the database template and accessible by planners and modelers for water management in Minnesota.

Seminar C: Planning to Mitigate Altered Hydrology with Multiple Benefits
Presenters: Kerry Netzke, Area II
Emily Javens, Yellow Medicine River Watershed District
Julie Blackburn, RESPEC

The Yellow Medicine One Watershed Plan was one of the first five One Watershed, One Plan pilot projects in the state. The plan is unique in that it addresses mitigating altered hydrology and preventing future flooding as one its primary concerns. It does so while prioritizing multiple benefits in order to address the plan’s other two priorities of reducing pollutant transport and protecting and preserving groundwater quality. The plan uses the Hydrologic Simulation Program – Fortran (HSPF) Scenario Application Manager (SAM) to first prioritize subwatersheds for targeting efforts as well as identify best management strategies best suited for addressing the goals. In order to reduce future impacts, the plan also identified extensive actions for improving the effectiveness of regulatory controls. This session will highlight the process for identifying altered drainage as a priority, how the implementation plan was developed to address this goal, the regulatory tools outlined to reduce future impacts, and how the measurable goals were determined.

Friday, December 2, 2016 Programming continued

Seminar D: Staff Development - Irrigate, Infiltrate, Automate:
Stormwater Reuse at Upper Villa Park
Presenter: Forrest J. Kelley, PE., Regulatory Division Manager, CRWD
Capitol Region Watershed District (CRWD) and the City of Roseville, through two State grants, constructed a 60,000 cubic foot underground stormwater infiltration system combined with a 13,000 cubic foot modular concrete cistern to harvest and use stormwater for irrigation of a high-use softball field at Upper Villa Park in Roseville, MN. The project protects Lake McCarrons, a high quality recreational lake within the upper Mississippi River basins – both State and National wild and scenic rivers, the Twin Cities, and the Villa Park Wetland System by capturing stormwater runoff and filtering the pollutants associated with urban stormwater. In addition to removing approximately 45 pounds of TP annually, the system will save up to 1.3 million gallons of drinking water by capturing and using rainwater to irrigate the softball field. The system uses real time technology to actively manage the water level in the cistern. Prior to a rain storm, software programmed to communicate with weather forecasts and level sensors within the rainwater cistern open an automated valve to drain the cistern into the underground infiltration pipes and capture more stormwater. The valve closes after the storm and fills the cistern to provide irrigation for the softball field. To determine effectiveness of infiltration practice pollutant removal, three pan-lysiometer wells were installed at depths of 3, 5, and 7 feet below the perforated pipes.

4:00-4:15 PM Break
Downstairs Lobby

4:15-5:00 PM Concurrent General Session IV

Seminar A: Stormwater BMPs at Watershed Offices: Design Solutions, Maintenance Challenges & Educational Opportunities
Presenters: Erica Sniegowski, Nine Mile Creek Watershed District
Paige Ahlborg, Ramsey-Washington Metro Watershed District
Matt Kumka, Barr Engineering Company

Stormwater best management practices (BMPs) at watershed district offices provide demonstration sites for solutions driven designs and rich opportunities for public engagement. Districts have been able to use these sites to expand outreach, connect with new audiences, and provide easy access to multiple BMPs at one location. On the flip side, there are also maintenance challenges associated with the upkeep of these demonstration sites. Challenges range from staff capacity to do maintenance, budgetary considerations, animal browse on plants, to BMP lifespan concerns, and beyond. During this presentation, learn about the practical implications and lessons learned from operating watershed district office demonstrations sites, including maintenance challenges, design solutions and educational opportunities.

Seminar B: Old Dog, New Tricks: Revised Approaches to Lake TMDLs for Better Results
Presenter: Geoff Kramer and Bruce Wilson, RESPEC

As a whole, Minnesota has been completing TMDL studies on lakes for many years which leads to a lot of collective expertise and standardized approaches. However, new modeling tools have increased the precision of watershed loading estimates, new research sheds light on the importance of wind and resuspension in understanding internal phosphorus, and adjustments to standard lake assessment tools may provide for improved understanding of shallow lake dynamics. This discussion will highlight several recently completed and current TMDLs, including shallow lakes in the northern, forested region of the state contrasted with those in the growing metropolitan area. Also included will be a discussion on what we have learned so far from the Lake of the Woods project – the largest lake TMDL in the state. Recent studies conducted by the St. Croix Research Station, Science Museum of Minnesota and University of Wisconsin – Stout provide tremendous amount of data to reexamine approaches to estimating internal loading and resuspension rates as well as aerobic vs anoxic release rates and an analysis of wind speed and calm days as foundational pieces to this TMDL and calibration of the BATHTUB model. This session will shed light on new information and approaches that can be used for lake TMDLs across the state.
Flood depth: The historical data provides a record of flood depths over time, which is useful for identifying trends and patterns. This can help in planning for future flood mitigation projects and in understanding the frequency and intensity of past floods.

Future flood depth predictions: As climate change continues to alter precipitation patterns, it is important to consider how future conditions might impact flood depths. This information can be used to inform planning and decision-making processes related to flood risk management.

Summary: The flood depth data, both historical and predicted, provides valuable insights into past and future flood events. By understanding these patterns, stakeholders can make informed decisions about flood mitigation and preparedness strategies.

References:
1. [Historical Flood Depth Data (Source)]
2. [Flood Depth Prediction Model (Source)]
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7:00 PM Association Banquet
MAWD Awards
Entertainment
Charlie Roth

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Welcome Reception
8:00 PM  Trade Show Floor
Exhibitors, food and prizes

[Thursday, December 1, 2016]

Seminar C:  Addressing increased flows in the Minnesota River watershed
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Presenters:  Erin Anderson Wenz, Barr Engineering Company
Tina Carstens, Administrator, Ramsey-Washington Metro Watershed District
When inadequately maintained, the water quality treatment performance of stormwater ponds and wetlands in urbanized areas can degrade over time due to sedimentation. To help member cities prioritize pond and wetland assessment efforts for maintenance, the Ramsey-Washington Metro Watershed District (District) conducted a modeling exercise that utilized existing water quality (P8) models of the District to (a) determine the relative water quality impact of modeled stormwater ponds and wetlands on downstream water bodies and (b) estimate how quickly ponds and wetlands may be filling in due to sedimentation. By comparing and ranking the relative water quality impact and rate of sedimentation of all modeled ponds and wetlands, an assessment prioritization list was created for all four hundred ten (410) modeled ponds and wetlands within the District. Assessment prioritization lists were distributed to member cities and will be used to help guide pond and wetland maintenance efforts. Additionally, a volume sensitivity analysis was performed on the top thirty highest priority ponds and wetlands in the District to generate a cost-benefit analysis for sediment management (i.e., dredging). Modeled pond and wetland storage volumes were reduced to simulate the impact of sedimentation, and a cost benefit analysis was performed based on the change in pollutant (phosphorus) removal and cost to dredge the sedimentation volume. The cost-benefit of sediment management was then compared to other capital improvement projects within the District. The assessment prioritization methodology, sediment management cost-benefit analysis and feedback on the tool from member cities will be presented.

Understanding the Art of Facilitation: Effective Practices for Public Processes
9:00 AM -3:30 PM (lunch and breaks provided)
Too often we our spend our precious time, money, and energy trying to convene people who are central to our work, such as neighborhood groups, lake associations, professional staff, and decision-makers. We need them to be knowledgeable and interested, but getting them to stay engaged is often challenging.

This workshop will immerse participants in the art of facilitating groups and group dynamics, as well as fostering leadership from within to address the water issues we face. We’ll explore worldview, reflective listening, asking powerful questions, and embracing creative chaos.

Participants will leave with concrete skills and practices that can be used to educate and engage audiences, support program development, foster creative problem solving, and foster community engagement in your work.

Presenters:  Peggy Knapp, Director of Programs – Freshwater Society
 Leslie Yetka, Program Manager – Freshwater Society
 Jen Kader, Program Manager – Freshwater Society
Bassett Creek Watershed Management Commission

MEMO

Date: October 12, 2016
From: Laura Jester, Administrator
To: BCWMC Commissioners
RE: Administrator’s Report

Aside from this month’s agenda items, the Commission Engineers, city staff, committee members, and I continue to work on the following Commission projects and issues.

CIP Projects (more resources at http://www.bassettcreekwmo.org/projects.)

2017 Plymouth Creek Restoration Project, Annapolis Lane to 2,500 feet Upstream (2017CR-P) (See Item 6A): The final feasibility study is now available online at http://www.bassettcreekwmo.org/index.php?cID=284. The Hennepin County Board approved the 2017 maximum levy request at their meeting on July 28th. Applications for a Clean Water Fund grant and a Hennepin County Opportunity Grant were submitted in August and September, respectively. At the September meeting, the Commission held a public hearing on the project and adopted a resolution ordering the project and certifying a final levy to Hennepin County. Also at that meeting, the Commission entered an agreement with the City of Plymouth to design and construct the project. At their meeting on October 11th, the city council approved the agreement. City staff will develop an RFP by the end of October for project implementation and expects project design to occur over the winter.

2017 Main Stem Bassett Creek Streambank Erosion Repair Project (2017CR-M) (See Item 6A): The feasibility study for this project was approved at the April Commission meeting and the final document is available on the project page at: http://www.bassettcreekwmo.org/index.php?cID=281. A Response Action Plan to address contaminated soils in the project area was completed by Barr Engineering with funding from Hennepin County and has been submitted to the MPCA for review and approval. The County Board approved the 2017 maximum levy request at their meeting on July 28th. At the September meeting, the Commission held a public hearing on the project and adopted a resolution ordering the project and certifying a final levy to Hennepin County. Also at that meeting, the Commission entered an agreement with the City of Minneapolis to design and construct the project. By November 1st, the Commission will submit an Environmental Response Fund grant application to Hennepin County to help fund the environmental response for the project.

2013 Four Season Area Water Quality Project (NL-2): NO UPDATE SINCE LAST MONTH Since November 2015, the City of Plymouth has considered different options for this area including the original stream restoration, using only rock to stabilize the channel, and a flocculation facility. The City received comments on these options at a public meeting in January. Recently, a developer has proposed a redevelopment project (Agora) for the site that includes several innovative stormwater management features for the site. At their meeting in August, Commissioners received a presentation from Solution Blue and considered the developer’s request for a partnership with the BCWMC to share in the cost of stormwater management that goes above and beyond the requirements. Currently, the City of Plymouth is working with the developer on determining appropriate stormwater management. The Commission will discuss the possibility of a partnership at a future meeting.

2014 Schaper Pond Diversion Project, Golden Valley (SL-3): In August, the Commission Engineer reported that the structure had been vandalized and repair was needed. The contractor for the project, Sunram Construction, and the Commission Engineer are in the process of exploring options for providing more support for the baffle
anchors against wind loading. Over seeding in two of the access areas is required to achieve final stabilization. Erosion control will be pulled once the final stabilization is completed.

**2014 Twin Lake In-lake Alum Treatment, Golden Valley (TW-2): NO UPDATE SINCE MAY:** At their March 2015 meeting, the Commission approved the project specifications and directed the city to finalize specifications and solicit bids for the project. The contract was awarded to HAB Aquatic Solutions. The alum treatment spanned two days: May 18-19, 2015 with 15,070 gallons being applied. Water temperatures and water pH stayed within the desired ranges for the treatment. Early transparency data from before and after the treatment indicates a change in Secchi depth from 1.2 meters before the treatment to 4.8 meters on May 20th. There were no complaints or comments from residents during or since the treatment. Water monitoring continues to determine if and when a second alum treatment is necessary.

**2015 Main Stem Restoration Project 10th Avenue to Duluth Street, Golden Valley (2015CR): NO UPDATE SINCE LAST MONTH:** The restoration project is being constructed in two phases, each under separate contract. Phase one includes stream bank shaping, placement of field stone rock and 12-inch bio-logs, and repair of storm sewer outlets. The first phase of the project began in November 2015 and was finished in June 2016.

Phase two of the project includes the establishment of native vegetation along the stream, including grasses, wildflowers, shrubs, live stakes and fascines, and cordgrass plugs. Rachael Contracting is working to finish sod repairs and final punch list items. The second phase of the contract, Native Buffer Vegetation installation is now under way. The project has been seeded and stabilized and maintenance mowing and spot treatments have been completed. Applied Ecological Services (AES) will continue to monitor and maintain the native vegetation this fall and into 2018. AES will complete tree and shrub planting this spring as they continue to maintain the native vegetation. It is anticipated that the total contract amount for both Phase one and Phase two will be within the Watershed’s overall project budget.

The City has been trying to assess the condition of the bank stabilization practices following the large rain events in July and August, but has been unable to do so because of continued high water. If any repairs are necessary, they will be made prior to project closeout.

**2016 Northwood Lake Improvement Project, New Hope (NL-1) (See Item 7E):** Construction on this project began this spring. Photos and construction progress are available at: [http://www.ci.new-hope.mn.us/departments/publicworks/2016infrastructure.shtml](http://www.ci.new-hope.mn.us/departments/publicworks/2016infrastructure.shtml)

Northwood Lake Improvement Project is nearing completion.
- The storm tank is complete, along with all pretreatment structures.
- The overflow rain gardens are complete and functional and planted.
- The force main for the ballfield irrigation system is installed and the contractor is currently working on the connection from the 4” force main to the existing irrigation system.
- Mulch and seed have been installed across the entire site and grass is starting to grow.
- Jordan Pond and the overflow structure to Basset Creek at 169 is complete.
- All other major site work is complete.
- An interim grant report for the Clean Water Partnership grant, along with an invoice for grant funds was submitted in July.
2016 Honeywell Pond Expansion Project, Golden Valley (BC-4): Design plans for this project were approved by the Commission in November 2015. This spring, the Honeywell Pond Project was bid as part of the City of Golden Valley and Hennepin County’s Douglas Drive (CSAH 102) Reconstruction Project. The reconstruction project began in June. Forcemain pipes and the low-flow diversion structure are currently being installed. Tree removal and major earthwork will begin this winter.

Other Projects

Education Tasks: I recently participated in a fieldtrip with Blake School to visit, learn about, and photograph four BCWMC CIP projects. We met with city staff at each of the sites to hear more about the projects. The students are now compiling their photos and information and will develop a “360° view” of each location that can be used on the BCWMC website. I’ve also been in contact with Blake’s Communication Department – we plan to submit a joint press release on the project once it’s complete.

Dawn Pape, a.k.a. the Lawn Chair Gardener, continues to write monthly article for local papers and is now a guest columnist with Lakeshore Weekly News on behalf of the BCWMC. She also continues to develop new BCWMC educational displays and continues to manage BCWMC’s social media. I continue to participate in the West Metro Water Alliance consortium at their monthly meetings, and to write and coordinate the WMWA “Water Links” newsletter articles. The fall newsletter was recently published: [http://www.hennepin.us/residents/environment/protecting-land-water#water-links](http://www.hennepin.us/residents/environment/protecting-land-water#water-links).

Hennepin County Natural Resources Partnership: I attended the meeting of this group on August 23rd and participated in a workshop to “envision the future of environmental education for youth.” I plan to continue regular attendance at these meetings held about every other month to connect with other watersheds, agencies, cities, and environmental organizations.

Records Retention/Management and Data Practices: At the direction of the Administrative Services Committee, I updated the Commission’s Records Retention Schedule and asked legal counsel to review and recommend any changes needed. Additionally, a Data Practices Procedure was drafted for the Commission by our legal counsel. The Commission will review these documents at a future meeting. Also, I continue to work on records management including locating all official records, determining what records should be disposed of or sent to the State Archives, how paper records can be digitized, and how and where to store our electronic records. I will be researching and gathering input on different options for records management and storage over the course of the year.

Organizational Efficiencies: At the direction of the Administrative Services Committee I will be drafting an organizational chart and have been discussing practices and procedures with TAC members, Commission staff, and Commissioners to ensure the proper and efficient use of staff’s time and to streamline communications where needed.