



## **2013 Annual Report**

**for the**

**Vadnais Lake Area Water Management Organization**

**VLAWMO**

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**In compliance with MN Rules Ch. 8410.0150**



## **TABLE OF CONTENTS**

### **ACTIVITY REPORT**

- A. 2013 Board of Directors; Technical Commission and acknowledgement of many other people who assisted VLAWMO efforts in 2013**
- B. Assessment of 2013 Annual Work Plan & 2103 Budget**
- C. 2014 Projected Work Plan**
- D. Local Plan adoption / updates**
- E. Communication**
- F. Locally adopted wetland banking**
- G. Summary of Wetland Conservation Act activity**

**APPENDIX 1: Water Quality Monitoring Report collected by VLAWMO**

### **APPENDIX 2 FINANCIAL REPORT**

- A. 2013 Fiscal year reporting of revenues and expenses**
- B. Management Letter prepared by the Auditing firm of Abdo, Eick & Meyer, LLC**





## **2013 Board of Directors**

### **Marc Johannsen, Chair**

771 Bur Oak Drive, Vadnais Heights, MN 55127; 612-336-9302

### **Dan Jones, Vice Chair**

1956 Lakeaires Drive, White Bear Lake, MN 55110; 651-653-3859 h

### **Bill Mample, Treasurer**

4270 Otter Lake Rd, White Bear Township, MN 55110; 651-653-3881

### **Bruce Ackerman,**

68 East Pleasant Lake Road, North Oaks, MN 55127; 651-484-4233

### **Rob Rafferty**

1573 Merganser Ct., Lino Lakes 55014

### **Robert Uzpen**

4200 Otter Lake Road, Gem Lake, MN 55110

### **Alternate Directors**

Jeff ODonnell, 6858 Black Duck Drive. Lino Lakes 55014

Kevin Edberg, 2408 Ronald Ave, White Bear Lake, 55110

Bob Kermes, White Bear Township 55110

Marty Long, 13 Nord Circle, North Oaks, MN 55127

Rick Bosak, Gem Lake, MN 55110

### **Technical Commission**

**Paul Peterson, Chair** 1770 Garden Lane, White Bear Township, MN 55110

**Chris Mann.** 10 Charles Lakes Road, North Oaks, MN 55127

**Jim Lindner,** 4155 Otter Lake Road, Gem Lake, 55110

**Mark Graham,** 800 East County Road E, Vadnais Heights, 55127

**Neil Franey,** 1323 Hedman Way, White Bear Lake and **Jim Grisim,** 1417 Highway 96, WBL

**Marty Asleson,** 600 Town Center Pkwy, Lino Lakes, 55014

### **Alternates**

Jessica Collin-Pilarski, 525 Carol Drive, Vadnais Heights

Gretchen Artig-Swomley, 1430 Goose Lake Road, Gem Lake

Mark Burch, 4701 Hwy. 61 White Bear Lake 55110

Brent Thompson, 4701 Hwy. 61 White Bear Lake 55110

John Murphy, NOHOA Board, North Oaks, MN

Bob Larson, North Oaks Natural Resources Commission

**Watershed Action Volunteers (WAV)**

Marsha Anderson, Vadnais Heights  
Joan Brainard, North Oaks  
Larry Briemhurst, Vadnais Heights  
Cindy Chua, North Oaks,  
Jessica Collin-Pilarski, Vadnais Heights  
Pete Dunn, Vadnais Heights  
Tammy Holmer  
Tom Falk, Vadnais Heights  
Gary Karger, North Oaks  
Sue Lundquist, White Bear Lake  
Chris Mann, North Oaks  
Ken Richter, White Bear Lake  
Ryan Strong, Vadnais Heights

Jennifer Hale  
Joe Walton, NO & Great River Grng  
Anne Conroy, North Oaks  
Kris Godbey  
Lucia Johnson, VH  
Vicky Douglas  
Vicki Ryan  
Kathy Tomsich, North Oaks

**Staff & Consultants**

Stephanie McNamara, Administrator; 651-204-6073  
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Vanessa Strong, Education & Outreach, 651-204-6070  
Jacob Thompson, Intern

Sarah Brown, Dave Schuler, & Justine Roe technical advisors & liaison,  
St. Paul Regional Water Service, 1900 Rice Street. St. Paul, 55113,  
Charles LeFevre & Peter Michail, Legal counsel  
Jensen, Bell, Converse & Erickson, P.A.; 1500 Wells Fargo Bldg., 30 E. 7 St, St. Paul  
Andrew Berg & Kevin Knopik, CPA, Auditor  
Abdo, Eick & Meyers LLP. 5201 Eden Ave., Ste: 310, Edina, MN 55436; 952-715-3003  
Brian Fischer, GIS website for VLAWMO, Houston Engineering, Inc. T 763.493.4522  
Della Young, Engineering gen. services, Water standards policies  
HDR Engineering, Inc.; 763-591-5400  
Rebecca Kluckhohn, TMDL on Lambert Creek & other 2010 Impaired Waters;  
Wenck Associates, 763-479-5150  
Ramsey Conservation District, Vadnais - Sucker Lake retrofit projects  
1425 Paul Kirkwold Drive, Arden Hills, MN 55112, 651-299-7274  
Jeanne Vogt, Storm Sewer Utility rate development and county certification assistance  
Ehlers & Associates

## 2013 Annual Report for the

### Vadnais Lake Area Water Management Organization

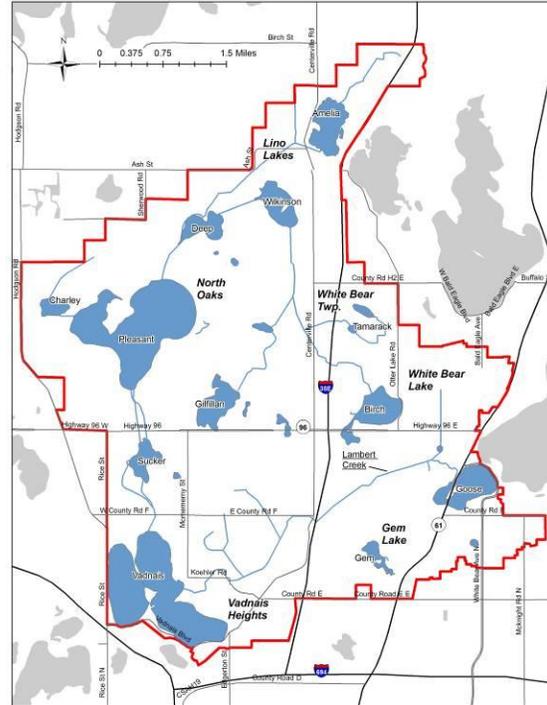
#### Introduction

The Vadnais Lake Area Water Management Organization (VLAWMO) covers approximately 25 square miles in the northeast metropolitan area. VLAWMO is a joint powers water management organization empowered by its member communities to manage water resources under Minnesota statute Chapters 103A – 103H.

VLAWMO shares responsibility with its member communities to:

- ❑ Protect surface water quality
- ❑ Manage stormwater and control flooding through the use of best management practices
- ❑ Require good erosion control practices, both during development and as a part of good stewardship
- ❑ Provide public education to promote good stewardship of water resources
- ❑ Protect and manage wetlands through the Wetland Conservation Act and local effort
- ❑ Protect groundwater quality and recharge areas.

Vadnais Lake, in the southwest corner of the watershed, serves as a reservoir for the St. Paul Regional Water Service (SPRWS). The SPRWS provides drinking water to about 400,000 customers in several communities. VLAWMO includes parts of Vadnais Heights, White Bear Township, White Bear Lake, Gem Lake, Lino Lakes and all of North Oaks. Most of the watershed lies in Ramsey County with a small portion in Anoka County.



This Annual Report is provided to the public and the State of Minnesota, Board of Water and Soil Resources in compliance with MN Rules Chapter 8410.0150.

#### Financial Reporting

The 2013 Approved Budget is included in Part 2 of this Report. Line item footnotes provide further clarification of the budget. The 2013 Financial Statement was prepared by the VLAWMO auditor, Abdo, Eick and Meyers LLC. It is included as an Appendix to this Report. General discussion of the watershed finances follows.

Income. The majority of the VLAWMO budget is supported by the Storm Sewer Utility (SSU). SSU fees were assessed on all non-exempt property within VLAWMO. Fees were based on an average amount of impervious surface in different land use classifications. The 2013 SSU fees were certified by the VLAWMO Board for assessment and collection by

Ramsey and Anoka Counties on property tax statements. Payable 2013 SSU fees were certified by the VLAMWO Board in October 2013. The actual income from service fees and interest continues to be low and considerably less than was budgeted. However, this income source is less than 1% of the budget. Interest income was derived from, a money market savings account and the transfer of checking funds to the Minnesota Municipal Money Market Fund (4-M and 4M Plus Fund).

Grant Income.

- The other grant received from the Board of Water & Soil Resources was a Community Partners grant for to establish a program partnering with new local groups to install best management practices in the Lambert Creek subwatershed. Of the \$105,200 award, another 40%, \$42,080 was received in 2013, with the first three partner project installations.
- The final payment of the Central Middle School grant was received: \$5,580.
- The St. Paul Regional Water Service award \$10,000 through the Upper Mississippi River Source Water Protection Plan for streambank stabilization work along Lambert creek.
- WCA sub-grant. This state cost share grant covers half of the cost of administering the Wetland Conservation Act within the watershed (\$7,353).
- The Oakmede Lambert Creek stabilization, phase 2 project was completed with \$50,000 of the \$65,000 coming from the Clean Water Fund through the Ramsey Conservation District.

VLAWMO provided the match funds.

- A contract with MPCA for the TMDL study was approved in August 2010. The second amendment was approved increasing the grant award to \$68,316. The study is nearing completion, with final payments expected in 2014.

After establishing a fund balance policy in 2011 the Board carried 2012 Fund balances forward to 2013: \$173,800, a portion is encumbered for grant funded projects.

Expense. VLAWMO budget supported a variety of project and program implementation such as:

- the Citizen's lake monitoring and Lambert Creek monitoring program,
- The Sustainable Lake Management Planning continued with work on the Goose Lake, Black and Gem Lake SLMP.
- Property owners around the watershed installed raingardens, naturalized shorelines and other best management practices. The purchase of rainbarrels remained a popular choice in the cost-share program. Unspent funds at the end of 2013 were carried over to 2014.
- The CIP projects included the installation of the Chippewa Middle School swale project with robust STEAM Education program for the 7<sup>th</sup> graders in North Oaks. VLAWMO provided matching money and time for this grant funding effort.
- Oakmede stabilization project was 25% funded by a VLAWMO match.

◆ Wetland Conservation Act administration is all

Staff support for program. VLAWMO employs four full time staff and a seasonal intern in 2013. All staff enable the variety of programs and projects that are in the Work Plan. The Community Blue program reaching out to new partners interested in installing best management practices (BMPS) such as raingardens has been an important part of the 2013 effort. The TMDL stakeholder meeting and follow-up involvement has also been critical. A Program Coordinator is implementing projects identified in the sustainable lake management plans and retrofit studies, providing BMP workshop education and continued to serve on the Blue Thumb steering committee. She provided grant oversight and GIS assistance and runs the cost-share program, as well other efforts. The Water Resources Technician focuses his time on the monitoring program, collecting and entered data into the watershed database and EQulS, the national database, SLMP planning & writing, has assisted with Wetland Conservation Act work. He oversaw the phase 1 streambank restoration at Oakmede and other projects. The Administrator works with the Board on budgeting & policy, support for program and projects and working with the bookkeeper and auditors on financial report generation, Storm Sewer Utility rate development and certification and a variety of other support roles. Several contracted consultants listed in the acknowledgements, as well assistance from the St. Paul Regional Water Service, Ramsey County and Ramsey Conservation District enabled the many efforts.

No actual expenses were significantly over budget in 2012. CIP actual expenses were significantly under budget some of the budgeted project expenses were reimbursed by the various grants received or under partnership agreements. The graduated increase built into the lease for office space was the primary driver of increased office expense costs. Facilities operations (maintenance) is expected to rise as more projects go into the ground.

## 2013 WORK PLAN ASSESSMENT

Three main goal areas were identified by the VLAWMO Board for 2013:

### 1. WATER QUALITY PROGRAMS

- ◆ The final report for the **Total Maximum Daily Load (TMDL) study of five impaired lakes and the Lambert creek bacterial impairment was completed and sent to MPCA for consideration.** Additional focus group meetings were held with stakeholders in a fall of 2013.
- ◆ **The Monitoring Program will be continued and expanded.**
  - ❖ 12 lakes are monitored with the assistance of a volunteers (Citizen's Lake Monitoring Program) and staff.
  - ❖ Lambert Creek is also monitored for quality, e coli and has an automated monitoring station at Whitaker added in 2010.
  - ❖ Lake level reading and baseline chloride levels were also taken.
  - ❖

- ❖ VLAWMO continued monitoring as part of the Odonata Survey Project. A workshop was held at Tamarack Nature Center kick off the second year of dragonfly and damselfly monitoring across the watershed.



Figure 1 Odonata workshop – Widow skimmer

- ❖ The automated monitoring system on Lambert Creek to is functioning at the White Bear storm sewer site, providing valuable data on creek flow. The other three flume sites are sampled and gauged by staff, with automation to be addressed as needed.
- ◆ Stormwater monitoring on **Birch Lake SLMP was done** in 2013 with results with the results used to clarify the larger sources of nutrient loading.
- ◆ The **Goose Lake fish study recommend recommended a Bullhead harvest to help address the internal nutrient loading.** 16,000 pounds of bullheads were removed in a spring and fall 2013 harvest on both sides Goose Lake. Fall harvest was cut short due to early winter weather. The fisherman doing the harvesting will be checking the population in the spring of 2014 and completing the harvest in fall 2014.



Figure 2 Goose Lake fish bullhead harvest

- ◆ **Sustainable Lake Management Plans.**

- ❖ Staff worked on Goose Lake and started work on Gem and Black Lake SLMP's in 2013.



Figure 3. Floating island in Tamarack Lake

- ❖ **Birch Lake SLMP** Maintenance on the lakeshore restoration with the help of the installing contractor, local neighbors and a DNR plant replacement grant.
- ❖ **A Floating Island wetland was installed in Tamarack Lake.** Made with recycled materials, soil and plants these floating bogs are intended to help with the internal nutrient loading and just as importantly education at Tamarack Nature Center. The interpretive signage will be installed, spring of 2014. Monitoring of the lake and near the island will continue.
- ◆ **The sixth year of the cost-share incentive program** funded 10BMP projects and several rainbarrels.

- ◆ **Capital Improvement Projects:**
  - ❖ **Streambank stabilization was completed downstream of flume 1 near Oakmede Lane in White Bear Township.** Scoured was moving sediment. Toe stabilization, soil lifts, rock vanes and flood plain planting were installed to correct the erosion problems.



◆ **Figure 4 Oakmede Phase 2 streambank stabilization**

- ◆ **Chippewa Middle School education project with 7<sup>th</sup> graders and raingarden installation.** Multiple partners and donors were critical in the success of this multi-faceted project.



**Figure 5 Conservation Corps & donated professional help prepare for students**



**Figure 6. VLAWMO tour 2013.**

- ◆ **VLAWMO hosted a summer tour in 2013.** Past, present and future projects were highlighted in the tour attended by residents, local and State agency people.
- ◆ **Central Middle school swale planting and maintenance took place.** The final educational signage was installed.



**Figure 7. sign for bioswale at Central Middle School in White Bear Lake.**

- ◆ Continue to **administer the Wetland Conservation Act** within the VLAWMO jurisdiction. Most of the 2013 work involved verification of wetland delineations and No-Loss of wetland determinations.

## 2. Public Education and Outreach

- ◆ **BMP Workshops: Raingarden, shoreline restoration and the first BMP maintenance workshops were held** staffed with VLAWMO trainers. Most of the attendees became cost-share recipients.
- ◆ A Dragonfly Workshop to train volunteers and staff on collection

and identification of dragonflies and damselflies was held with the help of the MN Odonata survey. These species spend more than half their life in the water and can be an indicator of water quality and habitat health. The VLAWMO team was able to add substantially to the knowledge base for this part of Minnesota..

- ◆ **VLAWMO partnered at several community events** Taste of Vadnais, North Oaks Fair, Marketfest, White Bear Lake, White Bear Township Community Fair.



Figure 8. Taste of Vadnais

- ◆ **The Watershed Action Volunteers (WAV)** became the backbone of the Odonata program as well as helping at community events. They also assisted at the TMDL stakeholder meeting.
- ◆ **GIS mapping site added to VLAWMO website.** Hosted by Houston Eng. this interactive site may be used by the public and staff to facilitate projects & program. Staff gave a demonstration at the North Oaks City Council meeting.
- ◆ **VLAWMO continues to be a Blue Thumb Partner** providing education and project effort. VLAWMO actively refers to the Blue Thumb website for planting for water quality information. Kristine serves on the BT steering committee
- ◆ **NEMO.** The education & outreach staff partnered with NEMO to

present information on the TMDL stakeholder meeting format and success at the Low Impact Development (LID) conference in the twin cities.

- ◆ **The Cost-share program** See above. A brochure on maintenance was developed with BT and printed.



Figure 9. Homeowner raingarden

### 3. Governance: Finance & Administrative

- ◆ **Implement Stormwater Utility** as directed by the VLAWMO Board of Directors. Done. 99% of the 2013 SSU fees were collected. Rates for 2013 were kept almost level with certification to the counties before the deadline.
- ◆ **Complete the Annual report and Audit** as required. Done & submitted.
- ◆ **BWSR Performance Review & Assistance Program (PRAP)**  
BWSR audited the activities, policies and performance of VLAWMO in the summer of 2013. Key findings:
  - ❖ “The VLAWMO has set ambitious goals for local water management in a challenging urban environment that involves many players. Now more than halfway through their current planning cycle the organization is making good progress in implementing their projects and programs.

- ❖ They have demonstrated the ability to effectively collaborate with other local water management entities to get the work done.
  - ❖ Partner organizations gave high marks to VLAWMO’s efforts to work with them and to deliver high quality products and services. If anything, there is potential for VLAWMO to accomplish more by collaborating more.
  - ❖ Key recommendation: Use short-term strategic planning to explore project and program expansion.”
  - ❖ Two action items: approve one local water plan and develop comprehensive data practices policies.
- ◆ Staff **attended training** the BWSR academy, MAWD, Wetland delineation and Ecological restoration and the International LID conference.



**2013 Budget**

<b>INCOME</b>	
Storm Sewer Utility	\$436,074
Other income	\$5,650
Grants/ Transfers	\$112,410
<b>Total income</b>	<b>\$554,134</b>
<b>EXPENSE</b>	
Operations	\$55,500
Consulting Assistance	\$36,450
Human resource	\$249,000
Programs	\$69,224
Capital Projects	\$140,000
<b>Total expense</b>	<b>\$550,174</b>



## WORK PLAN FOR 2014

### 1. WATER QUALITY PROGRAMS

- ◆ Work with MPCA, Wenck and other stakeholders to complete the **Total Maximum Daily Load (TMDL) Implementation Plan** including approval by the MPCA. Work with stakeholder groups to identify and prioritize which projects in the Implementation should be addressed first. Start work on those projects
- ◆ **The Monitoring Program** will be continued, with stormwater sampling with the assistance of a dedicated volunteers and laboratory analysis by Braun labs.
  - ❖ Initiate a pilot bacteria source monitoring program to address the Lambert Creek impairment.
  - ❖ The **Citizen's Lake Monitoring program** will be continued on all 12 basins
  - ❖ **Chloride level** measurements will be taken in the spring for both lakes and Lambert Creek.
  - ❖ Continue **Lambert Creek monitoring** program for nutrients, turbidity. Bacteria testing will be discontinued until direction from the TMDL Implementation plan is secured.
  - ❖ Utilize the automated & direct monitoring system at targeted locations of the **Whitaker project** focusing on the effectiveness of the project. Implement changes as we are able to do so.
  - ❖ Continue **Lake Level program.**
  - ❖ **Zebra mussel monitoring** for targeted lakes and Lambert Creek
- ◆ **Sustainable Lake Management Plans.**

With other Stakeholders complete the Sustainable Lake Management Plans for **Goose, Black and Gem Lakes.**

- ❖ **Birch Lake SLMP** – VLAWMO will work with other stakeholders including the BLID & the City of WBL to **maintain the project shoreline** restoration on the north shore of the lake.
- ❖ **Tamarack & Fish Lakes SLMP's** VLAWMO will partner with education and study opportunities – see CIP project below.
- ❖ **Wilkinson Lake SLMP** will be initiated with stakeholders
- ◆ Implement **the 5th year of the cost-share incentive program** to encourage watershed restoration projects.
- ◆ Strategic Planning 2014 – 2016 effort will be completed with stakeholder, Board and TEC input.
- ◆ **Capital Improvement Projects:**
  - ❖ CIP projects will for 2014 will be completed as directed by the strategic planning.
  - ❖ **Community Blue Projects.** At least two school raingardens will be installed by partner groups at the schools.
  - ❖ Work with the City of Gem Lake to scope and initiate a **drainage study for the Hwy. 61 drainage into Gem Lake.**
- ◆ Continue to **administer the Wetland Conservation Act** within the VLAWMO jurisdiction.

### 2. Public Education and Outreach

- ◆ **Workshops:**
  - ❖ **A Raingarden workshops, a shoreline stabilization and a BMP maintenance workshop** will be held.
  - ❖ **A Dragonfly training** Workshop will be held.
  - ❖ **A Community Blue workshop for teachers** will be held at Vadnais Elementary.

- ◆ **VLAWMO will partner with the community as** through local events, providing educational information for community newsletters and school newsletters. VLAWMO will continue to be a Blue Thumb and NEMO partner, as well as outreach opportunities with **Tamarack Nature Center & other community groups.**
- ◆ The **Watershed Action Volunteers (WAV)** will continue to help with the Odonata program in 2013 and other outlets.
- ◆ **The Cost-share program** will continue with new incentives for successful installation of projects. Target: all cost-share funding spent in 2013.
- ◆ **Communication** (requirement of MN Rules Ch. 8410.0100) The Annual Report together with the internet website: [www.vlawmo.org](http://www.vlawmo.org) is intended to meet the requirements under Minnesota Rules. Planning documents are on the website. The office may be contacted at 651-204-6070 or at [office@vlawmo.org](mailto:office@vlawmo.org) on line.
- ◆ **New Logo and other Marketing materials** will be developed in time for the workshop and community event season.
- ◆ VLAWMO will **update its website** in 2014 with the aid of new software and professional consulting.

- ◆ **Local Water Plans** and ordinances. Two more communities completed updates in 2010.

### Local Water Plan Status

Member Community	Last Update	New update in progress
Gem Lake	1910	No
Lino Lakes	2011	No
North Oaks	1999 *	Yes
Vadnais Heights	2010 *	No
White Bear Lake	Nov. 2007	no
White Bear Town	2010 *	No



### 3. Governance: Finance & Administrative

- ◆ **Adopt new VLAWMO Policies:**
  - ❖ Data Practices policies (PRAP)
  - ❖ Personnel policy updates.
- ◆ Do **Strategic Planning** to identify and prioritize projects & programs for 2014 – 2016.
- ◆ **Implement Stormwater Utility** as directed by the VLAWMO Board.
- ◆ **Complete the Annual Report and Audit** as required. The Annual Report will include the report of activity, finances and monitoring.

ATTACHMENT  
 2013 WCA PROJECT / EXPENSE  
 SUMMARY  
 1/01/2013 – 5/31/2013

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**Replacement Plans**

**0**

**WCA Assistance**

2 Rapp Farm Phase 2 -3  
 follow-up North Oaks

6 Betsy Laurey wetland – site  
 visit White Bear Lake

1 Charlie Lake Preserve  
 standards questions North Oaks

2 Doug Ehlert – Turtle Lake  
 Rd wetland questions North Oaks

3 Mcmenomy Rd.  
 Eibensteiner  
 Vadnais Heights

1 Ehlen pond cleanout  
 questions Vadnais  
 Heights

2 Life time fitness potential  
 impact check White Bear

6 Justin Halvorson – Willow  
 Grove Ln. Vadnais Heights

2 wetland questions – D  
 Powers, NOHOA North Oaks

**25**

**Wetland Determinations**

1 Summit Orthopedic no-loss  
 review Vadnais Heights

1 Talmadge Circle paperwork  
 to SEH Vadnais Heights

**2**

**Exemptions**

3 Talmadge Circle drainage-  
 wetland Vadnais  
 Heights

**Banking**

**3** Discuss potential wetland  
 banking site White Bear Town

**Monitoring**

1 Reports review  
 All

**Miscellaneous**

9 WCA Training - with  
 Dennis R All

3 Email communications w-  
 BWSR & year-end report All

4 Subgrant administration  
 All

3 WCA communication with  
 the Board & TEC All

**18**

**Total hours for 1/01/13 – 5/31/13: 49**