



2012 Annual Report

10/22

Coon Creek Watershed District

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www.cooncreekwd.org

Approved by the Coon Creek Watershed District Board of Managers

April 22, 2013

Coon Creek Watershed District

Managers and Staff 2012-13

Board of Managers

Byron Westlund
Brad Johnson
Warren Hoffman
William MacNally
Scott Bromley

Office

President
Vice President
Secretary
Treasurer
At-Large

Staff

Tim Kelly
Ed Matthiesen
Michelle Ulrich
Dawn Doering
Tom Gile
TJ Helgeson
Jon Janke
Diana Shonyo

Position

District Administrator
District Engineer
District Attorney
Information & Education Coordinator
Regulatory Affairs Coordinator
On Leave
Operations & Maintenance Coordinator
Administrative Assistant

Cover photo: Clean Water Partnership grant- rain garden at Sand Creek trail head, Coon Rapids.

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1. Reporting Requirements

About the Performance Report and Plan The Coon Creek Watershed District (District) is required to annually report on a variety of activities. These requirements and the state and federal laws that mandate the reporting are listed here.

Watershed Act The Minnesota Watershed Act (M.S. 103D.351) requires the District to prepare a yearly report of

- The financial conditions of the District
- The status of all projects
- The business transacted by the District
- Other matters affecting the interests of the District
- The District plans for the succeeding year

Metropolitan Water Management Act The Metropolitan Water Management Act (M.S. 103B.231) requires a yearly report similar to the Watershed Act but stipulates specific financial and activity items to be reported.

- Roster and contact information for the Board and Advisory Committees
- Various financial expenditure information
- Permit and enforcement activity
- Annual plan
- Status of local plan adoption
- Summary of monitoring data
- Status of wetland banking

Federal Clean Water Act The National Pollution Discharge Elimination System (NPDES) Program requires all MS4s to file an annual report of specific activities related to the Minimum Control Measures (MCMs) identified in the District Storm Water Pollution Prevention Plan (SWPPP).

Wetland Conservation Act The Minnesota Wetland Conservation Act (M.S. 103A) requires the Board of Water and Soil Resources to report to the legislature on various activities related to the implementation of the Act. All LGUs that receive funding through the Natural Resource Block Grant (NRBG) program administered by BWSR are required to report on:

- The number of WCA applications
- Replacement plans
- Size of wetland impacts and losses
- Use of credits for replacement
- Exemption determinations
- Replacement wetlands
- Enforcement actions
- Administrative and technical training

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2. Coon Creek Watershed District At a Glance

Introduction

The Coon Creek Watershed District (District) was created in 1959. The Watershed District encompasses 107 square miles and includes areas that drain directly to the Mississippi River. The District is located entirely within Anoka County.

The hydrologic boundary encompasses 92 square miles of the northern edge of the Twin Cities Metropolitan Area.

On December 14th, 2011, the Board of Water and Soil Resources ordered the District to include the northern areas of the dissolved Six Cities Water Management Organization. These approximately 14 square miles include parts of Coon Rapids, Fridley, and Spring Lake Park. The Watershed Act (103D) and the Metropolitan Water Management Act (103B) provide the most basic authorities for the District. In 1990 the District Board adopted a mission statement to guide District programs and activities:

Mission

To manage groundwater and the surface water drainage system to prevent property damage, maintain hydrologic balance, and protect water quality for the safety and enjoyment of citizens, and preserve and enhance wildlife habitat.

Organizational Structure

A Board of Managers administers the District. The Board is composed of five members representing different areas of the District. Each Manager

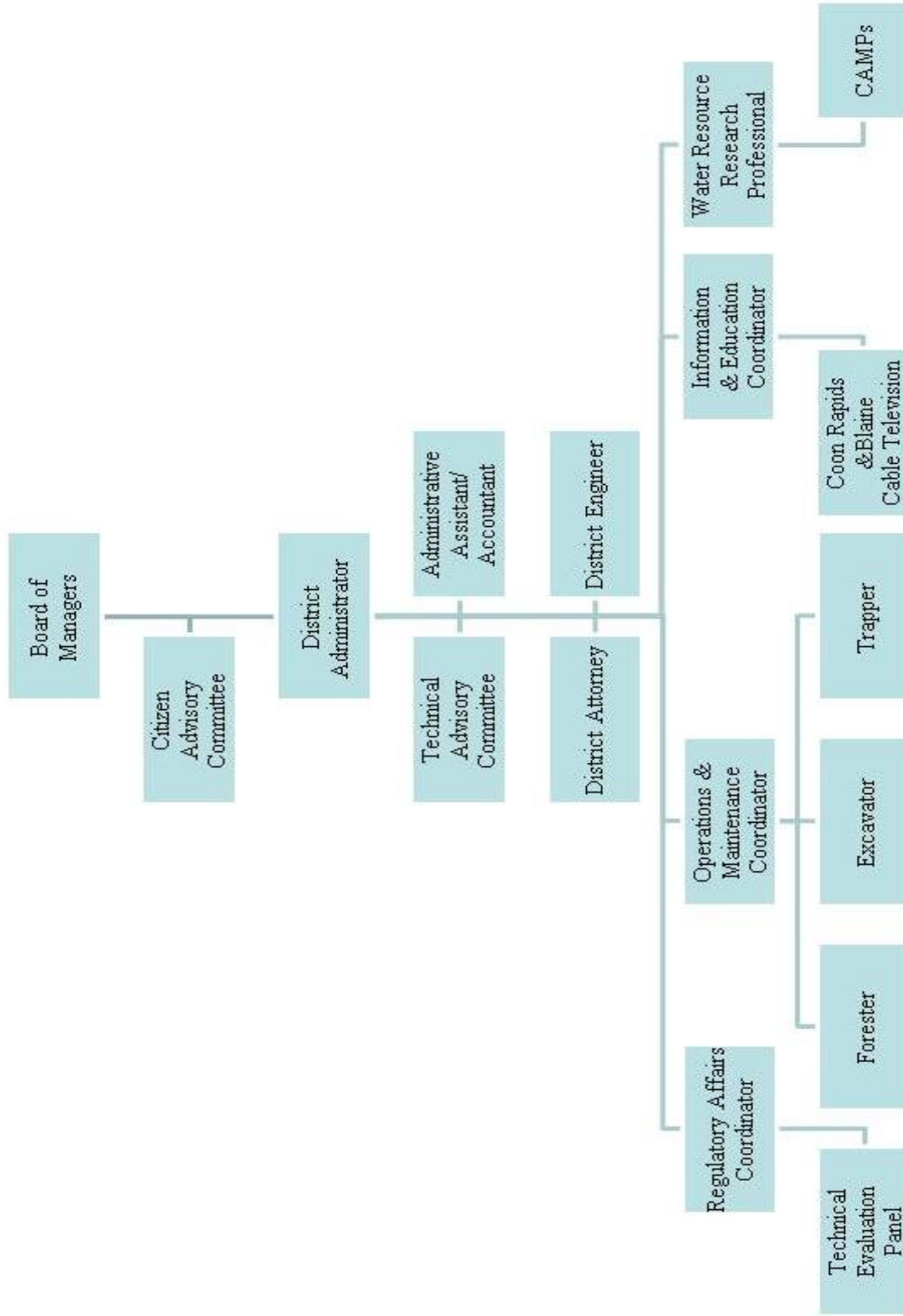
- Serves a three-year term, staggered
- Is nominated by his or her local unit of government
- Is appointed by the Anoka County Board

The watershed Board is statutorily authorized to employ professional assistants in carrying out its duties. The Board and staff provide leadership on a watershed-wide basis. Watershed-wide policy and direction are formulated and provided for field implementation through District and Municipal activities.

The current organizational structure is shown on the next page.



Coon Creek Watershed District Organizational Structure



District Business Model

As the lead agency in the watershed for water resource management, the Coon Creek Watershed District provides leadership in the protection, management, and use of water and related land resources.

The watershed uses a multiple-use land management approach to pursue eleven goals. To pursue the goals the Coon Creek Watershed District operates six programs which oversee 22 basic activities, which in turn involve well over 500 separate tasks.

The programs are:

1. Administration
2. Development Regulation and Issue Management
3. Operations and Maintenance
4. Planning, Programming, and Budgeting
5. Public and Governmental Relations
6. Research, Monitoring, and Data Collection

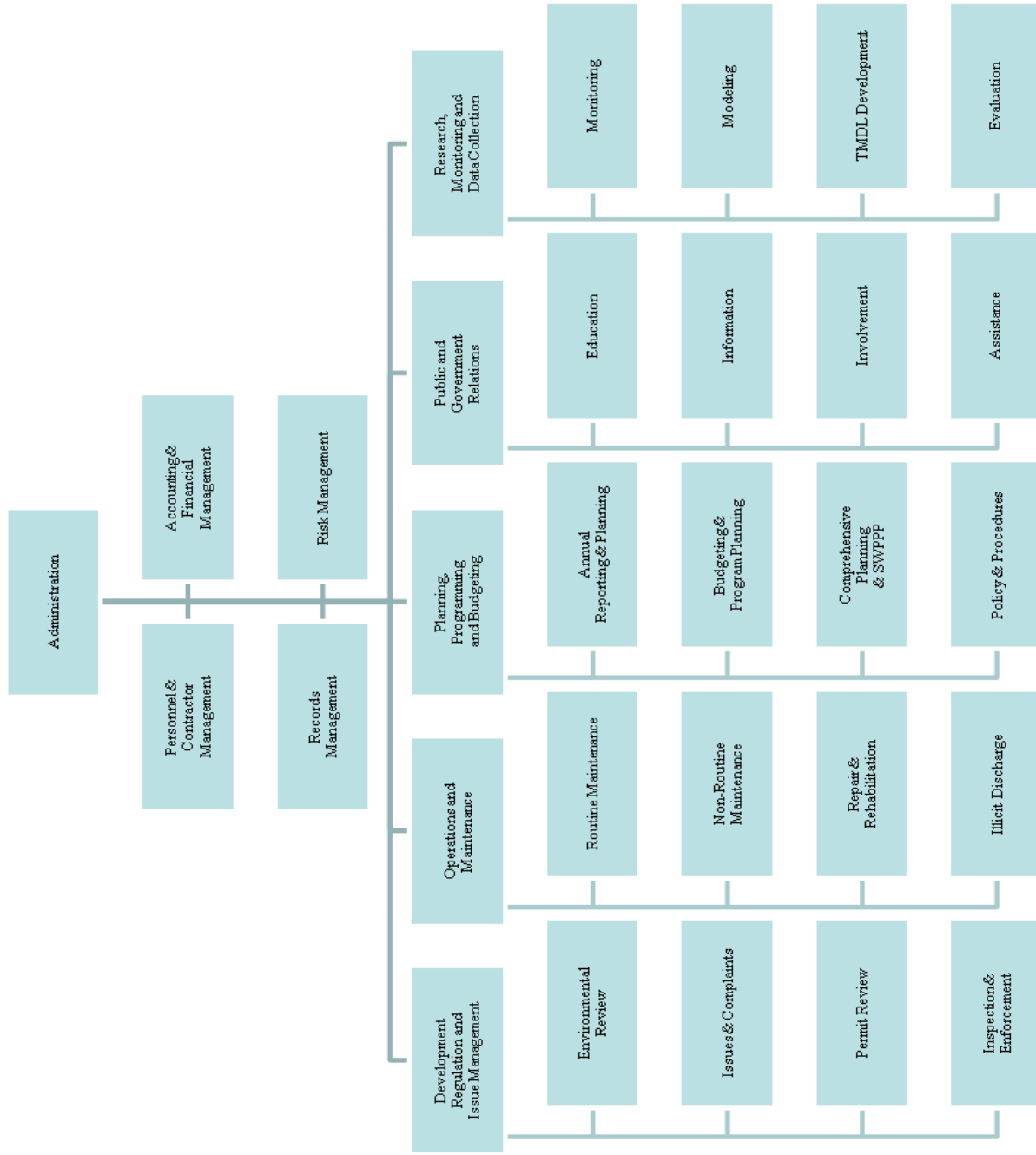
Link to District Budget

These programs are developed to provide better public service and sustainable land stewardship practices. They are also the context for budgeting and tracking District activities and tasks.

Adjustments to Comprehensive Plan

The annual goals for our 2012 Budget and Plan are based on the District Comprehensive Plan (approved by the Board of Water & Soil Resources in October 2004) and SWPPP (received by the MPCA in June 2006, with corrections and additions in September 2007). Adjustments to some District objectives and outcomes are based upon more recent performance information and current and projected funding levels.

Coon Creek Watershed District Program and Activity Structure



4. District Program Review

Coon Creek Watershed District is managed through six programs:

1. Administration
2. Development Regulation and Issue Management
3. Operations and Maintenance
4. Planning, Programming, and Budget
5. Public and Governmental Relations
6. Research, Monitoring, and Data Collection



ADMINISTRATION

Program Description

This program implements the approved policies of the Board of Managers, administers the financial affairs of the Coon Creek Watershed District, ensures the accountability of public funds, and serves the District financial needs.

Activities and Outcomes

The Administration Program consists of seven activities:

1. Board of Managers
2. Records
3. Personnel Administration
4. Contract Administration
5. Training and Seminars
6. Financial Management
7. Risk Management

Board of Managers: Members, Officers, Contact Information and Terms

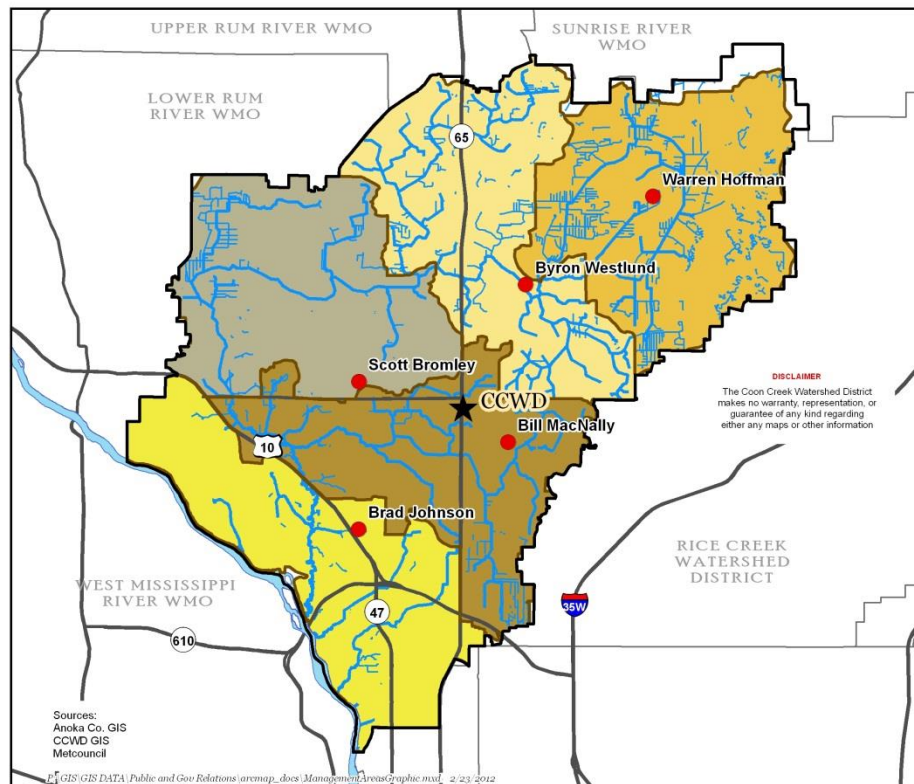
The District is governed by a Board of Managers. The Board is composed of five members representing different geographic areas of the District. Each Manager serves a staggered three-year term, is nominated by his or her local unit of government, and is appointed by the Anoka County Board.

Name	2012 Office	Appointed	Current Term Ends	Phone
Scott Bromley	At-Large	2011	2014	(763) 754-3820
Warren Hoffman	Secretary	2000	2013	(763) 434-5518
Brad Johnson	Vice President	2011	2014	(763) 202-4665
Bill MacNally	Treasurer	2003	2013	(763) 951-2667
Byron Westlund	President	2006	2015	(763) 427-7500

Principle Place of Business

Minnesota Statutes 103D.321, Subd. 1 requires the District to designate a public facility within the watershed district as a principal place of business.

- Address** 12301 Central Avenue NE, Suite 100
Blaine, Minnesota 55434
- Phone** 763-755-0975
- Fax** 763-755-0283
- Web** www.cooncreekwd.org
- E-mail** info@cooncreekwd.org



Oath of Office

Minnesota Statute 103D.315 requires all Managers to take an Oath of Office. Each Manager is sworn in using the Oath of Office when they are appointed. In addition, the Board re-administers the Oath of Office during the first meeting of each calendar year.

Minutes

Minnesota Statute 103D.315, Subd. 5, requires that the District keep records of all business done and meetings held by the Board of Managers. All Board meetings are recorded and minutes are prepared and presented to the Board for approval. Approved minutes are available at the District office and online at www.cooncreekwd.org >About us>Board information>Past minutes.

Records Retention & Disposal

Administer Records Retention & Disposal Policy and procedure:

Program	Record	Retention (Yrs)	2011	2012	2013
Administration	Expired Service Contracts	10	2000	2001	2002
	Financial Details	6	2005	2006	2007
	Employment Apps & Resumes	1	2010	2011	2012
	Separated Personnel files	5	2005	2006	2007
	Timesheets	6	2004	2005	2006
	Contracts & Leases	10	2001	2002	2003
Operations	Bids & specs	6	2004	2005	2006
Planning	Budget work papers	2	2008	2009	2010
I&E	Conference & Workshop Info	6	2005	2006	2007

Meetings

The Board of Managers meets on the second and fourth Monday of each month (approximately 24 times per year). The meeting schedule is published in the Anoka County Union, the Fridley Sun Focus, and on the District website, www.cooncreekwd.org. The meeting schedule is also stipulated in the District rule. Board meetings are at:

Address Bunker Hills Activity Center
550 Bunker Lake Blvd NW
Andover, MN 55304

Phone 763-757-3920

Fax 763-755-0230

In 2012 the Board met 19 times; one was the Board Tour of the District and included members of the Citizen Advisory Committee. Six regularly scheduled meetings were cancelled. All of the cancelled meetings occurred on the second Monday of the month.

	2012 Budget	2012 Actual
Number of Meetings	22	19
Per Diem	\$ 5,800	\$ 4,450

Board Business

The Board of Managers reviewed and acted on 265 separate items of business in 2012. These actions were down slightly (-10%) from 2011 when the CCWD boundary was expanded to include part of the dissolved Six Cities Watershed Management Organization. The greatest change was seen in increased permit reviews as the economy seems to pick up and (60%) and decrease in policy items (-25%) mostly as a result of the reconciling of the new boundary and that a Consent Agenda format was introduced in August and taken into account.

Outcome: Agenda Items	2011 Actual	2012 Actual	Percent change
Policy	149	112	-25
Permit Review	40	64	+60
Discussion	58	52	-10
Information	46	37	-20
Total	293	265	-10

Official Paper

Minnesota Statutes 103D requires that under certain circumstances, the District Notice its meetings, hearings, and decisions. To meet the District goal of keeping the public informed, District business is always noticed in the Anoka County Union & Shopper, Inc. (Anoka Union, Blaine- Spring Lake Park Life, and Coon Rapids Herald), and with the boundary expansion, the Fridley Sun Focus.

Notice	2012	2013
Request for Bids	1-Xeon Pond	
Budget	1	2
SWPPP Meeting	1	2
Request for Interest – Eng		2
Request for Interest – Legal		2
Rules		
Legal Notices	3	4
Unit Cost		
Budget	\$ 3,309.50	\$ 3,478.00

Advisory Committee Appointments

M.S. 103D.331 requires that the Board of Managers annually appoint an advisory committee to advise and assist the Board on matters affecting the interests of the watershed district. The Advisory Committee must have at least the following members

Measures	2012	2013
Board	Scott Bromley	Scott Bromley
Anoka County	Carol LeDoux	Jon Olson, P.E. Public Services Division Manager
Anoka Conservation District	Jim Lindahl	Jim Lindahl
Conservation Organization	Gary Nereson Crooked Lake Area Association	Gary Nereson Crooked Lake Area Association
Agriculture Organization		
Andover	Diana Perron	
Blaine	Michael Von Wald	
Columbus		
Coon Rapids	Roger Johnson Bill Kurdziel Jeff Simon	Roger Johnson Bill Kurdziel
Fridley	Donna Bahls	Donna Bahls
Ham Lake		
Spring Lake Park		

Technical Advisory Committee

Minnesota Statute 103D.337 requires that the District establish a technical advisory committee consisting of representatives of affected cities, county, and soil and water conservation districts.

Organization	2012	2013
Number of meetings	8	6
Anoka Conservation District	Chris Lord	Chris Lord
Andover	Todd Haas	Todd Haas
Blaine	Jim Hafner	Jim Hafner
Columbus	Elizabeth Mursko	Elizabeth Mursko
Coon Rapids	Tim Himmer, Public Works Director	Bob Moberg, P.E., City Engineer
Fridley	Jim Kosluchar	Jim Kosluchar
Ham Lake	Tom Collins	Tom Collins
Spring Lake Park	Phil Gravel, Stantec	Phil Gravel, Stantec
BWSR	Melissa Lewis	Mary Peterson
DNR	Kate Drewry	Kate Drewry
MPCA	Brooke Asleson	Brooke Asleson

Technical Evaluation Panel

Minnesota Statute 103G.2242 Subdivision 2 requires the District establish a Technical Evaluation Panel to assist or make determination on questions concerning the public value, location, size, or type of a wetland.

Organization	2011	2012	2013
Number of meetings	24	28	33
Anoka Conservation District	Dennis Rodacker	Dennis Rodacker	Aaron Diehl
BWSR	Lynda Peterson	Lynda Peterson	Dennis Rodacker
US Army Corps of Engineers	Tim Fell / Marie Kopka	Andy Beaudet	Andy Beaudet
Andover	Todd Haas	Todd Haas	Todd Haas
Blaine	Jim Hafner	Jim Hafner	Jim Hafner
Columbus	Elizabeth Mursko	Elizabeth Mursko	Elizabeth Mursko
Coon Rapids	Dave Full	Dave Full	Dave Full
Fridley	Jim Kosluchar	Jim Kosluchar	Jim Kosluchar
Ham Lake	Tom Collins	Tom Collins	Tom Collins
Spring Lake Park	Stantec	Stantec	Stantec
DNR	Kate Drewry	Kate Drewry/Melissa Doperalski	Kate Drewry/Melissa Doperalski

ADMINISTRATION

Personnel

<u>Staff</u>	<u>Position</u>	<u>FTE</u>	<u>Years of Service</u>	<u>2012 Training Sessions</u>	<u>2012 Training (Hrs)</u>
Tim Kelly	District Administrator	1.0	23.0	0	0
Diana Shonyo	Administrative Assistant	1.0	4.5	0	0
Dawn Doering	Information and Education Coordinator	1.0	6.5	4	13
Tom Gile	Regulatory Affairs Coordinator	1.0	4.5	7	46
T.J. Helgeson	On Leave		1.0		
Jon Janke	Operations & Maintenance Coordinator	1.0	1.75	10	31

District Attorney

Michelle Ulrich
1561 Lincoln Ave.
St. Paul, MN 55105
651-699-9845

District Engineer

Ed Matthesen
Wenck Associates, Inc
1800 Pioneer Creek Ctr.
PO Box 249
Maple Plain, MN 55359-0249
(763) 479-4200

Solicitation of Interest Proposals for Service Providers

The District employs seven technical service providers. Minnesota Statutes 103B requires that the District *solicit interest proposals for legal, professional, or technical consultant services before retaining the services of an attorney or consultant or extending an annual services agreement at least every two years.*

Solicit interest proposals (SIP), Request Service Proposal (RFP), Review Rates & Services (RRS)

Service	Provider	2012	2013
Engineering	Wenck & Associates	RRS	SIP
Legal	Michelle Ulrich	RRS	SIP
Accounting	Anoka County		RRS
GIS	Flat Rock Geographics (formerly GIS Rangers)	RRS	
Water Quality	Anoka Conservation District	RRS	RRS
Trapping	Rick Johnson	RRS	SIP
Tree Services	P & C Tree Service	RRS	SIP

Other Service Providers

Service	Provider	Formal Agreement?	Term (yrs)	Current?
Audit Service	Minnesota State Auditor	Yes	1	Yes
Banking: Magic Fund	US Bank	No	na	Yes
Computer Support	Solution Builders	Yes	1	Yes
Domain Name:	Network Solutions	Yes	10	Yes
Equipment Maintenance	Metro Sales	Yes	1	Yes
GIS Services	Flat Rock Geographics (GIS Rangers)	Yes	1	Yes
Insurance	Bearence Management Group	Yes	1	Yes
License ArcView	ESRI	Yes	1	Yes
License for use of digital photos	Anoka County	Yes	1	Yes
Maintenance Office	A-1	No	1	Yes
Meeting Room Rental	Anoka County Parks	No	1	Yes
Membership	League of Minnesota Cities	Yes	1	Yes
Mobile Phone Service	Verizon	Yes	2	Yes
Mobile Phone Service - Data	T - Mobile	Yes	2	Yes
Monitoring	Anoka Conservation District	Yes	2	Yes
Official Newspaper	ECM Publishers	No	1	Yes
Payroll	Anoka County	Yes	na	Yes
Phone System	Integra Telecom, Inc	Yes	3	Yes
Photocopier Rental	Metro Sales	Yes	5	Yes
Professional Organization	MN Assoc. Watershed Districts	No	1	Yes
Rental Space	Blaine Office Partners	Yes	5	Yes
Software Maintenance	Solbrekk	No	1	Yes
Telecommunications	Avenet LLC (GovOffice)	No	1	Yes



Conferences/Seminars & Training

Measures	2011	2012	2013
Hours of Training	104	90	100
Number of classes/conferences	12	14	5
Budget	\$ 2,645.00	\$ 3,245.00	\$ 3,245.00

Required Certifications & Training

Certifications	2011	2012	2013
Best Management Practices			
Construction Site Management			*
Design of Construction SWPPPs		*	
Illicit Discharge Detection & Elimination			*
P8 Modeling	*		
Regulatory Enforcement			
Wetland Delineation			*

Official Depository

Minnesota Statutes 103D.351 requires the District to report its financial transactions, and Minnesota Statutes 103D.925 authorizes the District to issue warrants for payment of contracts and general expenses. To accomplish both payment, and reporting, the District must have a depository for its funds and uses the US Bank as its official depository. This is noted in the Minutes for the January 9, 2012 Board Meeting.

Fund Equity

In the 2003 and 2004 audits, the State Auditor expressed concern about the size of the fund balances/fund equity being held by the District and recommended that:

1. Fund equity amounts be reviewed annually
2. The Board approves these designations, with acknowledgement in the Minutes.

Task	2012	2013
Annual Review of Fund Equity	1/9/12	1/14/13
Board approval of fund equity designation	1/9/12	1/14/13
Amount	\$300,000	\$341,000
Acknowledgement in Minutes	Yes	Yes

Annual Financial Audits

The District utilizes the Minnesota State Auditor to perform the annual audit. Generally the audit team is the same team auditing Anoka County. The timing of the District audit is subject to work load and availability of the State Auditor, and for 2012, the implementation of a new financial software system at Anoka County. The auditor is aware that the completion of the audit is dependent on the County, that this is out of the control of Coon Creek Watershed District, and that the completion timetable is undetermined.

Task	2011	2012	2013
Status	Yes	Yes	Yes
Ordered	12/15/10	12/12/11	12/10/12
Entrance Interview	2/7/12	2/19/13	
Board review of Auditor comments	4/20/12	TBD	3/25/14
Final Audit	4/30/12	TBD	4/30/14

Because of the delay in the audit, the following sections will be completed as soon as possible after the audit is completed.

Financial Condition of Coon Creek Watershed District

Change in Net Assets Governmental Activities

Capital Assets at Year-End

Analysis of the District at the Fund Level

General Fund

Budget Highlights

Condition of Fully Depreciated Capital Assets

Class	Type	Location	Expected Life (yrs)	Pct Deprec.	Condition	Need	Replace Cost
Office Equipment	Conference Table & Chairs	Office Conference Room	20	115%	Poor	Replace	\$3,300.00
	Easel	Storage	10	106%	Fair	Replace	\$145.00
	Camera	Office	3	105%	Fair	None	
Data Processing	Computers (X2)	Office	3	168%	Poor	Replace	\$1250.00
Field Equipment							
	Soil Probe	Office	10	294%	Poor	Replace	\$100.00
	Tape	Office	10	270%	Poor	Replace	\$44.25
	Auger	Office	10	249%	Fair	None	
Monitoring	Data Loggers(x2)	Field, with rain gages	5	344%	Fair	Replace	\$315.00
	Rain Gage(x5)	Field	10	279%	Fair	Replace	\$120.00
	WL-40s (x8)	Field	5	236%	Fair	Replace 2/yr	\$235.00x2 = \$470.00
	Flow & Water Quality Monitor	Field	10	235%	Fair	Replace	\$6,860.21

DEVELOPMENT REGULATION & ISSUE MANAGEMENT

PROGRAM DESCRIPTION

The purpose of development regulation is to evaluate, permit, and monitor plans and programs affecting the water and related land resources of the District in an orderly and informed fashion.

The Development Regulation and Issue Management Program consists of five activities:

1. Environmental Review which includes comments on DNR and Corps of Engineers permits
2. Permit Inspection and Enforcement
3. Permit Review
4. Permits
5. Final Inspections, Project Close-Outs & Escrow Returns



Inspection southwest of Jefferson Street and 242 reconstruction, Coon Rapids



Stabilization of ditch banks and channel protection, Wal-Mart of Blaine

Description

This activity reviews and comments on plans, permits, assessments and studies issued by federal, state, and local units of government for the completeness, accuracy, and consistency of water resource proposals relative to District goals, objectives, and standards.

Measures	2011	2012 Forecast	2012	2013	Cost
Number of Environmental Reviews	0	2	0	1	1
DNR Permits	1	10	1	1	1
EAWs	0	10	0	0	0

Description

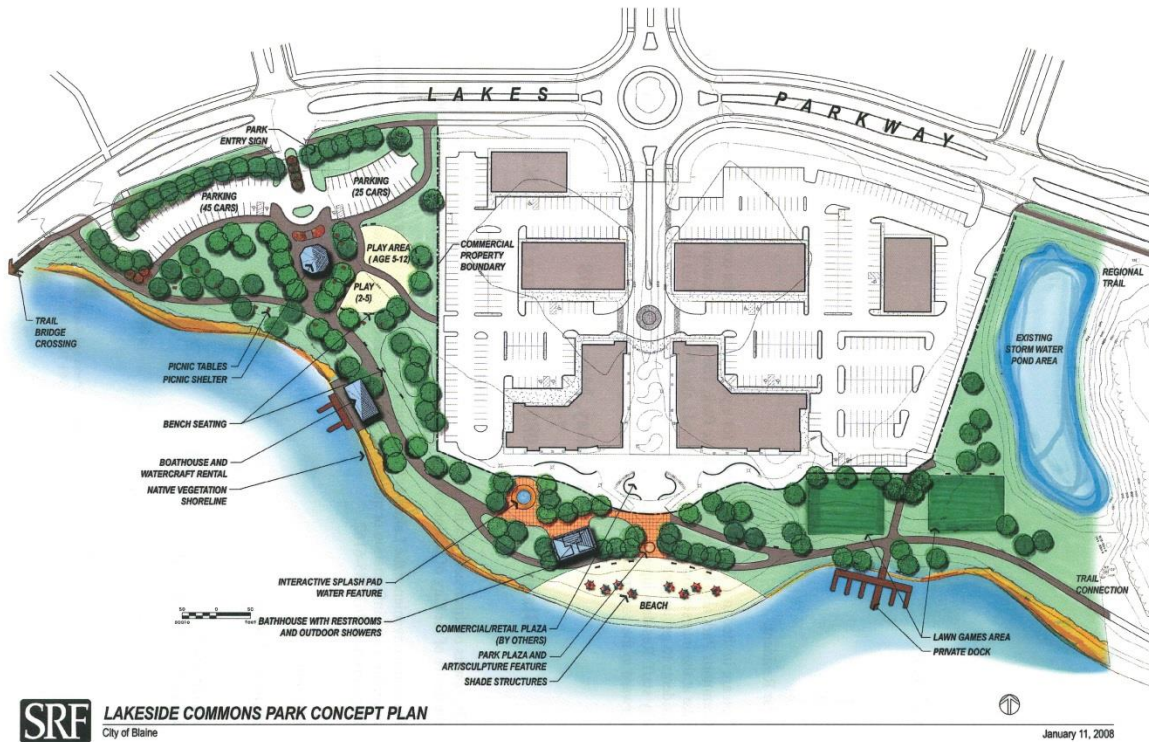
This activity ensures compliance with permit requirements and the goals, objectives and rules of the District. The activity is intended to:

1. Ensure that the approved plan is implemented
2. Provide the landowner with technical assistance as needed
3. Provide a means to determine if changes to the plan are necessary
4. Observe and document deviations from the plan as they occur

Violation	2011	2012 Forecast	2012 Actual	2013 Forecast	Cost
Number of Inspections	142	150	148	160	\$7189

Enforcement Issues

Violation	2011	2012 Forecast	2012 Actual	2013	Cost
Failure to comply with permit or approved plan	1	2	0	1	\$0
Failure to maintain or repair BMPs or STPs	8	10	11	10	\$1069
Failure to maintain site in Good condition	11	10	12	11	\$2332
Failure to meet standards	2	3	2	3	\$1554
Failure to use BMPs to stop erosion & sedimentation	15	10	13	11	\$2526
False information	0	0	0	0	\$0
Illicit Connection	0	2	0	2	\$0
Illicit Discharge	7	10	6	10	\$2320
Obstruction	4	3	4	3	\$3886
Submittal of As Built	0	1	1	1	\$194
Wetland Drainage	0	1	2	0	\$2332
Wetland Excavation	1	1	2	1	\$778
Wetland Fill	5	5	5	5	\$5830
Work without a permit	1	2	1	2	\$777
Total	55	60	59	60	\$21498



Description

This activity involves public review of permit applications and findings relative to District standards. It involves monitoring, evaluating and permitting plans and programs affecting the water and related land resources of the District.

Measure	2011	2012 Forecast	2012 Actual	2013 Forecast	Cost
Number of Pre-application meetings	21	21	35	40	\$1700
Number of Permit Applications	42	60	102	80	\$79282
Number of Permit Reviews by Board	34	35	56	50	\$5440

Description

This activity regulates land-disturbing activities affecting the quality, course, current or cross section of ditches and watercourses.

Measure	2011	2012 Forecast	2012 Actual	2013 Forecast	Cost
Number of Pre-Construction Meetings	6	10	18	18	\$1749
Number of Best Management Practices	138	140	221	140	N/A
Certificates of No-Loss	4	0	2	4	\$1554
WCA Exemptions	0	1	1	1	\$388
Variances	1	0	0	0	0
Permits	19	25	40	35	\$971
Permit Renewal/Extension	4	4	1	4	\$24

Description

This activity reviews completed development and other construction projects for compliance and adherence to the approved plans. The activity also includes a tabulation of District incurred costs for review, inspection and any site repair or stabilization that may have been needed prior to returning the balance of escrows held by the District.

Measure	2011	2012 Forecast	2012 Actual	2013 Forecast
Final Inspections Conducted	95	90	32	70
Fees withheld by District	\$50,608	\$50,000	\$18,268	\$30,000
Number of Projects closed out	95	90	32	70
Value of Escrow Returned	\$88,374	\$90,000	\$111,477	\$90,000

Immediate Needs (2015 – 2017)	
Need	Explanation
Consideration of amendment of rules to require 1.5” of infiltration	1.5 inches is the 95 th percentile of storm recurrence within the watershed
Update water quality findings to better represent current and future regulatory needs	As the water quality era unfolds a greater emphasis will be put on performance standards for the various BMPs. With this increased emphasis will come the need to ensure projects meet the standard in detail and the ability to quickly report various numbers to multiple agencies.
Hire summer staff to review, inspect and return old project escrows for compliant projects	The Board has previously expressed interest in lowering the balance in the escrow account. Staff has made an effort over the past two years to increase close out of older projects. However with the increase in permit load the necessity to shift staff time to other obligations has limited the ability to act on this request for older projects.
Update District flood model based on current data and incorporate Atlas 14 data	CCWD Flood model should be updated to reflect current LIDAR elevation information for accuracy purposes. In addition NOAA is expecting to publish Atlas 14 (Updated frequency and duration for precipitation events) which will have direct and dramatic impact on regulation in the CCWD.

OPERATIONS & MAINTENANCE

PROGRAM DESCRIPTION

The purpose of the Operations and Maintenance program is the planning, design, construction and maintenance of the District ditch system and water control structures, and to preserve the location, character, and extent of the District ditch and conveyance system.

The Operations & Maintenance program consists of the following activities:

1. Routine Maintenance
2. Non-Routine Maintenance
3. Repair and Rehabilitation
4. Retrofit and Construction



Clean Water Partnership grant project: Xeon Pond, Coon Rapids



Pleasure Creek, Major Obstruction

Description

The purpose of the annual inspection is to assess the general condition of the entire drainage system for identification of maintenance needs. Inspections vary in detail and can range from a windshield inspection of the District public drainage system to taking elevations and cross sections every 100 feet, photographing the ditch channel, and comparing to established performance standards based on functional classification of the ditch.

Measure / Outcome

Measures	2012 Goal	2012 Actual	2012 Cost	2013 Forecast
Public Miles Inspected	28.07	28.07	\$3,076	27.29
Private Miles Inspected	0.71	0.71	\$137	0.00
Total Miles Inspected	28.78	28.78	\$3,213	27.29
Percent of the public system	22.4%	22.4%		21.8%
Percent of the combined system	20.8%	20.8%		19.7%

Facility	2012 Goal	2012 Actual	2012 Cost	2013 Forecast
Ditch	Miles Inspect	Miles Inspect		Miles Inspect
11				
17 (Springbrook)				
17 Private Stormwater				
20				3.01
23	1.87	1.87	\$205	
37				
39				
39 Private Stormwater				
41 (Sand Creek)				
41 Ponds				
41 Private Stormwater				
41 Private Ponds				
44				
44 Private Agriculture				
52 (Epiphany Creek)	1.98	1.98	\$217	
54				5.08
57				
58 (Prairie Creek)				18.50
59 (Deer Creek)	20.22	20.22	\$2216	
59 Private Stormwater	0.71	0.71	\$137	
60				
60 Private Stormwater				
Lower Coon Creek				
Pleasure Creek	4.00	4.00	\$438	
Oak Glen Creek				
Riverview Creek				
Stoneybrook				0.10
Tronson Creek				0.60
Woodcrest Creek				
Betts Bank Stabilization		Construct	\$26,419	Inspect
Columbus Ponds (3)		Inspect	\$245, incl.	
Crooked Lake Outlet	Inspect	Inspect	“	Inspect
Crooked Lake Rain Gardens (3)	Inspect	Inspect	“	Inspect
Ditch 58 Structures (5)	Inspect	Inspect	“	Inspect
Lake Andover Outlet	Inspect	Inspect	“	Inspect
Magnolia Pond Retrofit	Inspect	Inspect	“	Inspect
Northdale Pond Retrofit	Inspect	Inspect	“	Inspect
Woodcrest Bank Stabilization	Inspect	Inspect	“	Inspect
Sand Creek Rain Gardens (9)		Construct	\$69,662	Inspect
Xeon Pond		Construct	\$121,720	Inspect



Woodcrest Bank Erosion and fallen Cottonwood Tree

Description

This activity investigates and responds to unanticipated and unplanned circumstances, events or conditions that may affect the Water and related land resources of the watershed or District operations.

Measures	2012 Forecast	2012 Actual	2012 Cost	2013 Forecast
Bank Stabilization	5	5	\$200	5
Beaver	10	25	\$3,024	10
Compliance	25	15	\$600	25
Emergency Work	1	1	\$20,992	1
Illicit Discharge	3	5	\$330	4
Maintenance	5	0	\$0	5
Easement	1	0	\$0	1
Erosion	9	7	\$280	9
Flooding	3	2	\$80	3
Obstruction/Trees	30	39	\$47,873	30
Other		11	\$440	
Water availability	5	0	\$0	5
Water quality	5	1	\$80	5
Total Issues	102	111	\$73,900	102



Betts/Schmidke Bank Stabilization Project

Description

This activity involves the creation of new water management facilities or the increase in capacity of existing systems. The Coon Creek Watershed District may fund Creek and ditch bank stabilization through a process involving inspection, diagnosis of cause and design of a stabilization method which gives preference to bioengineering, a determination of problem significance, and contracting work.

Measures	2012 Goal	2012 Actual	2012 Cost	2013 Forecast
Number of	3	3		8
New Facilities	Xeon Pond	Xeon Pond	\$121,720	WC-In stream WC-1 WC-9 SC-R2 SC-R3
	Sand Creek Rain Gardens	Sand Creek Rain Gardens	\$69,662	
Retrofitted Facilities				
Bank Stabilization Projects	Betts Bank Stabilization	Betts Bank Stabilization	\$26,419	Sand Creek Cappiello Perkins



Ditch 11 Repair

Description

Activity involves restorative construction work typically involving forestry practices and or heavy excavating equipment. The intent of the activity is to restore all or a part of a drainage system as nearly as practicable to the same condition as originally constructed and subsequently improved.

Measures	2012 Goal	2012 Actual	2012 Cost	2013 Forecast
# of Projects	6	2		5
Projects	Ditch 11 Ditch 17 Ditch 41 Ditch 44 Timberline Spillway Prairie Creek Spillway	Ditch 11 Ditch 44	\$20,992 \$100	Ditch 17 Ditch 44 Pleasure Creek Timberline Spillway Prairie Creek Spillway



Springbrook Nature Center Lower Weir Beaver Dam

Description

This activity is to ensure the flow of water in a manner that does not create threats to public health, safety, or welfare. Program activities include the following:

Measures	2012 Forecast	2012 Actual	2012 Cost	2013 Forecast
Beaver Sites		19		12
Beaver	10	25	\$3,024	23
Obstructions	5	20		21
Trees	40	73	\$47,874	103
Projects	9	39		33



City of Blaine Public Works Facility Pervious Pavement Inspection (Installed 2010)

Description

Demonstration projects involve the application, construction, or installation of new or innovative practices to treat water quality. The District will encourage and may contribute funding to such projects.

Measures	2012 Forecast	2012 Actual	2012 Cost	2013 Forecast
Number of Projects	3	0	\$0	3

Immediate Needs (2014 – 2015)

Need	Explanation
Evaluate the potential impacts for water conservation and flooding by boarding culverts.	In 2009 the District boarded culverts in four locations in Blaine. The effort appeared to have some success and if performed over a larger area could significantly contribute to recharging surficial groundwater levels. As the net effect of the current weather pattern has resulted in a depletion of groundwater it is necessary to identify additional areas of potential boarding throughout the District. It is also necessary to evaluate the design and impacts of the boarding in relation to more intense precipitation events.
Evaluate the effect of Atlas 14 on the ditch system	The draft Atlas 14 suggests a significant increase in the 100 year storm event for the District. If implemented, there will be a need to adjust accordingly to offset the differences. As a result, the current ditch system may require additional maintenance, new BMPs, retrofits and/or improvement(s) in order to meet District goals and objectives.

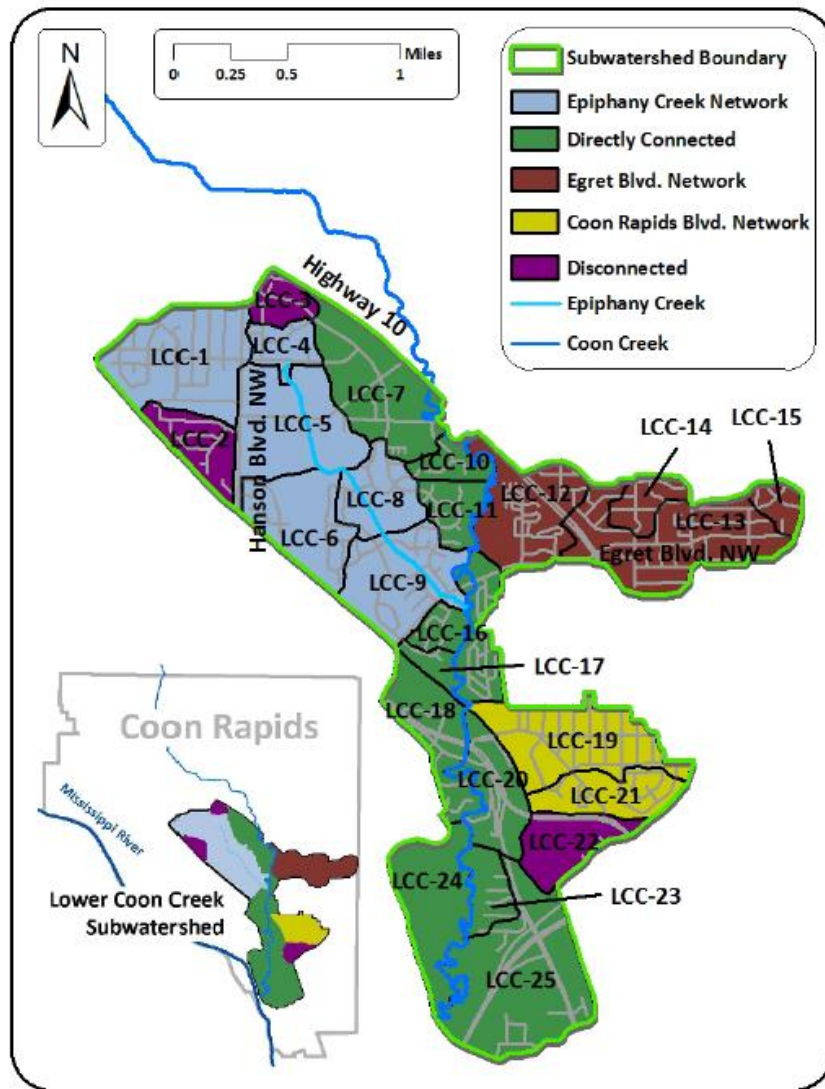
PLANNING, PROGRAMMING, & BUDGETING

PROGRAM DESCRIPTION

The purpose of the program is to coordinate the planning, prioritizing, and financing of District programs and activities.

The Planning program consists following activities:

1. Annual Assessment, Reporting, and Planning
2. Budgeting and Program Planning
3. Comprehensive Planning
4. Modeling
5. Policy and Procedures



Lower Coon Creek Subwatershed Assessment Report July 2012

Description

This activity presents basic statistics on the accomplishments and/or progress of District operations and activities in pursuing and achieving goals. It serves as the basis for accountability through quarterly objectives and through financial and program goals. Overall, the activity provides context for understanding the physical, social, and managerial trends and concerns affecting the District that may not have been anticipated in the Comprehensive Plan and the basis for accountability.

Specific tasks under this activity involve preparation of an annual report and work plan for implementing the District Comprehensive Plan approved by the BWSR and the District Storm Water Pollution Prevention Plan (SWPPP) approved by the MPCA.

Measures	2011	2012
Annual Report & Plan Approved	Yes	Yes
MPCA Annual SWPPP Report Approved	Yes	Yes



**Coon Creek
Watershed District**

12301 Central Avenue NE Suite 100 Blaine, MN 55434
Phone: 763.755.0975 Fax: 763.755.0283 www.cooncreekwd.org
Approved by the Coon Creek Watershed District Board of Managers April 23, 2012

PLANNING, PROGRAMMING, & BUDGETING

Budgeting & Program Planning

Description

The budget process and resulting budget describes the programs and projects the public will fund in pursuing the District Mission.

The budget process involves 11 steps detailed in District policy which begin with adoption of a budget calendar, then a review of District strengths and weaknesses and operating environment, followed by a tour of past and potential projects, public review, and ends with a public hearing and adoption of the succeeding-year budget in September.

Measures	2011	2012 Goal	2012 Actual	2013
Annual Report	3/21/11	4/30/12	4/23/12	4/22/13
Budget Calendar	4/11/11	4/30/12	4/13/12	4/8/13
Review of Financial Status	4/25/11	4/30/12	4/27/12	4/22/13
Review Program Goals & Commitments	4/25/11	4/30/12	4/27/12	4/22/13
Establish Budget Guidelines and Assumptions	6/13/11	6/30/12	6/11/12	6/10/13
District Tour	7/18/11	7/31/12	6/4/12	June or July
Project & Program Initiatives	7/25/11	7/31/12	7/23/12	7/22/13
Budget Review and Deliberation	8/8/11	8/15/12	8/13/12	8/12/13
Advisory Committee Review and Comment	8/9/11	8/15/12	8/14/12	8/13/13
Public Hearing & Budget Adoption	9/12/11	9/15/12	9/10/12	9/9/13
Levy Certification	12/12/11	12/15/12	12/10/12	12/9/13

PLANNING, PROGRAMMING, & BUDGETING Comprehensive Planning

Description

The Comprehensive Plan takes its direction from Minnesota law and the District Mission Statement. It is the guiding document for program and capital facilities management and provides context and purpose to near-term choices, and assesses the future consequences of those choices.

Tasks under this activity involve maintaining and updating the District Comprehensive Plan required under the Watershed Act (103D) and the Metropolitan Water Management Act (103B), and the District Storm Water Pollution Prevention Plan (SWPPP) which serves as the District NPDES permit under the federal Clean Water Act.

Measures	2011	2012	2013
Comprehensive Plan			
Comp Plan	Agency Review & approval		Agency Review & approval
Updates to land uses & cover			
Updates to the hydrology of the watershed	Soil moisture study	Pleasure Creek Springbrook Creek	Atlas 14 precipitation data
Ditches & Watercourses	Electronic Ditch Profiles Ditch 39 Ditch 41 Lower Coon Creek	Electronic Ditch Profiles Ditch 23 Ditch 52 Ditch 59	Electronic Ditch Profiles Ditch 11 Ditch 17 Ditch 44 Springbrook
Floodplains	COE & FEMA Review Coon Rapids Flood Study Review	Ditch 17 Springbrook	Modelling XP-SWMM Atlas 14
Groundwater	Geologic Atlas	Geologic Atlas	Geologic Atlas
Retrofit Study	Lower Coon Creek		Pleasure Creek Springbrook Creek Stoneybrook
Stormwater	Anoka-Hennepin School District lands	Anoka-Hennepin School District lands	Anoka-Hennepin School District lands
Water Quality		Lower Coon Creek	WRAPP Springbrook
Wetlands			
Lakes			Crooked Lake
Wildlife			

Measures	2011	2012	2013
Plan Amendments			
Boundary	Six Cities WMO in Blaine, Coon Rapids & Fridley		Coon Rapids
Rule	Ordered	Amend	
NPDES Permit			
Storm Water Pollution Prevention Plan (SWPPP)		Permit expires 12/31/12, coordinate revisions	Prepare new SWPPP
Impaired Waters Study/TMDL	X	X Mississippi River Bacteria	X Mississippi River Bacteria
Minimum Impact Design Standards (MIDS)	Rule Development	Rule Development	Rule Development
Tiered Aquatic Life Uses (TALU)	Rule Development	Rule Development	Rule Development
Watershed Restoration And Protection Plan (WRAPP)			X
Watershed Subcommittee - Stormwater Steering Committee	X	X	X

Comprehensive Planning

Local Water Planning

The District reviews and either comments or approves a variety of local water planning efforts:
Local Water Plan: Required by the Metropolitan Water Management Act (must be consistent with the Watershed District Comprehensive Plan).

Stormwater Management Plan: Stormwater chapter required as part of the City Comprehensive plan.

Stormwater Pollution Prevention Plan (SWPPP): Required by the NPDES program under the federal Clean Water Act.

Nondegradation/Water Quality Plan: Required under the NPDES program under the federal Clean Water Act.

City	2011	2012 Goal	2012 Actual
Number of Local Plans reviewed	0	7	7
Andover	Participate in CCWD Comp Plan Development	Prepare new SWPPP & Local Water Plan	Prepare new SWPPP & Local Water Plan
Blaine	Participate in CCWD Comp Plan Development	Prepare new SWPPP & Local Water Plan	Prepare new SWPPP & Local Water Plan
Columbus	Participate in CCWD Comp Plan Development	Prepare new SWPPP & Local Water Plan	Prepare new SWPPP & Local Water Plan
Coon Rapids	Participate in CCWD Comp Plan Development	Prepare new SWPPP & Local Water Plan	Prepare new SWPPP & Local Water Plan
Fridley	Participate in CCWD Comp Plan Development	Prepare new SWPPP & Local Water Plan	Prepare new SWPPP & Local Water Plan
Ham Lake	Participate in CCWD Comp Plan Development	Prepare new SWPPP & Local Water Plan	Prepare new SWPPP & Local Water Plan
Spring Lake Park	Participate in CCWD Comp Plan Development	Prepare new SWPPP & Local Water Plan	Prepare new SWPPP & Local Water Plan

Plan	Andover	Blaine	Columbus	Coon Rapids	Fridley	Ham Lake	Spring Lake Park
Local Water Management	2005	2009	2009	2003		2009	
Stormwater Management	2009	2009	2009	2003	2010	2009	2009
SWPPP	2006	2006	Not Required	2006	2008	2006	2008
Non-degradation Report	2007	2007	Not Required	2007	Not Required	Not Required	Not Required
Wellhead Protection	2007	2008	Not Required No public wells	2007	2013	Not Required No public wells	2013
Wetland Management				2004			

Description

This activity models the hydrology of surface water flows within the watershed to provide an accurate simulation of District hydrology and water quality for assessing and determining management needs and actions. The activity also involves assessing the overall hydrology of the Watershed to gain insight into factors affecting surficial ground water levels and the amount of water lost to potential evapotranspiration (PET).

Measure / Outcome

Model	2011	2012	2013
XP-SWMM	Update		
P8			Update
Water Budget		Update	

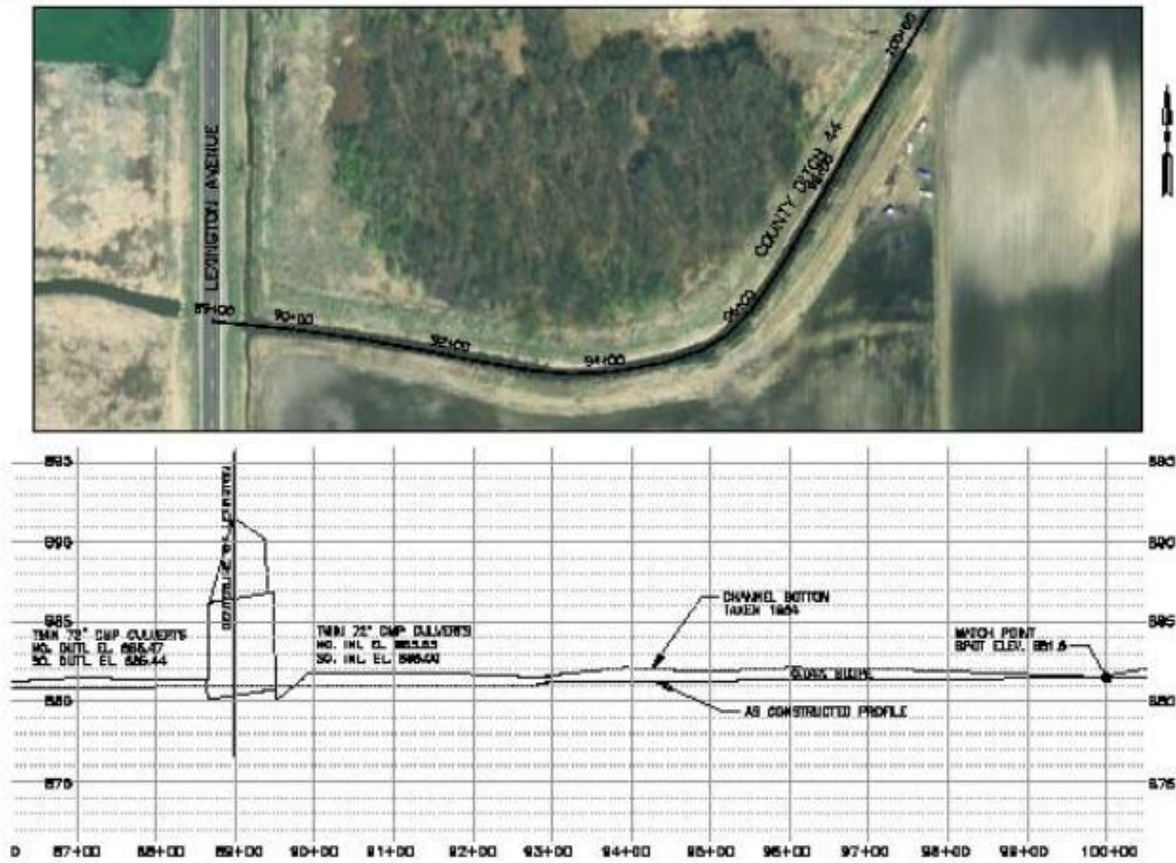
PLANNING, PROGRAMMING, & BUDGETING Policy and Procedures

The policy and procedures manual is intended to provide guidance, continuity, and consistency in District operations and activities. The manual is the principal source of specialized guidance and instruction for carrying out the direction issued in the program handbook. The manual may include significant procedural direction.

The program manual provides guidance, continuity, and consistency in District operations and activities. It contains the legal authorities, objectives, policies, responsibilities, instructions and guidance needed on a continuing basis by District staff to plan and implement assigned programs and activities.

Measures	2011	2012	2013
Policy & Procedure Manual	1	1	2
Policies	By Laws Operations & Maintenance Manual	Contracting By Laws Operations & Maintenance Manual	Contracting Measurable Outcomes

PLANNING, PROGRAMMING, & BUDGETING Electronic Ditch Profiles



Description

Electronic media is rapidly becoming the standard of design and planning through GIS and CAD. All of the public ditch data need to be converted to electronic format. Plan sets are registered to CAD and GIS with current elevations and airphotos. Plan sets not reviewed and approved by DNR would be submitted. This is a 5-year program coordinated with our NPDES inspection requirements.

	2011	2012 forecast	2012	2013
Ditch	Ditch 39	Ditch 23	Ditch 11	Ditch 17
	Ditch 41	Ditch 52	Ditch 39	Ditch 20
	Lower Coon Creek	Ditch 59		Ditch 54 Ditch 58

PUBLIC AND GOVERNMENTAL RELATIONS

PROGRAM DESCRIPTION

The purpose of the public and governmental relation program is to ensure that the continuing planning and management of the Coon Creek watershed is responsive to the needs and concerns of an informed public and to coordinate policies and programs of the local, state, and federal government agencies to achieve consistency with the plan.

A program consisting of three activities has been developed to carry out District policies. The components are:

1. Education
2. Information
3. Involvement

In practice, overlap will occur among these three components; all information is educational in nature, and education requires involvement.



Creek Cleanup by MOMs Club of Coon Rapids along Sand Creek, April 2012



Stormwater Pond inspection presentation to Andover Public Works & Engineering, March 2012

Description

Major needs of the District include greater public awareness of water resources, appropriate use of water resources, and the issues/conflicts that arise when managing those resources. Increasing awareness is a first step in enhancing public commitment to sound natural resource management. The District makes presentations each year to civic & governmental organizations. These presentations focus on water resources, the establishment of the District, its purposes and policies, and issues facing the watershed.

Measures	2011	2012 forecast	2012 actual	2013 forecast	Cost per item (avg)
Number of Conferences	15	16	14	15	\$100
Total public education efforts	891	900	3052	3100	\$250
Number of presentations	28	30	2571 (includes online efforts via Slideshare)	2600	\$500
Number of materials/events	35	35	13	20	\$400
Education Grants	3	4	5	4	\$650
	Coon Rapids Green Expo-Science Museum of MN show Andover High School wetland restoration Adams Elementary School bussing to Waterfest		Christ Lutheran Church Community Cleanup Jefferson Elementary School bussing to Metro Children’s Waterfest Crooked Lake Area Association Collaborative Herbicide Training Workshop Girl Scouts Northwoods Service Unit, Andover, additional stormdrain stenciling supplies Anoka Parks Geocache Watershed Trail @ Coon Rapids Dan Regional Park		= \$500 grant * 3hrs staff time



Tim Kelly giving CCWD update to Blaine City Council, February 2012

Description

Public information is essential in any public capital or regulatory program. It is also a prerequisite to both public education and public involvement. To be able to participate and sense when that participation will be most effective, individuals must first know the issues and the decisions needed to be made. The District is used by the community as a credible reference regarding water resources information.

Measures	2011	2012 forecast	2012 actual	2013 forecast	Cost per item (avg)
Number of articles	20	18	42	48	\$200
Number of pre-application conferences	16	17	35	40	\$70
Number of presentations	28	30	2571 (includes online efforts via Slideshare)	2600	\$500
Web Site Visits	36,000	50,000	45,000	53,000	\$200



Citizen Advisory Committee at CCWD, October 2012

Description

The purpose of this activity is to provide for active involvement of the public and related units of government in developing and implementing water management plans and activities.

Measures	2011	2012 fore cast	2012 actual	2013 forecast	Cost per item (avg)
Average number on agenda distribution list	55	55	78	75	\$40
Completed SWPPP Review meeting	Yes	Yes	Yes	Yes	\$85
Number of CAMP participants	0	0	1	1	\$50
Number of Planning Workshops/Reviews	10	10	7	6	\$350
Coon Creek Clean-up	Yes	Yes	Yes	Yes	\$300
Number of Hearings	4	3	2	3	\$125
Number of issues on Hot Line	80	80	113	120	

Measures	2011	2012 fore cast	2012 actual	2013 forecast	Cost per item (avg)
Number of contacts with Lake Assn	6	6	24	25	\$70
Number of open mike presentations	1	0	2	1	0
Number of Board Meetings per year	18	18	18	18	\$575

Advisory Committee

M.S. 103D.331 requires that the District have an advisory committee to advise and assist the Board on all matters affecting the interests of the watershed district and make recommendations on all contemplated projects and improvements in the watershed district.

Organization	2011	2012	2013
Anoka Conservation District	Jim Lindahl	Jim Lindahl	Jim Lindahl
Anoka County	Carol LeDoux, Commissisoner	Carol LeDoux, Commissioner	Jon Olson, Public Services Division Manager
Sporting/Env Organization	Vacant	Gary Nereson, Crooked Lake Area Association	Gary Nereson, Crooked Lake Area Association
Andover	Vacant	Diana Perron	Vacant (Diana Perron health issues)
Blaine	Vacant	Michael Von Wald	Vacant
Coon Rapids	Vacant	Roger Johnson Bill Kurdziel Jeff Simon	Bill Kurdziel Roger Johnson
Fridley	Vacant	Donna Bahls	Donna Bahls
Ham Lake	Vacant	Vacant	Vacant



TAC members prepping for meeting in CCWD conference room, October 2012

Minnesota Statute 103D.337 requires that the District establish a Technical Advisory Committee consisting of representatives of affected cities, county, soil and water conservation districts.

Organization	2011	2012 forecast	2012 actual	2013 forecast
Number of TAC meetings	6	6	8	8
Anoka Conservation District	Chris Lord	Chris Lord	Chris Lord	Chris Lord
Andover	Todd Haas	Dave Berkowitz	Dave Berkowitz	Dave Berkowitz
Blaine	Jim Hafner	Jim Hafner	Jim Hafner	Jim Hafner
Columbus	Elizabeth Mursko	Elizabeth Mursko	Elizabeth Mursko	Elizabeth Mursko
Coon Rapids	Doug Vierzba	Doug Vierzba retires	Tim Himmer	Tim Himmer
Fridley	N/A	Jim Kosluchar	Jim Kosluchar	Jim Kosluchar
Ham Lake	Tom Collins	Tom Collins	Tom Collins	Tom Collins
Spring Lake Park	N/A	SEH	Phil Gravel, Stantec	Phil Gravel, Stantec



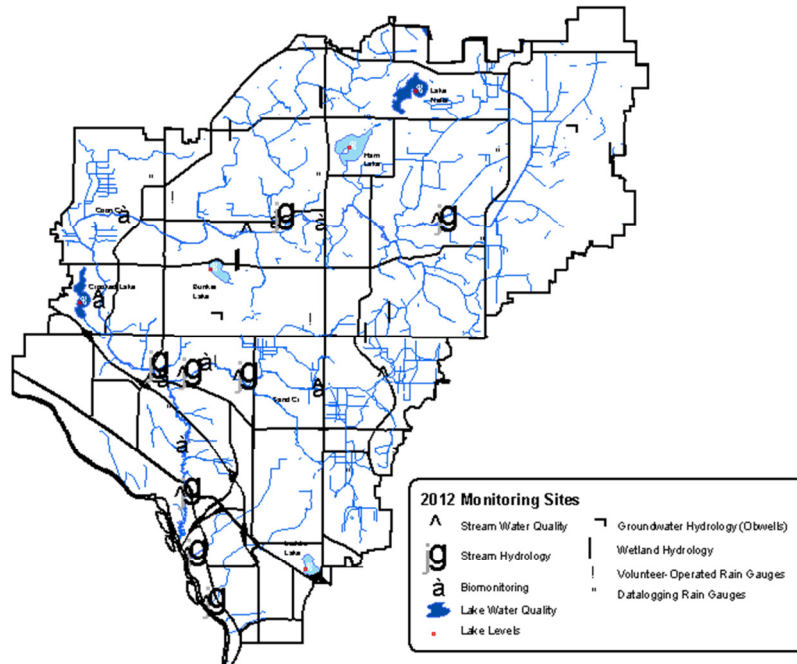
Minnesota Statute 103G.2242 Subdivision 2 requires the District establish a Technical Evaluation Panel to assist or make determination on questions concerning the public value, location, size, or type of a wetland.

Organization	2011	2012	2013 forecast
Number of Technical Evaluation Panel meetings	24	28	33
Anoka Conservation District	Dennis Rodacker	Dennis Rodacker	Aaron Diehl
BWSR	Lynda Peterson	Lynda Peterson	Dennis Rodacker
US Army Corps of Engineers	Tim Fell retires, Marie Kopka fills in	Andrew Beaudet	Andrew Beaudet
Andover	Todd Haas	Todd Haas	Todd Haas
Blaine	Jim Hafner	Jim Hafner	Jim Hafner
Columbus	Elizabeth Mursko	Elizabeth Mursko	Elizabeth Mursko
Coon Rapids	Dave Full	Dave Full	Dave Full
Fridley	N/A	Jim Kosluchar	Jim Kosluchar
Ham Lake	Tom Collins	Tom Collins	Tom Collins
Spring Lake Park		Stantec	Stantec
DNR	Kate Drewry	Kate Drewry/ Melissa Doperalski	Kate Drewry/ Melissa Doperalski

Immediate Needs (2013 – 2014)	
Need	Explanation
Increase our internal library of diagrams, illustrations, and animations demonstrating technical aspects of water resource issues for non-professionals.	The popularity of short videos or animations for broadcast on Web, local community access television, and at outreach events, allows more opportunity for illustrating complex concepts and issues, and their implications on District activities. Getting update-to-date software and training is a first step, followed by professional graphics input.
Continued awareness of and training in communications trends, particularly multimedia.	The roles of various media change rapidly. Staying in tune with best vehicles for targeted message delivery will continue to be a part of the PGR landscape.
Intermediate Needs (2014 – 2017)	
Need	Explanation
Develop methodologies to assess public knowledge, awareness, and attitudes within CCWD.	With the new NPDES permit, focus will be on measurement of changed behaviors. Defining target behaviors and audiences will be the first steps in this process.
Increase knowledge of grant cycles for piloting projects	Increasing civic engagement per NPDES requirements can be done two ways: digitally and with additional staff. Either method requires increased funding which may be brought in through outside grants especially for pilot programs (such as defining audiences) or for augmenting other CCWD projects.

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RESEARCH, MONITORING, & DATA COLLECTION



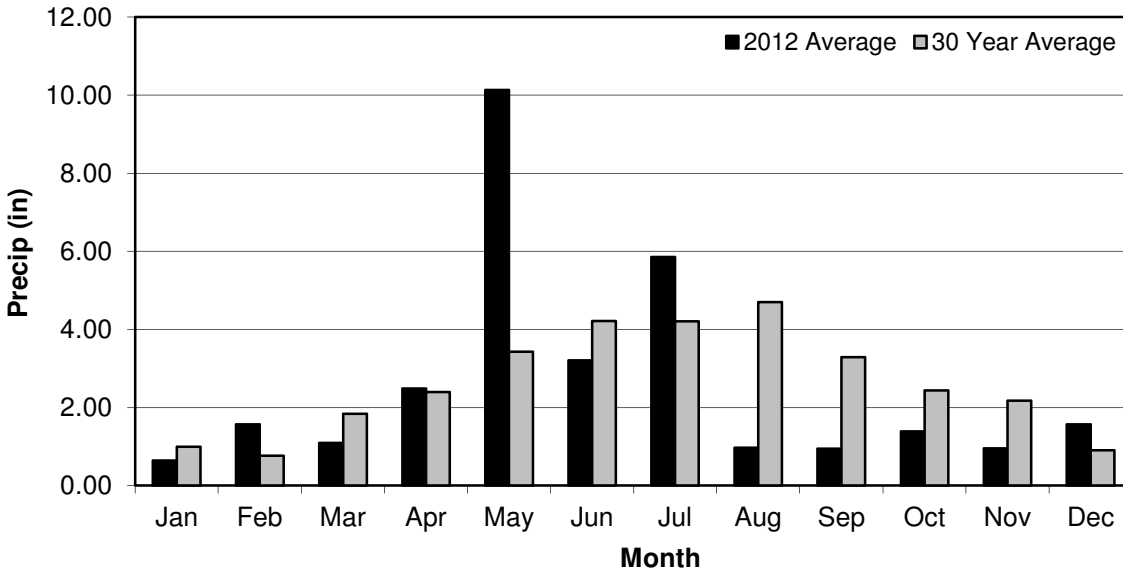
PROGRAM DESCRIPTION

The purpose of the research, monitoring and data collection program is to gather and analyze data that will result in increased efficiency and effectiveness of watershed management and District programs. Most of the data that is presented in this section of the annual report and plan is drawn from “2012 Anoka Water Almanac: Water Quality and Quantity Conditions in Anoka County, MN,” prepared by the Anoka Conservation District.

The research, monitoring, and data collection program provides integrated resource information used in planning, evaluating, and decision-making within the Coon Creek Watershed District. Program activities include:

1. Precipitation Monitoring
2. Stream
 - a. Hydrology
 - b. Water quality
 - c. Biology
3. Lakes
 - a. Hydrology
 - b. Water quality
4. Wetlands
 - a. Hydrology
 - b. Biology/Vegetation

District planning, regulation, and project decision-making depend upon scientifically credible and accurate resource information. This data allows resource managers to make scientifically based management decisions. These are all essential to effective resource management.



Description

This activity involves continuous monitoring of precipitation with both data-logging rain gauges and non-logging rain gauges that are read daily by volunteers. Rain gauges are placed around the watershed in recognition that rainfall totals and storm phenology vary over distance, and these differences are critical to understanding local hydrology including predicting flooding.

Coon Creek Watershed 2012 Precipitation

Location or Volunteer	Location	Month												Annual Total	Growing Season (May-Sept)
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Tipping bucket, datalogging rain gauges (Time and date of each 0.01" is recorded)															
Andover City Hall	Andover			0.95	2.53	8.44	4.08	6.50		3.27	0.85				
Blaine Public Works	Blaine			0.84	2.28	9.37	3.41	4.87	0.95	0.58	1.17	1.05			
Coon Rapids City Hall	Coon Rapids			1.28	2.48	11.20	3.52	6.17	1.28	0.61	1.39	0.98			
Anoka Cons. District office	Ham Lake				2.66	10.65	3.00	6.36	0.76	0.29	1.38	1.03			
Hoffman Sod Farm	Ham Lake				2.49	10.01	3.05			1.19	1.23	1.08			
Northern Nat. Gas substation	Ham Lake			0.86	2.34	10.16	2.40			0.47	1.28	0.70			
Cylinder rain gauges (read daily)															
N. Myhre	Andover	0.64	1.57	1.52	2.24	10.68	3.26	5.57	0.77	0.53	2.40	0.89	1.57	31.64	20.81
J. Arzdorf	Blaine				2.60	10.24	2.94	5.63	1.06	0.58	1.44				
S. Solie	Coon Rapids				2.78	10.43									
2012 Average	County-wide	0.64	1.57	1.09	2.49	10.13	3.21	5.85	0.96	0.94	1.39	0.96	1.57	30.80	21.09
30 Year Average	Cedar	0.99	0.76	1.84	2.40	3.43	4.22	4.21	4.70	3.29	2.44	2.18	0.90	31.36	19.85

precipitation as snow is given in melted equivalents

Precipitation as snow is given in melted equivalents

Measures	2011	2012	2013
Number of Data Logging Gages	6	6	7
Andover City Hall, Andover	*	*	*
Anoka Conservation District, Ham Lake	*	*	*
Blaine Public Works, Blaine	*	*	*
Coon Rapids City Hall, Coon Rapids	*	*	*
Hoffman Sod Farm, Ham Lake	*	*	*
Northern Natural Gas Substation, Ham Lake	*	*	*
Springbrook Nature Center, Fridley			*
Costs			
Monitoring Unit	\$545.00	\$921.07	\$7868.99
Monitoring Budget	\$3,270.00	\$3,335.40	\$3,402.11
Unit Costs Chng – Prev Yr	-5.2%	169%	854%
Analysis Budget	\$850.00	\$867.00	\$884.34
Analytical Cost chng – Prev Yr	0%	2%	2%

Description

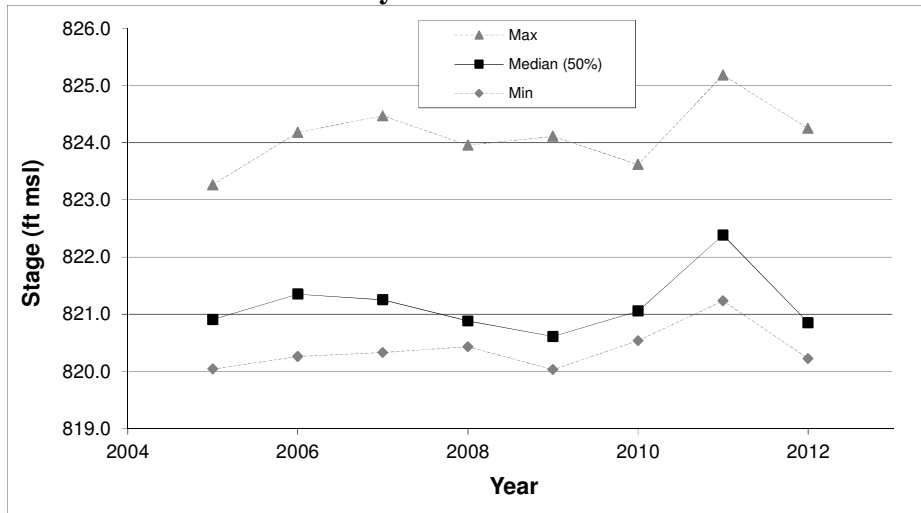
This activity involves monitoring observation wells installed by the Department of Natural Resources and maintained by the Anoka Conservation District. With increasing concern and awareness of declines in the surficial water table it is important that changes and trends in the surficial aquifer be reported at least annually.

Measures in feet below ground level	Well Number	2011	2012	5 Year Avg.	10 Year Avg.	43 Year Avg.
Upper Watershed				-8.5	-8.8	-9.1
East Bethel	2025	-7.5	-7.6			
Carlos Avery	2026	-18.3	-18.2			
Lower Watershed						
Coon Rapids	2016	-34.5	-23.0			
Soderville	2023	-	-	-10.2		-9.8
Blaine	2037	Completed 10/10/2011	-7.7			

Coon Creek Hydrology

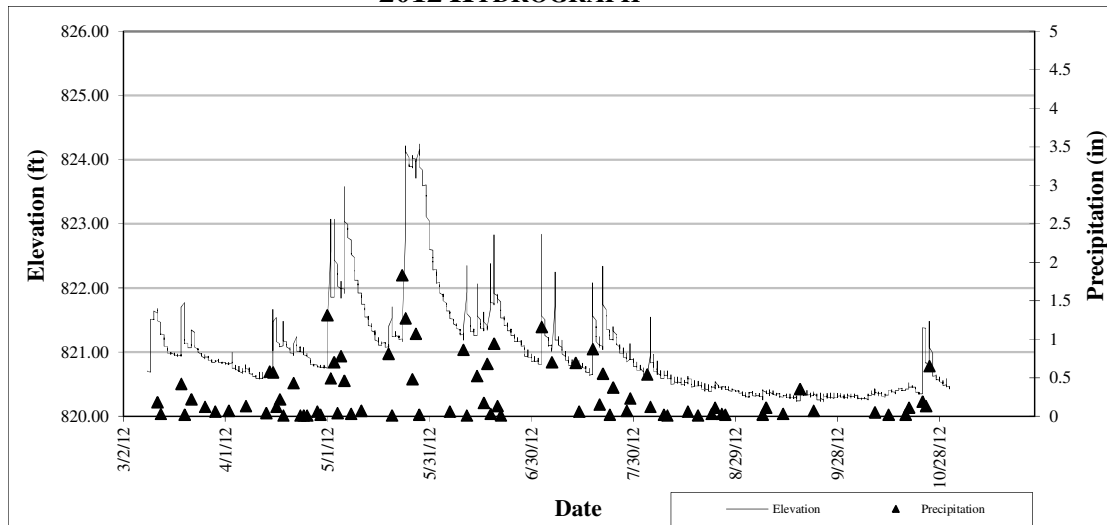
Continuous water level monitoring in streams at four locations provides understanding of stream hydrology, including the impact of climate, land use or discharge changes. These data also facilitate calculation of pollutant loads and are used in computer models for developing management strategies.

Summary of All Monitored Years

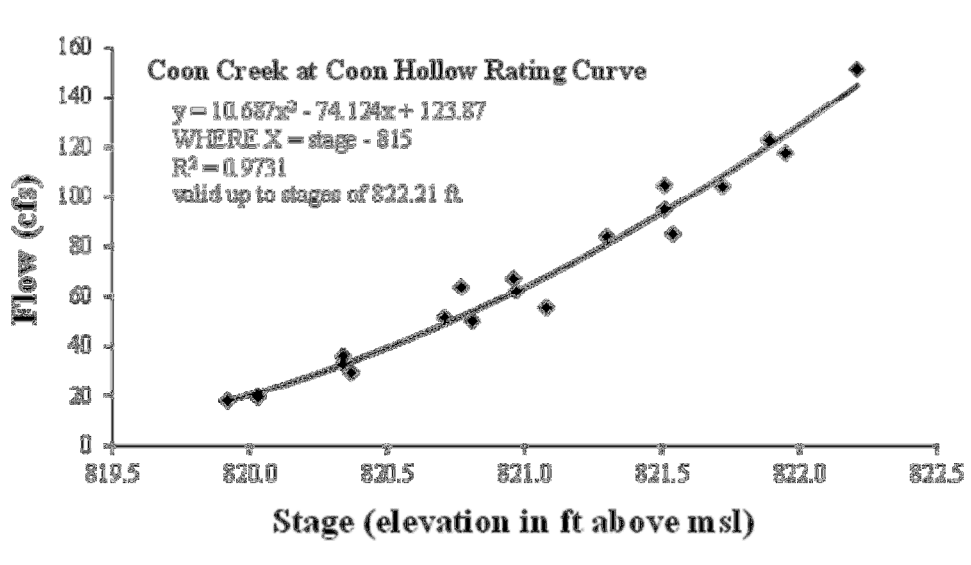


Percentiles	2005	2006	2007	2008	2009	2010	2011	2012
Min	820.04	820.26	820.33	820.43	820.03	820.54	821.23	820.22
2.5%	820.06	820.42	820.40	820.52	820.12	820.64	821.27	820.28
10.0%	820.19	820.53	820.53	820.57	820.20	820.73	821.31	820.33
25.0%	820.57	820.78	820.73	820.63	820.35	820.85	821.83	820.45
Median (50%)	820.91	821.35	821.25	820.88	820.61	821.05	822.38	820.85
75.0%	821.26	821.78	821.88	821.78	820.93	821.32	822.99	821.28
90.0%	821.77	822.27	822.63	822.26	821.31	821.68	823.70	821.89
97.5%	822.92	822.76	823.21	822.79	822.05	822.33	824.56	823.60
Max	823.26	824.18	824.47	823.96	824.11	823.62	825.18	824.25

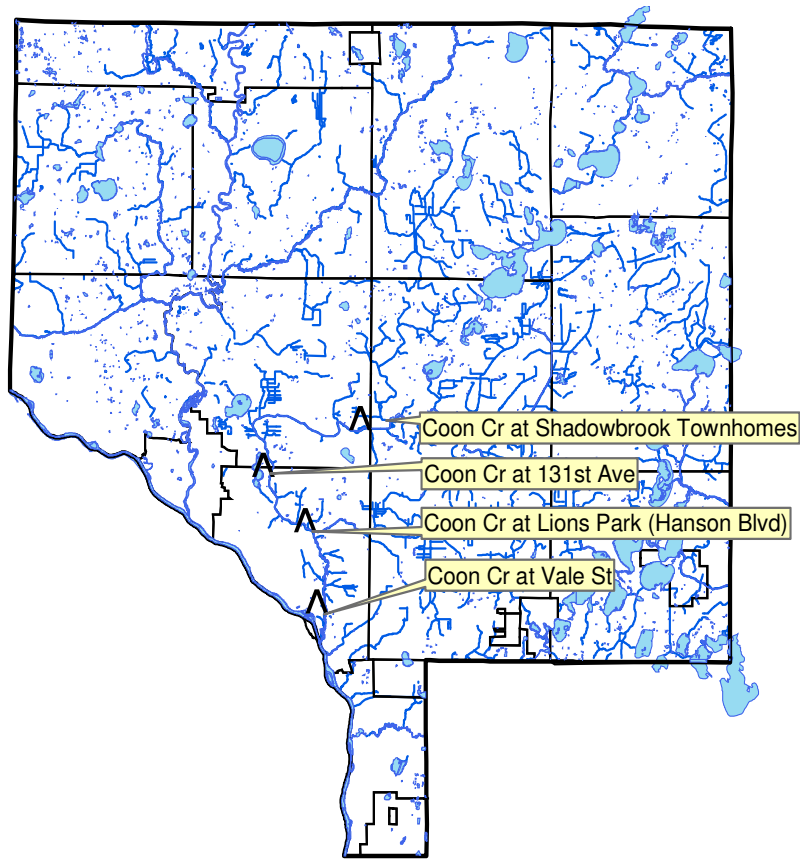
2012 HYDROGRAPH



Rating Curve (2010 - updated)



Monitoring Sites	2011	2012	2013
Coon Creek			
Coon Creek at Vale, Coon Rapids	X	X	X
Coon Creek at Vale, Coon Rapids Rating Curve		X	
Deer Creek			
Ditch 59-4 at Andover Blvd, Ham Lake	X	X	X
Prairie Creek			
Ditch 58 at Bunker Lake Blvd	X	X	X
Sand Creek			
Sand Creek at Ditch 39 Confluence, Coon Rapids	X	X	X
Sand Creek at Xeon St, Coon Rapids	X	X	X
Pleasure Creek		X	X
Springbrook Creek		X	X
Numb of Sites	5	7	7
Unit Cost	\$545.00	\$555.90	\$567.02
Budget Cost	\$2,725.00	\$3,891.30	\$3,969.13
Change in Unit Costs	1.9%	2.0%	2.0%
Change in Total Costs	1.9%	42.8%	2.0%



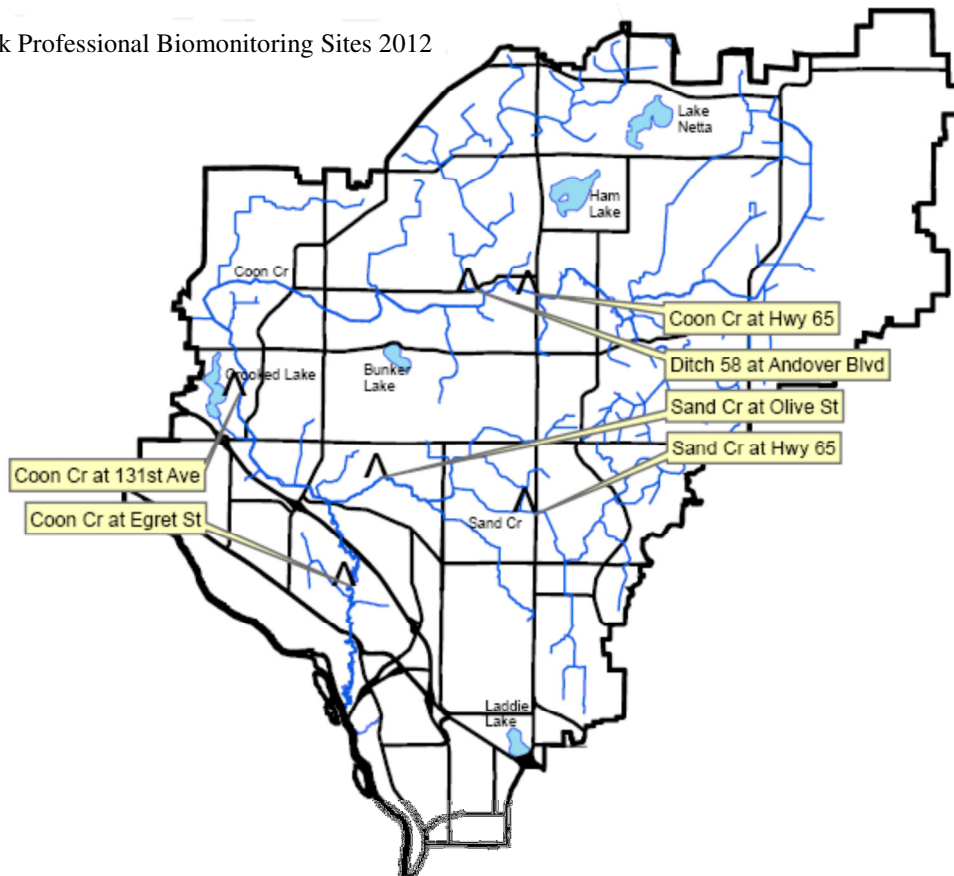
Description

The District monitors Coon Creek stream water quality at four locations. Each location is sampled eight times: four during storm events and four during baseflow. These are the median results from all sampling:

Coon Creek	Standard	2011	2012
TP (mg/L)	.130	0.169	0.128
TSS (mg/L)	>13.7	22.5	14
CL (mg/L)	≥ 230	47.1	40
Turbidity (FRNU)	>25	26.3	17

Locations	2011	2012	2013
Coon Creek			
Naples St., Ham Lake		X	X
Shadowbrook Townhomes, Andover	X	X	X
131 ST Ave, Andover	X	X	X
Lions Park, Coon Rapids	X	X	X
Vale St., Coon Rapids	X	X	X
Springbrook Creek			
River Road	X	X	X
Sand Creek			
Radisson Rd (41-4), Blaine	X	X	X
Highway 65, Blaine	X	X	X
Happy Acres Park, Blaine			
Ditch 39, Blaine	X	X	X
Xeon Street, Coon Rapids	X	X	X
Pleasure Creek			
86 th Ave.	X	X	X
Ditch 39			
University Ave, Coon Rapids		X	X
Ditch 60			
Happy Acres Park, Blaine			X
Total Number	10	11	12
Unit Cost	\$ 1,345.00	\$ 1,371.90	\$ 1,399.34
Budget Cost	\$ 13,450.00	\$ 15,090.90	\$ 16,792.06
Change in Unit Costs	35.9%	2.0%	2.0%
Change in Total Costs	69.8%	12.2%	11.3%

Coon Creek Professional Biomonitoring Sites 2012



Description

In 2012 the District monitored six locations within the watershed. The effort coordinated by the Anoka Conservation District, assessed stream health using benthic (bottom-dwelling) macroinvertebrates. Certain macroinvertebrates, such as mayflies, stoneflies, and caddisflies, require high quality streams while others such as midges thrive in poor quality streams. Because of their extended exposure to stream conditions and sensitivity to habitat and water quality, these macroinvertebrates can serve as good indicators of stream health.

The Minnesota Pollution Control Agency (MPCA) has listed Coon Creek as biologically impaired based on single samples taken from two sites in August 2000. Both of these reaches are actively maintained ditches that had been recently cleaned. The purpose of this work is to:

- compare maintained and unmaintained creek reaches
- compare the Coon Creek system with similar nearby streams
- examine the effect of total suspended solids on invertebrate communities
- verify the MPCA findings.

Summary

The community of invertebrates and fish observed in a stream is one way to measure stream health. Because this biota is present in the stream continuously and exposed to all facets of stream ecology, they provide a holistic picture of stream health. In this study, we examined invertebrate data collected by professional aquatic ecologists. The purposes of the study were to investigate the impact of ditch maintenance on the invertebrate community, the impact of habitat and suspended solids on invertebrates, and compare the six Coon Creek sites that were part of our study with 8 other Coon Creek sites and 15 other sites across the county that had been monitored by professionals and supervised student groups to provide a relative ranking of the health of all these stream sites. Overall, this study provides insight into the extent of invertebrate community impairments and possible stressors causing these impairments.

The data used in this study are limited in several ways and therefore the results should be interpreted with caution. Limitations include a relatively small number of sampling sites, changes in sampling sites across years, and the statistical non-independence of different sampling sites located within the same stream or ditch. However, data from 2008-2012 support of the following general conclusions:

- Sites that have not been cleaned with a backhoe or similar equipment (unmaintained sites) have higher habitat MPCA Stream Habitat Assessment (MSHA) scores in all categories, including land use, substrate, and channel morphology scores, and lower turbidity values. All of these observations are consistent with better stream habitat for macroinvertebrates at unmaintained sites, but the differences were not dramatic.
- Turbidity and TSS, common stressors of invertebrate communities, were similar at maintained and unmaintained sites. The dataset for this analysis was small, including only measurements taken immediately prior to professional biomonitoring, and therefore this is not a robust analysis.
- Family Biotic Index (FBI) was correlated with overall MSHA score. A more sensitive invertebrate community (lower FBI) occurs where there is better habitat (higher MSHA scores). The number of families and number of EPT families was not correlated with MSHA score, presumably because a high number of families can be dominated by insensitive, generalist families.
- Total number of families, FBI, and EPT indices of stream health did not differ among unmaintained reaches of stream and those that have been maintained (ditched or cleaned) in the last 10 years. It is likely that ditch maintenance is indeed a stressor, but other stressors also exist and affect all sites, such that invertebrate communities are stressed in both maintained and unmaintained channels.
- TSS is inversely correlated with two invertebrate indices; higher TSS results in poorer stream health scores for Family Biotic Index and number of families. It appears TSS may be a stressor of the invertebrate community.
- Invertebrate indices for Coon Creek sites are distributed widely over the spectrum observed in other streams locally, and the sites designated by the MPCA as “impaired” are at or better than the county average.
- Sites designated as having an impaired invertebrate community were re-examined with new data collected since 2000. Data from both Coon Creek at Egret Street and Highway

- 65 show biological impairment, though not dramatic. Likewise, new MPCA data in 2010 will likely be viewed by MPCA as confirmation of an impaired condition. Two considerations need to be made: (1) MPCA's new tiered aquatic life standards, once adopted, will set lower biological expectations for ditched portions of Coon Creek and (2) Coon Creek invertebrate community scores are typical of those found in streams in Anoka County, and indication that either MPCA's standards are flawed or nearly all streams are biologically impaired.

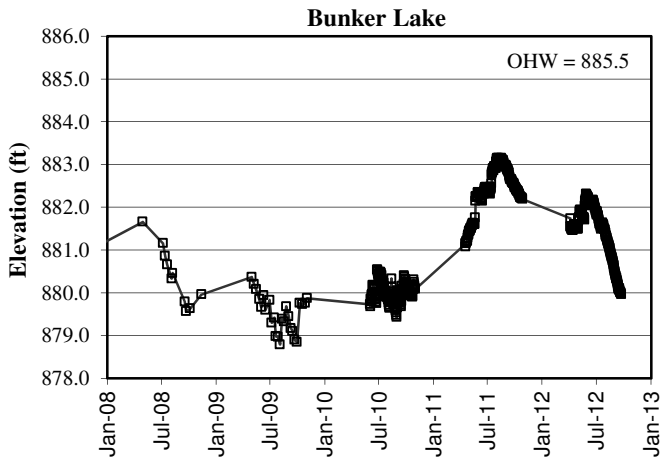
Overall, impairment of the invertebrate community is variable throughout the Coon Creek system. Impairment designations for portions of the creek are appropriate, but possibly not for the entire system. Moreover, there is more than one stressor on the invertebrate community. While ditch maintenance seems like a likely culprit in actively maintained ditches, it appears that other stressors. Even in some unmaintained stream reaches habitat deterioration is likely a stressor. TSS, and perhaps other water quality parameters, affect both maintained ditches and other stream segments. Flow rates and volumes may be a stressor.

New information and procedures at the MPCA should help refine invertebrate impairment designations for Coon Creek. First, the agency monitored seven sites in 2010, which is better than the two that were monitored in 2000 and used to designate the system as impaired. Additionally, the MPCA is developing tiered biological expectations for different types of streams. The portions of Coon Creek that are actively maintained as ditches deserve lower biological expectations.

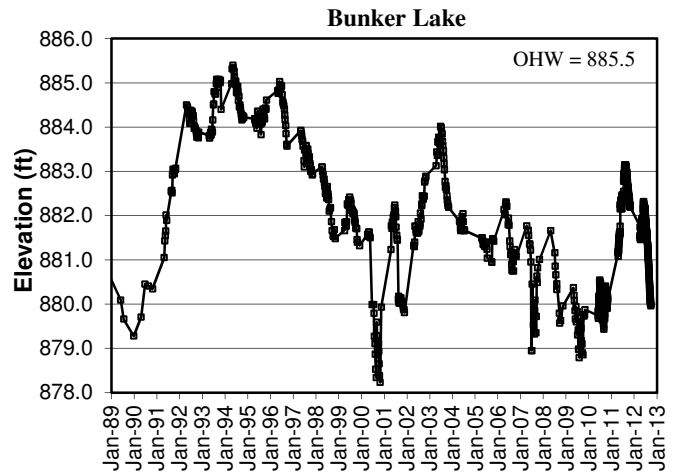
In 2013 the Coon Creek Watershed District, MPCA, and partners begin a Watershed Restoration and Protection Project (WRAPP) study. It will begin with a stressor identification process for biota. This process will be an extension of the work presented in this report and will direct efforts to protect and improve Coon Creek's overall health while setting realistic expectations about the water body's beneficial uses.

Locations	Status	2011	2012	2013
Coon Creek				
131 ST St, Andover	Maint	X	X	X
TH 65, Ham Lake	Maint	X	X	X
Egret Blvd, Coon Rapids	Unmaint	X	X	X
Sand Creek				
(D-41) at Olive, Blaine	Unmaint	X	X	X
D-41) at Ulysses, Blaine	Maint	X	X	X
Ditch 59-4				
At Bunker, Ham Lake	Maint; Last monitored 2008			
Ditch 58				
At 165th, Ham Lake	Unmaint			
At Andover Bld, Ham Lake	Unmaint	X	X	X
Total Number		6	6	6
Unit Cost		\$ 1,275.00	\$ 1,300.50	\$ 1,326.51
Budget Cost		\$ 7,650.00	\$ 7,803.00	\$ 7,959.06
Change in Unit Costs		0.0%	2.0%	2.0%
Change in Total Costs		300.0%	2.0%	2.0%

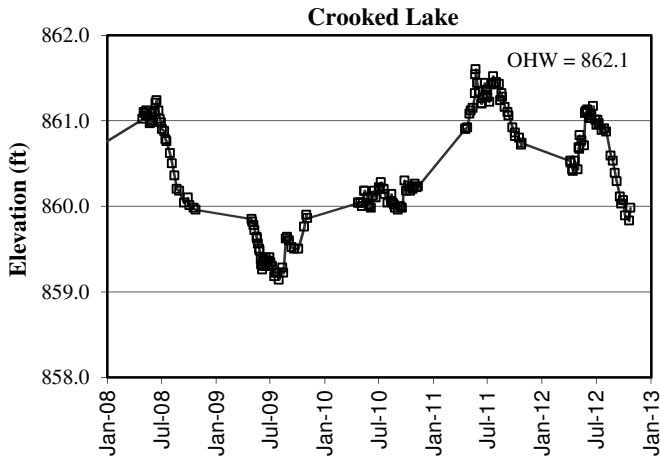
Bunker Lake Levels 2008-2012



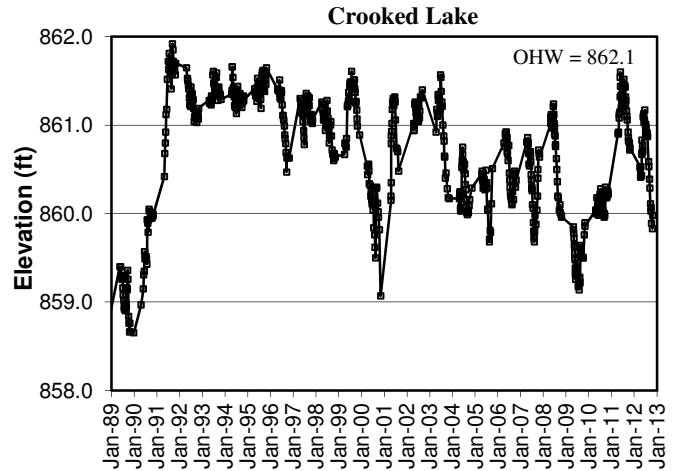
Bunker Lake Levels 1990-2012



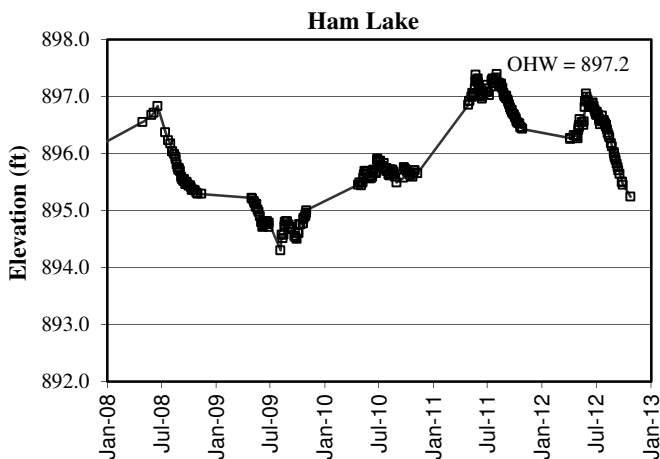
Crooked Lake Levels 2008-2012



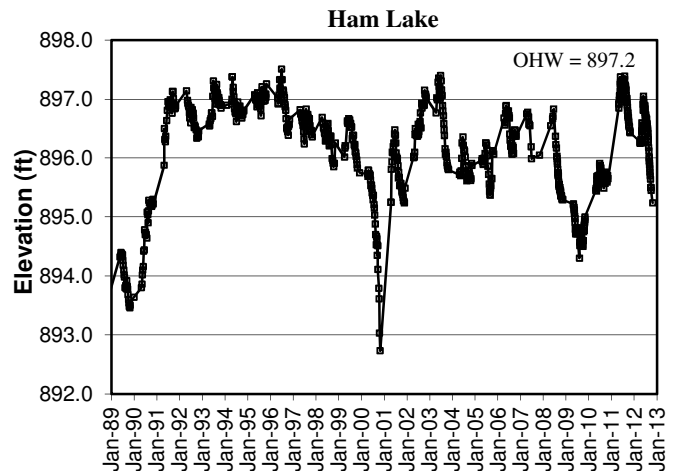
Crooked Lake Levels 1990-2012



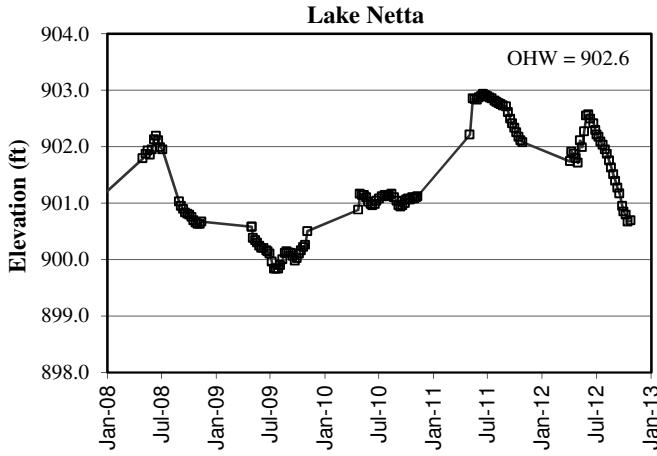
Ham Lake Levels 2008-2012



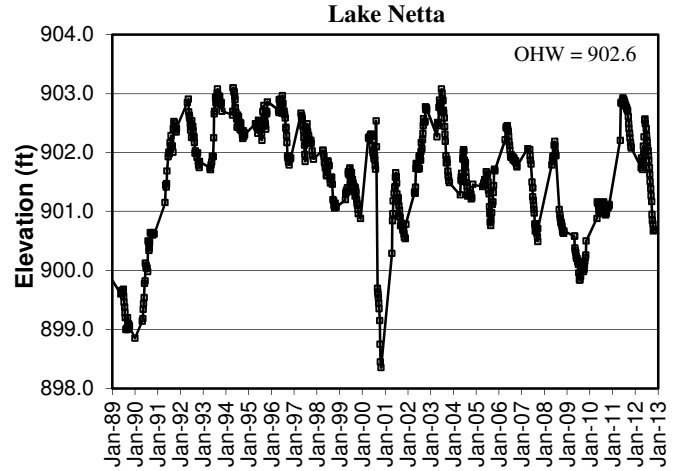
Ham Lake Levels 1990-2012



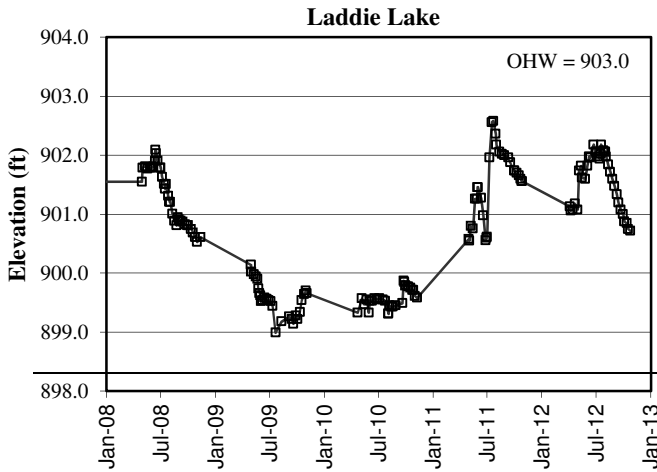
Lake Netta Levels 2008-2012



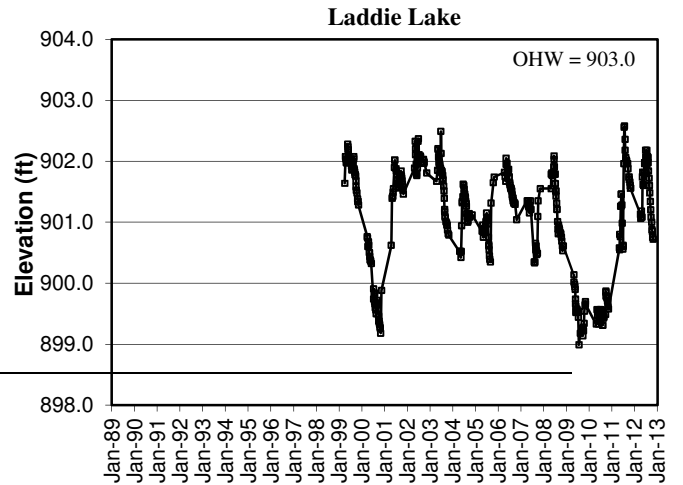
Lake Netta Levels 1990-2012



Laddie Levels 2008-2012



Laddie Levels 1990-2012



Description

Long-term monitoring of lake levels is useful for regulatory decision making, development decisions, lake management decisions and investigation into possible causes of various impacts to lakes. The lakes are monitored using an enamel gauge that is surveyed into each lake so that readings coincide with mean sea level elevations. The gauges are read weekly and reported to the DNR by the Anoka Conservation District. The data is available on the DNR website, www.dnr.state.mn.us/lakefind/index.html. Note that as of December 14, 2011, Laddie Lake is within our expanded boundary formerly in the Six Cities Watershed Management Organization.

Lake	Year	Average	Min	Max
Bunker	2008	880.41	879.57	881.66
	2009	879.52	878.79	880.37
	2010	880.01	879.43	880.54
	2011	882.40	881.08	883.15
	2012	881.45	879.96	882.32
Crooked	2008	860.75	859.96	861.24
	2009	859.47	859.14	859.90
	2010	860.12	859.96	860.30
	2011	861.19	860.72	861.60
	2012	860.64	859.83	861.17
Ham	2008	895.75	895.29	896.83
	2009	894.80	894.30	895.22
	2010	895.66	895.44	895.91
	2011	897.00	896.43	897.39
	2012	896.40	895.24	897.05
Netta	2008	901.32	900.63	902.19
	2009	900.15	899.84	900.58
	2010	901.06	900.88	901.16
	2011	902.64	902.08	902.93
	2012	901.76	900.67	902.57
Laddie	2008	901.28	900.53	902.09
	2009	899.55	898.99	900.14
	2010	899.56	899.31	899.87
	2011	901.51	900.55	902.58
	2012	901.58	900.72	902.18

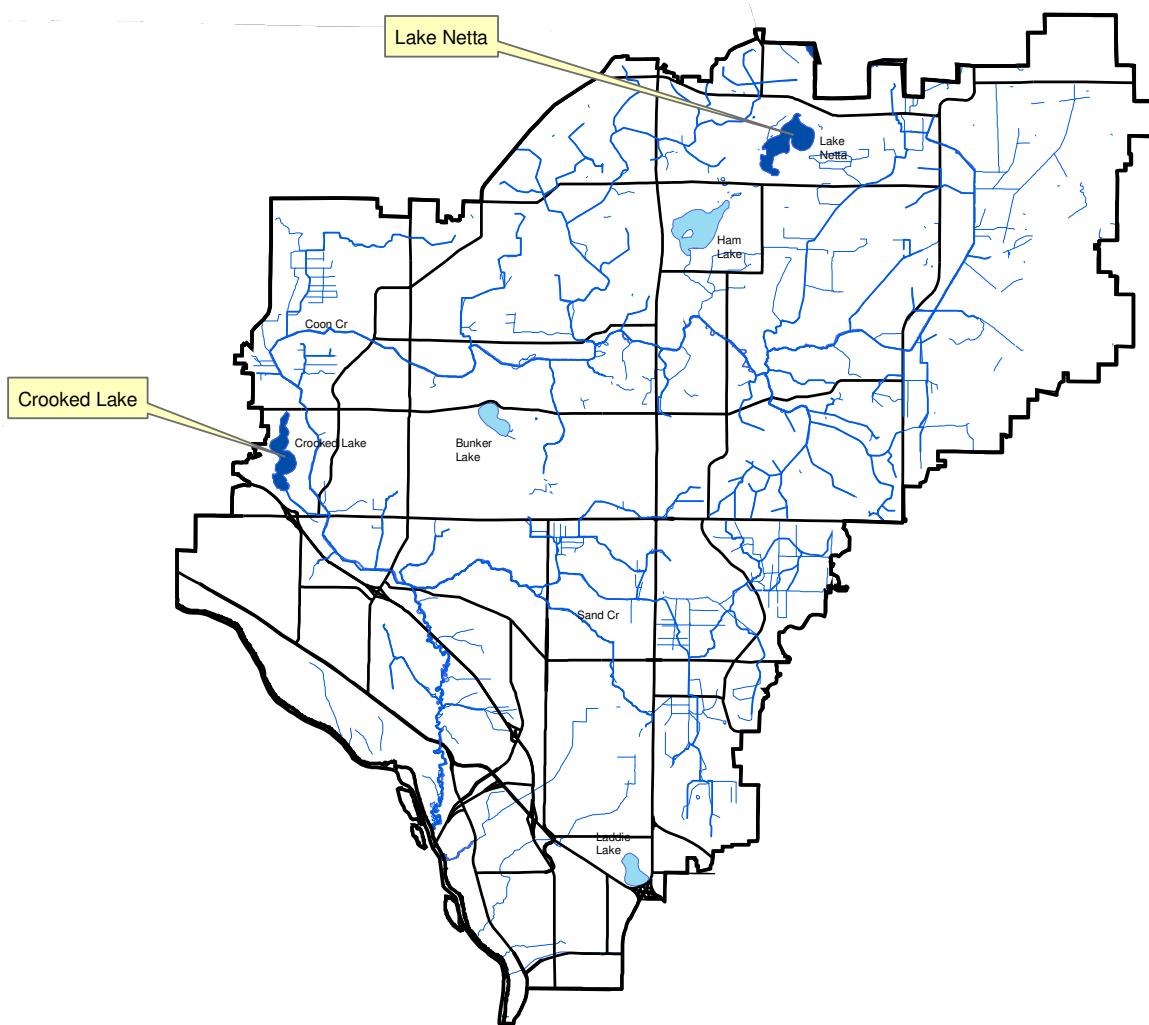
Lake	2012	2013
Bunker	X	X
Crooked	X	X
Ham	X	X
Laddie	X	X
Netta	X	X
Total Number	5	5
Unit Cost	\$163.20	\$166.46
Budget Cost	\$816.00	\$832.32
Change in Unit Costs	2.0%	2.0%
Change in Total Costs	-	2.0%

Description

To detect water quality trends and diagnose the cause of changes water quality samples are taken May through September twice-monthly. The samples are analyzed for the following parameters: total phosphorus, chlorophyll-a, Secchi transparency, dissolved oxygen, turbidity, temperature, conductivity, pH, and salinity. Detailed data for each lake are provided in the Anoka Water Almanac prepared by the Anoka Conservation District (ACD) including summaries of historical conditions and trend analysis. Previous years' data are available from the ACD.

Coon Creek Watershed 2012 Lake Water Quality Monitoring Sites

Site	City
Crooked Lake	Andover/Coon Rapids
Lake Netta	Ham Lake



Lake Netta Historical Summertime Mean Values

Agency	CLMP	CLMP	CLMP	CLMP	CLMP	ACD	ACD	ACD	ACD	ACD	ACD	ACD	ACD	ACD	ACD	ACD
Year	1975	1990	1991	1992	1993	1997	1998	1999	2001	2003	2004	2006	2007	2009	2010	2012
TP (µg/L)						21.8	56.9	22.2	30.7	20.8	23.8	28.0	23.5	32.2	23.0	24.0
Cl-a (µg/L)						6.7	16.6	3.8	7.7	6.2	5.7	5.5	5.6	8.9	4.5	6.2
Secchi (m)	2.4	1.93	2.08	1.98	1.47	2.53	2.90	2.47	2.70	2.47	2.58	3.00	3.10	2.30	2.90	2.20
Secchi (ft)	7.9	6.3	6.8	6.5	4.8	8.3	9.5	8.1	8.9	8.1	8.5	10.0	10.1	7.6	9.4	7.3

Carlson's Trophic State Index

Year	1975	1990	1991	1992	1993	1997	1998	1999	2001	2003	2004	2006	2007	2009	2010	2012
TSIP						49	62	49	54	48	50	52	50	54	49	50
TSIC						49	58	44	51	48	48	47	48	52	45	48
TSIS	47	51	49	50	54	47	45	47	46	47	46	44	44	48	45	49
TSI						48	55	47	50	48	48	48	47	51	46	49

Lake Netta Water Quality Report Card

Year	1975	1990	1991	1992	1993	1997	1998	1999	2001	2003	2004	2006	2007	2009	2010	2012
TP (µg/L)						A	C	A	B	A	B+	B	B	C	A-	B+
Cl-a (µg/L)						A	B	A	A	A	A	A	A	A	A	A
Secchi (m)	B	C	C	C	C	B	B	B	B	B	B	B+	A	B	B+	B
Overall						B	B	A	B	A	A	B+	B+	B	A-	B+

Crooked Lake Historical Summertime Mean Values

Agency	MC	MC	MC	MC	MC	CAMP	ACD	ACD	ACD	ACD	ACD	ACD	ACD	ACD	ACD
Year	1994	1995	1996	1997	1998	1999	2000	2002	2003	2005	2006	2008	2009	2011	2012
TP	30.0	34.0	30.0	30.0	30.0		26.7	31.1	30.9	31.0	38.0	26.4	36.0	27.0	22.0
Cl-a	13.0	10.7	9.8	10.6	16.7		12.5	14.0	10.2	11.6	8.0	8.5	8.0	5.2	4.9
Secchi (m)	1.4	1.5	1.3	1.4	1.6	1.9	1.2	2.2	1.7	1.9	1.9	2.2	2.4	2.9	2.8
Secchi (ft)	3.2	4.8	4.1	4.6	5.4	6.2	4.0	7.1	5.5	6.3	6.3	7.1	7.8	9.5	9.0

Carlson's Trophic State Indices

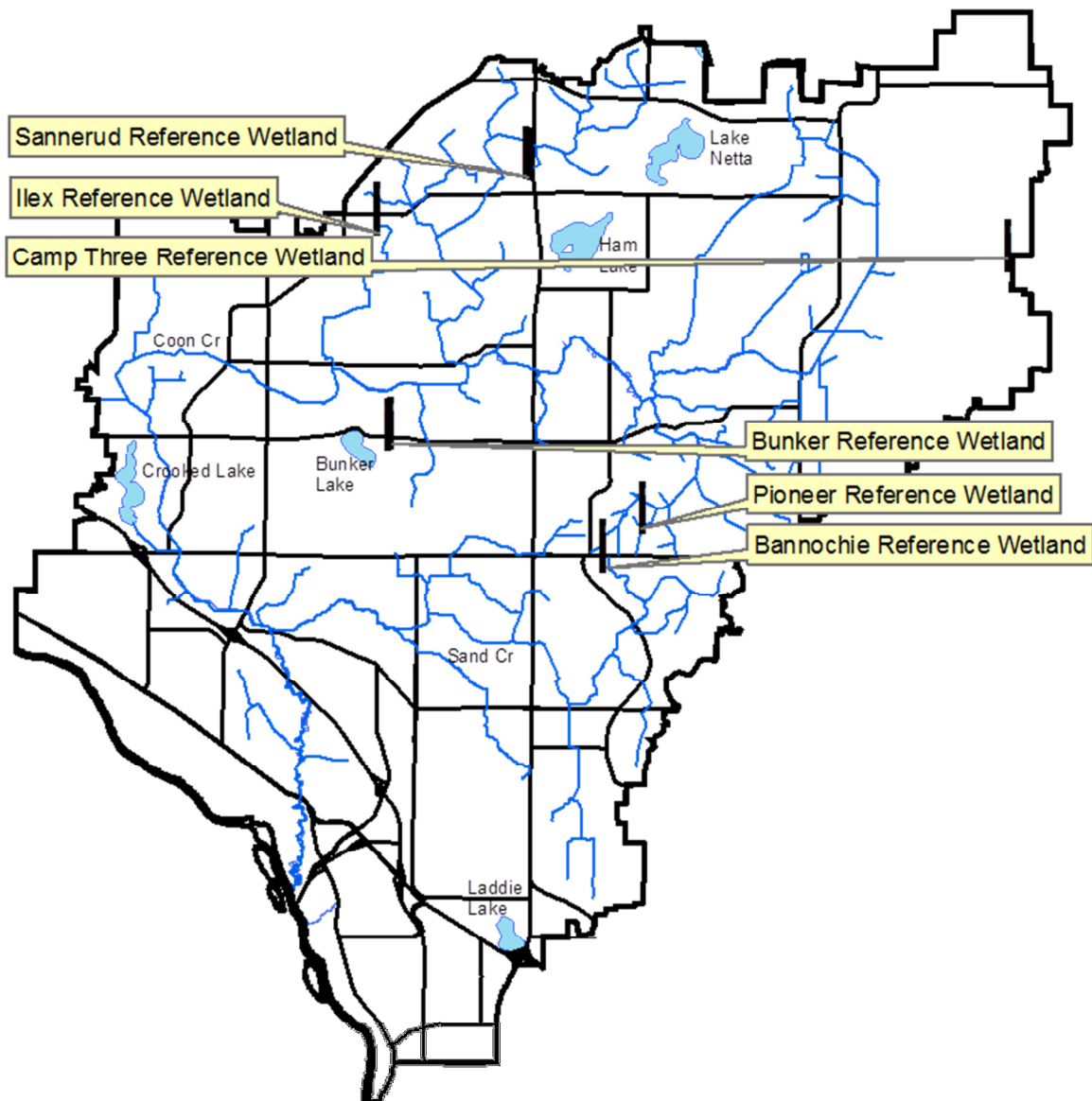
TSIP	53	55	53	53	53		52	54	54	54	57	51	56	52	49
TSIC	56	54	53	54	58		56	57	53	55	51	52	51	47	46
TSIS	56	55	57	55	53	51	57	49	52	51	51	49	47	45	45
TSI	55	55	54	54	55		55	53	53	53	53	51	51	48	47

Crooked Lake Water Quality Report Card

Year	94	95	96	97	98	99	2000	2002	2003	2005	2006	2008	2009	2011	2012
TP	B	C	B	B	B		B	B	B	B	C	B	C	B	A-
Cl-a	B	B	A	B	B		B	B	B	B	A	A	A	A	A
Secchi	C	C	C	C	C	C	C	C	C	C	C	B-	B	B	B
Overall	B	C	B	B	B		B	B	B	B	B-	B	B	B	A-

Lake monitoring has followed this schedule:

	2011	2012	2013
Crooked	X	X	
Ham	X		X
Laddie		X	X
Netta		X	X
Total Number	2	3	3
Unit Cost	\$ 1,075.00	\$ 1,096.50	\$ 1,118.43
Budget Cost	\$ 2,150.00	\$ 3,289.50	\$ 3,355.29
Change in Unit Costs	4.9%	2.0%	2.0%
Change in Total Costs	4.9%	53.0%	2.0%



Description

This program is to provide understanding of wetland hydrology, including the impact of climate and land use. These data aid in delineation of nearby wetlands by documenting hydrologic trends including the timing, frequency, and duration of saturation. Continuous groundwater level monitoring at a wetland boundary to a depth of 40 inches is done. District-wide, the ACD maintains a network of six wetland hydrology monitoring stations.

The purpose of reference wetland data is to help assure that wetlands are accurately identified by regulatory personnel. State and federal laws place restrictions on filling, excavation and other activities in wetlands. Commonly, citizens wish to do work in an area that is sometimes, or perhaps only rarely, wet. Whether this area is a wetland under regulatory definitions is often in dispute. Complicating the issue is that conditions in wetlands are constantly changing—an area that is very wet and clearly wetland at one time may be completely dry only a few weeks later.

As a result, regulatory personnel look at a variety of factors including soils, vegetation, and current moisture conditions. Reference wetland data provide a benchmark for comparing moisture conditions in a disputed area to known wetlands, thereby helping assure accurate regulatory decisions. The analysis of reference wetland data is a quantitative, non-subjective tool.

The simplest use of the reference wetland data is to compare water levels in the reference wetlands to water levels in a disputed area. The graphics and tables below are based upon percentiles of the water levels experienced at known wetland boundaries. The quartile boxes in the figures delineate the 10th, 25th, 50th, 75th, and 90th percentiles. Water table depths outside of the box have a low likelihood of occurring or may only occur under extreme circumstances such as extreme climate conditions or in the presence of anthropogenic hydrologic alterations. If sub-surface water levels in a disputed area are similar to those in reference wetlands, there is a high likelihood that the disputed area is a wetland.

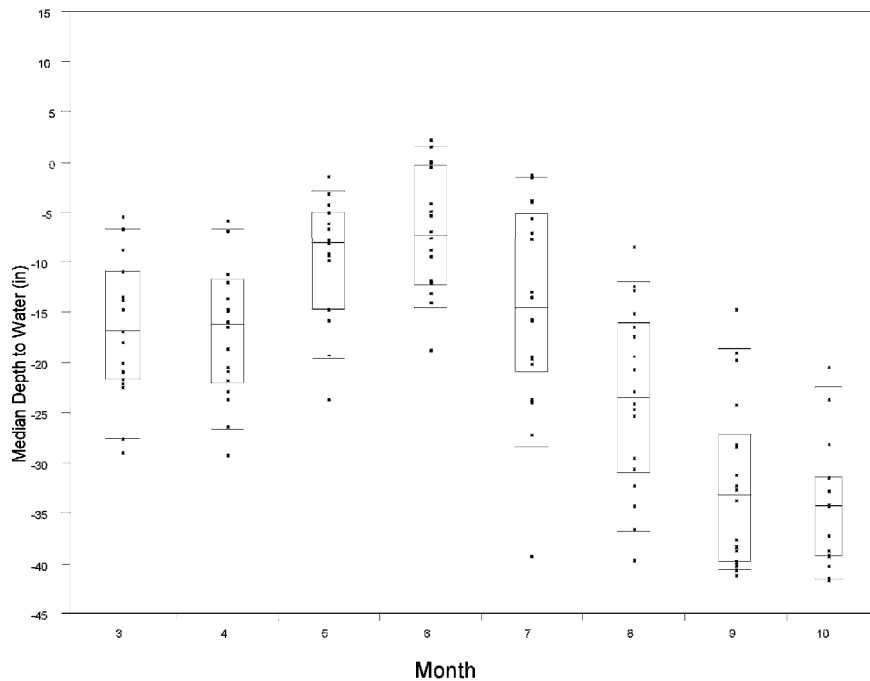
This approach can be refined by examining data from only the year of interest and only certain wetland types. This removes much of the variation from climatic variation among years and due to wetland type. Substantial variation in water levels will no doubt remain among wetlands even after these factors are accounted for, but this exercise should provide a reasonable framework for understanding what hydrologic conditions were present in known wetlands during a given time period.

Water table levels are recorded every 4 hours at all reference wetlands except during winter. The raw water level data are available via the Data Access tool at www.AnokaNaturalResources.com.

2012 Reference Wetland Water Levels Summary:

Each dot represents the median depth to the water table at the edge of one reference wetland for a given month in 2011. The quartile boxes show the median (middle line), 25th and 75th percentile (ends of box), and 10th and 90th percentile (floating horizontal lines).

Maximum well depths were 40 to 45 inches, so a reading <40 inches likely indicates water was below the well at an unknown depth.



Wetland Hydrology	2011	2012	2013
Andover	X	X	X
Bunker	X	X	X
Bannochie	X	X	X
Camp Three	X	X	X
Pioneer Park	X	X	X
Sannerud	X	X	X
Total Number	6	6	6
Unit Cost	\$ 545.00	\$ 555.90	\$ 567.02
Budget Cost	\$ 3,270.00	\$ 3,335.40	\$ 3,402.11
Analysis	\$ 325.00	\$ 331.50	\$ 338.13
Change in Unit Costs	1.9%	2.0%	2.0%
Change in Total Costs	1.9%	2.0%	2.0%

Wetland Veg Transects	2011	2012	2013
Andover			
Bunker	X	X	
Bannochie			
Camp Three			
Pioneer Park			
Sannerud	X	X	
Total Number	2	2	2
Unit Cost	\$ 380.00	\$ 387.60	\$ 395.35
Budget Cost	\$ 760.00	\$ 775.20	\$ 790.70
Change in Unit Costs	2.7%	2.0%	2.0%
Change in Total Costs	2.7%	2.0%	2.0%

Immediate Needs (2013 – 2015)

Need	Explanation
Focus on retrofit efforts in the lower portion of the watershed to reduce volume, Phosphorus loading, and TSS	The District has completed one “retrofit” study through the Anoka Conservation District (Sand Creek). In 2010-11 the District assessed the lower part of the Coon Creek Watershed (Coon Rapids). This effort needs to continue with other tributaries until the issues of volume, turbidity, phosphorus loading, and TSS in the lower Creek are addressed.
Encourage water conservation and infiltration throughout the District	Two efforts should be considered: 1) Public education to conserve beyond watering restrictions (eg, lawn aeration to encourage infiltration). 2) Use of ‘Culvert Boarding’ on high infiltration (losing reaches) of the public ditch system throughout the watershed.