2012 Annual Report

Pelican River Watershed District

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In accordance with Chapter 103D, the Minnesota Watershed Act, I hereby submit the 45th annual report of the Pelican River Watershed District for the year 2012. The Board of Managers approved this report on June 17, 2013.

Tera Guetter
Administrator
June 2013

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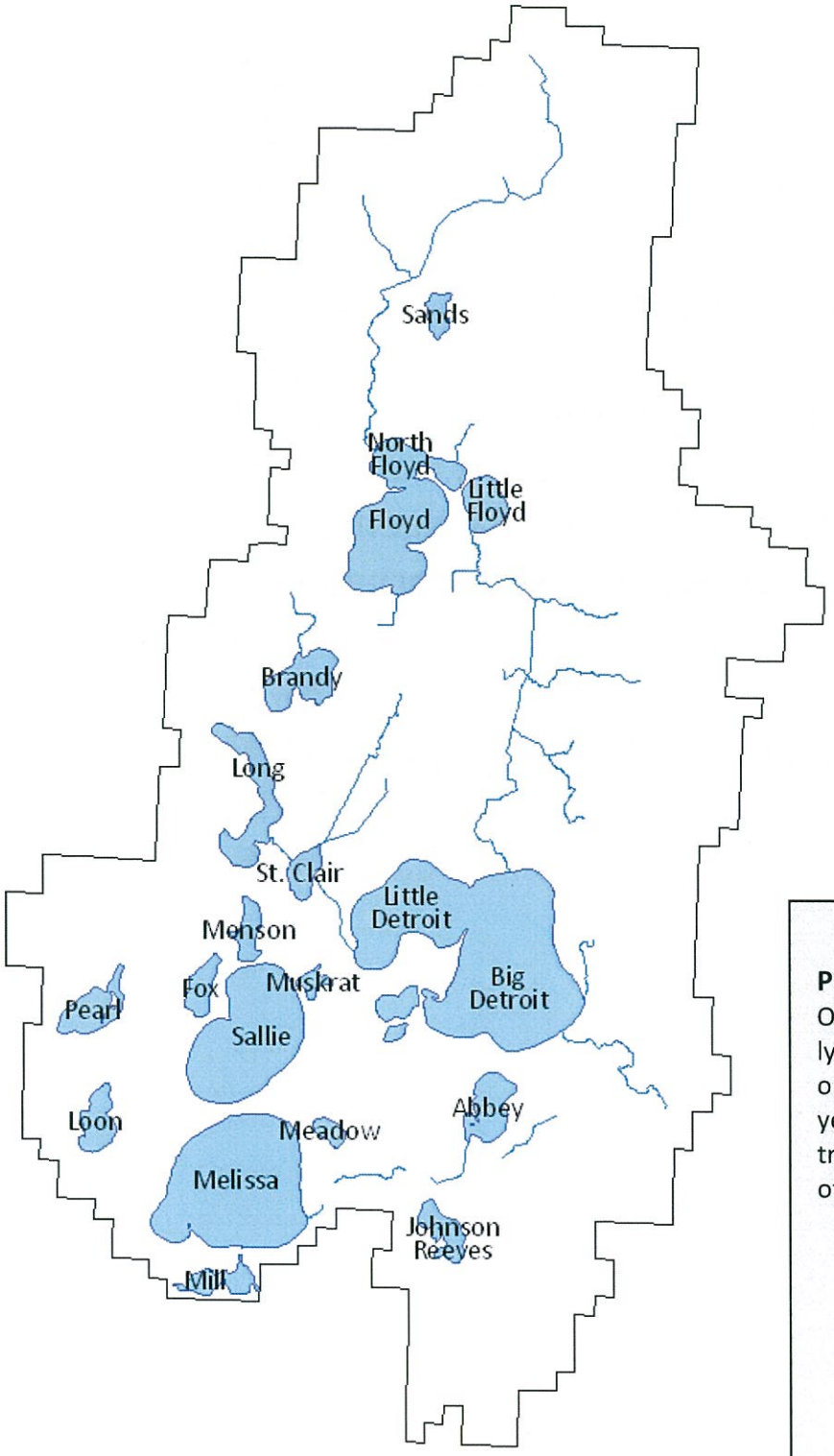
About the District



Established by State on May 27, 1966 by community and lake association leaders to address deteriorating lake water quality conditions.

District Size: 120 Square Miles
Wetlands: 11,957 Acres
Pelican River: 8.3 miles
Lakes: 144
Ditch Systems: 3

The District encompasses 75,160 acres in Becker and 1,747 acres in Ottertail County for a total of 76,907 acres. The area includes the upper reaches of the Pelican River, and several large lakes.

City/Townships: City of Detroit Lakes; Erie, Richwood, Detroit, Lakeview, Lake Eunice, and Holmesville Townships

Major Lakes: Big & Little Floyd, North Floyd, Big & Little Detroit, Sallie, Melissa, Long, Pearl, Fox, St. Clair, Munson, Abbey, Meadow, Johnson, and Reeves.

PRWD Mission

On March 17, 1994, the District Managers formally adopted a new mission statement. Rooted in its original MWRB charge, and sustained for over 31 years by 25 Managers and their advisors, the District affirms its central interest in the water quality of the Upper Pelican River chain of lakes:

"The mission of the Pelican River Watershed District is to enhance the quality of water in the lakes within it's jurisdiction. It is understood that to accomplish this, the District must ensure that wise decisions are made concerning the management of streams, wetlands, lakes, groundwater, and related land resources which affect these lakes".

Introduction

PRWD Establishment

Acting on a nominating petition submitted on September 15, 1965, the Minnesota Water Resources Board (MWRB) established the Pelican River Watershed District (PRWD) on May 27, 1966. In explaining its action, the Board found that the...

> ***"principal bodies of water in the upper reaches of the watercourse of the Pelican River, Detroit Lake, Lake Sallie and Lake Melissa, have become at certain times during the summer recreational months, unhealthy and unsightly due to excessive weed and algae growths. Such undesirable growths along the shores of the above lakes have interfered with boating, fishing and swimming; and have denied lake home owners the enjoyment of water scenery. In addition, weeds and algae growths have affected lake property value." (MWRB, 1966)***

The perception that conditions of area lakes were rapidly deteriorating was the primary motivation for creating a watershed district, and has guided formulation of the District's 1967 Overall Plan and the subsequent efforts of the District Managers since that time. These efforts have included research, advocacy of sewer projects and improvement of sewage treatment facilities, aquatic plant harvesting activities, control of exotic species, especially flowering rush, and many other conservation and enhancement activities.

Water Quality Concerns

Upon completion of the "Phase I" Clean Lakes study, funded by the State of Minnesota and the US Environmental Protection Agency to determine the nature and causes of problems in several District lakes and to outline a strategy for accomplishing solutions, attention in 1994 turned to the matter of preparing and submitting a revised management plan, as required by the Watershed District statute. This plan was approved by the Board of Waters and Soil Resources in December, 1994. The plan identified the causes of water quality problems faced by District lakes as follows:

1. **Incomplete treatment of sanitary wastes, especially septage**
2. **Inadequately treated storm water effluent**
3. **Nutrient enriched surface discharges to lake and streams**
4. **Nutrient enriched groundwater discharges to lakes and streams**
5. **Removal of wetlands which serve as a natural sediment and nutrient buffers**
6. **Excessive aquatic plant biomass in lake littoral zones**
7. **Channelization of drainage ways, and drainage of wetlands which enhances sediment and nutrient discharges to lakes**
8. **Existence of nutrient-enriched wetlands and lake-bottom sediments wherein nutrients are released under conditions of unusual runoff or anoxia**

The following specific goals were identified in the 1994 Revised Management Plan:

1. The water quality in District lakes shall not be further degraded.

2. Lake water quality for Sallie, Little Detroit, and Little Floyd Lakes will be improved to the condition of other nearby lakes.

The 1994 Revised Management Plan called for a monitoring program and described a three-approach strategy to achieving the District's water quality improvement goals:

1. **Implement "Best Management Practices" throughout the District**; this includes resource management measures which are aimed at improving District water quality in general, and an effective education program. These measures must be in place in order for measures aimed at a specific lake or area to be successful.

2. **Reduce upstream releases of stored sediments and nutrients**; restoration and/or improvements to wetlands; better ditch management.

3. **Undertake in-lake treatments**, including whole lake chemical treatments and continuation of aquatic plant removal.

1997 Revised Water Management Plan Amendments. Responding to changes in the Watershed District Statue, and the transfer of public ditches to District control, in 1997 the Managers proposed four (4) Amendments to the Revised Management Plant.

The Managers...

1. Specified that the District's Basic Water Management project **is to improve lake water quality by reducing nutrient loadings to District lakes**, with the further understanding that past and present nutrient mismanagement has occurred throughout the District, that all District lakes have been adversely impacted, and that the measures taken to solve lake nutrient enrichment problems *will benefit the whole District.*

2. Added responsibility for Becker County Ditches, 11, 12, 13, and 14 as **"part of the general on-going business of the District and its staff"**. The District also signaled its intention to maintain and further develop the ditches in such a way as to minimize their past, present, and future downstream impacts on the District's lakes. This will be accomplished by a combination of "best management practices", creation of runoff storage and treatment facilities, and in-lake treatments to ameliorate past damages to water quality.

3. Specified that for purposes of establishing a **Storm water Utility**, the following are considered to be storm water treatment activities and facilities; collection systems, wetland restoration, sediment control devices, storm water detention ponds, constructed wetlands, storm water diversion, storm water detention, stream bank protection, buffer zones, flood easements, ditch plugs, culvert risers, storm sewers, in-stream chemical treatment, conservation pools, and other devices which are designed to reduce storm water flows or the nutrients which are contained in them.

4. Defined several water management districts, and described options for funding future water quality improvements, including grants, ad valorem taxes, assessments, and **storm water utility fees**.

The Amendments also specified procedures to be used for establishing a storm water utility fee structure. The Board of Water and Soil Resources prescribed these amendments at the July, 1997 meeting.

District Water Management Rules. The Managers previously had adopted rules aimed at preventing practices perceived to be detrimental to the water quality of District lakes. The Managers made substantial changes to these Rules in 1994, and in 1998.

The Water Management Rules were completely re-written and streamlined in 2003. Permits are now required for some activities, especially those including activities in the shore impact zone, impervious surface additions, and major land alterations.

2005-2014 Revised Water Management Plan. In 2004-05 the District prepared and submitted to the Board of Soil and Water Resources for review its 10-year plan (update from the 1994 Revised Management Plan). The plan was approved by the BWSR Board in August, 2005.

The District's water quality goals described above remain essentially the same as in the 1995 and 1997 Amendments. For the second goal, the wording was generalized: "Water Quality for Any Lakes classified as Eutrophic shall be improved to Mesotrophic."

The following specific goals were identified in the 2005 Revised Management Plan:

The water quality in District lakes shall not be further degraded

Lake water quality for any lakes classified as Eutrophic shall be improved to Mesotrophic

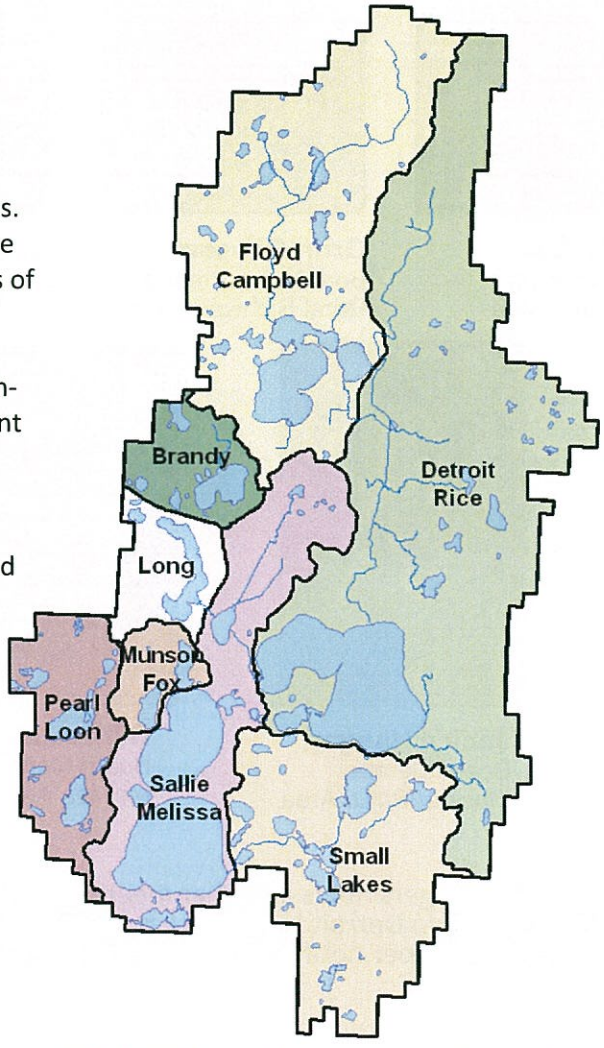
Water Quality Management Areas

The plan describes a two -tiered strategy for achieving this goal.

The first tier deals with District wide strategies. In general these reflect on-going actions of the District, with minor modifications, expansions of programs.

The second tier strategy involves the establishment of eight Lake Water Quality Management Areas.

Each of these eight involve contiguous areas which have similar water quality problems and lend themselves to common actions to address those problems.

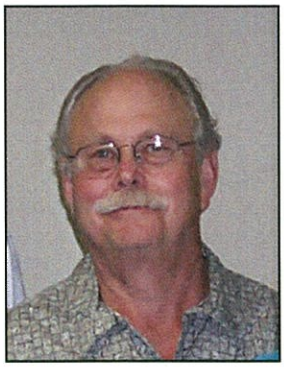


PRWD Water Management Districts

Board of Managers

Appointed by the Becker county Board of Commissioners

	Names	Office	Telephone	Sub-Watershed	Service from	Term Expires
1	Dennis Kral	President	847-9187	Big Floyd	1988	2013
2	David Brainard	Secretary	847-8355	Long	1997	2012
3	Ginny Imholte	Treasurer	847-4236	Big Detroit	1991	2014
4	Orrin Okeson	Vice Pres.	847-7983	Campbell	1987	2012
5	Janice Haggart	Member	847-9394	Muskrat	2005	2013
6	William Jordan	Member	847-3416	Melissa	1995	2013
7	Gary Nansen	Member	849-4972	Long	2012	2014



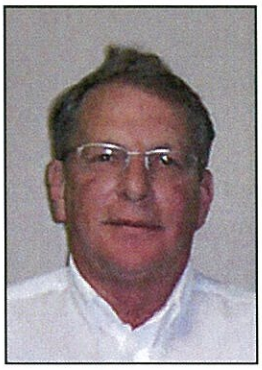
Dennis Kral
Board President
Floyd Lake Area

Orrin Okeson
Board Vice-President
Rural Richwood Area

David Brainard
Board Secretary
Rural Long Lake Area

Ginny Imholte
Board Treasurer
Detroit Lake Area

Janice Haggart
Board Member
Muskrat/Sallie Area



Bill Jordan
Board Member
Melissa Area

Gary Nansen
Board Member
Long Lake Area

The Board of Managers holds a regular meeting on the third Thursday of each month in District Office located in Detroit Lakes, MN at 6:15PM. Special meetings and hearings are held after posting the proper notification on the District Office doorway, or as otherwise required by statute.

Staff and Advisory Committee

PRWD Staff.

3 full-time; 2 part-time; 2 seasonal
Tera Guetter, Administrator
Dick Hecock, Senior Advisor
Terry Anderson, Harvester Supervisor
Jerome Genz, Harvester operator
Monitoring Interns, Brody Wiedmann and Savannah Fritz

District Attorney. The consulting attorney for the District is:

Lisa Tuffs
Briggs,Ramstad & Skoyles
P.O. Box 683, Detroit Lakes, MN 56502
Phone: 218-847-5653

District Engineer. The consulting engineer for the District is:

Marlon Mackowick
Wenck Associates
3310 Fiechtner Dr., Suite 110
Fargo, ND 58103
Phone: 701-297-9600 (mmackowick@wenck.com).

District Advisory Committee. The Advisory Committee is comprised of persons representing special constituencies within the District (in accordance with the Watershed District statute), together with people who have special expertise or influence over District lakes:

John Okeson	Becker County Commissioner
Ted Heisserer	Izaak Walton League
John Postovit	Floyd Lake Association
Tim James	MPCA
Mike Lahlum	Detroit Lakes, Water and Waste Water Dept.
Tom Muench	Curfman Lake Resident
Brad Grant	Becker Soil & Water Conservation District

District Information.

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211 Holmes Street West, Suite 201,
Detroit Lakes, MN 56501
Office Hours: 8:00 AM to 4:30 PM Monday through Friday

Phone: 218-846-0436
Fax: 218-846-0778

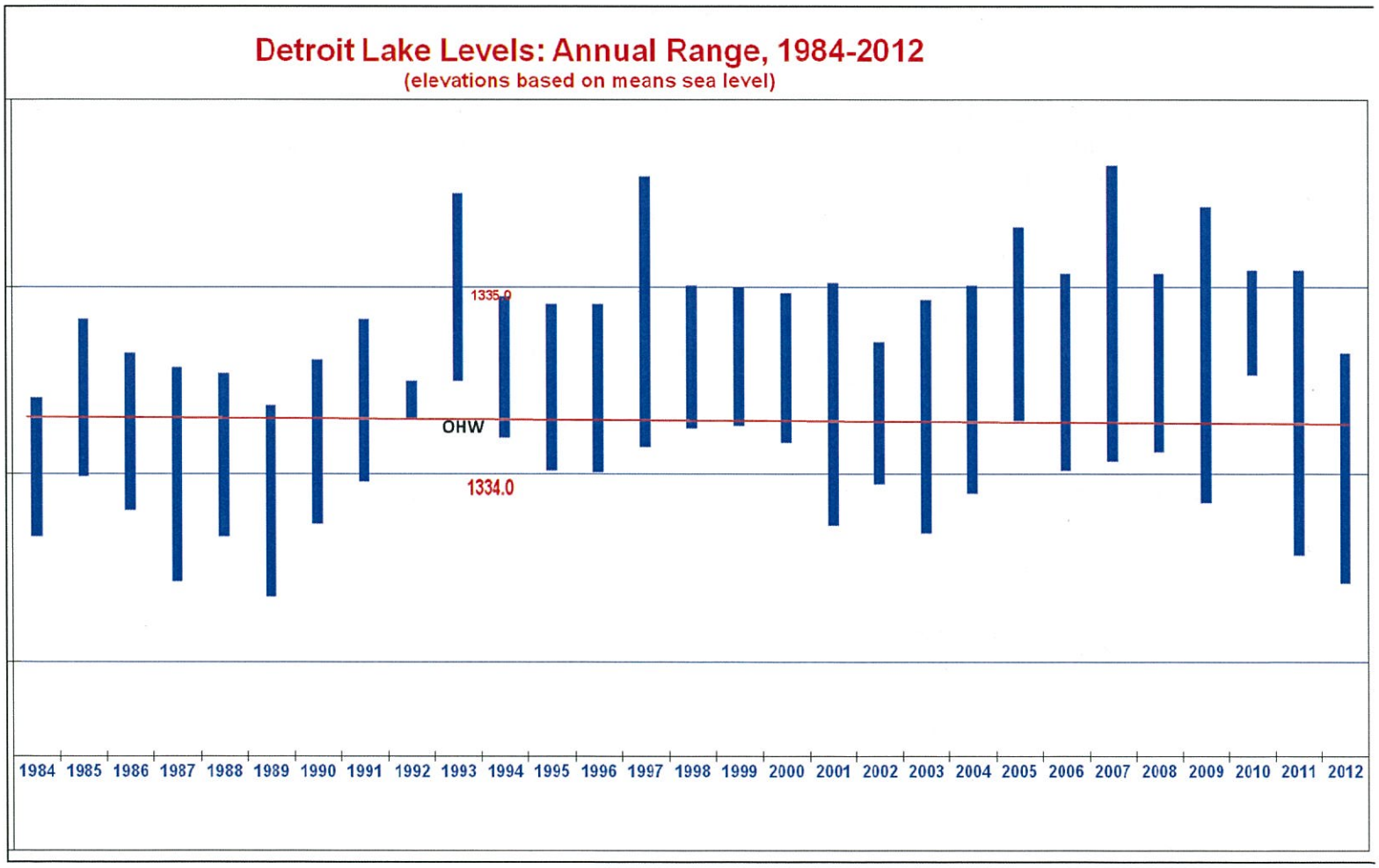
Website: www.prwd.org / Facebook

2012 WATER YEAR REVIEW

2012 continued a pattern of unusual weather. A very warm winter and early spring led to near-record early ice-outs in March on most area lakes. Continuing warm temperatures in the spring produced early stratification and very warm surface water temperatures for a long part of the long open-water season. Nuisance algae blooms were common on area lakes in July and August.

Precipitation in each of the last two years has been about twenty percent less than the 20-year average. The drought that began in the summer of 2011, continued in the 2012 winter with low snowfall. Spring rains were helpful, but there was only one significant runoff event (June 19) and in general streams flowed at unusually low rates. Drought conditions returned in the summer and persisted for the rest of the year.

Higher temperatures, less precipitation, little runoff, and longer ice-free conditions led to falling lake levels throughout the District. Detroit reached its lowest level since the 1980's.



2012 LAKE WATER QUALITY MONITORING

PRWD has operated a comprehensive water quality monitoring program since 1995. Each year data is obtained on both streams and lakes. In 2012, PRWD staff took observations on nine District lakes. For each sampling event, clarity, temperature, pH, dissolved oxygen and specific conductivity were measured. Samples were collected from which TP, OP and Chl-a levels were assessed. Late in the summer, bottom samples were drawn to obtain phosphorus levels. Vegetation and Shoreline surveys were also undertaken.

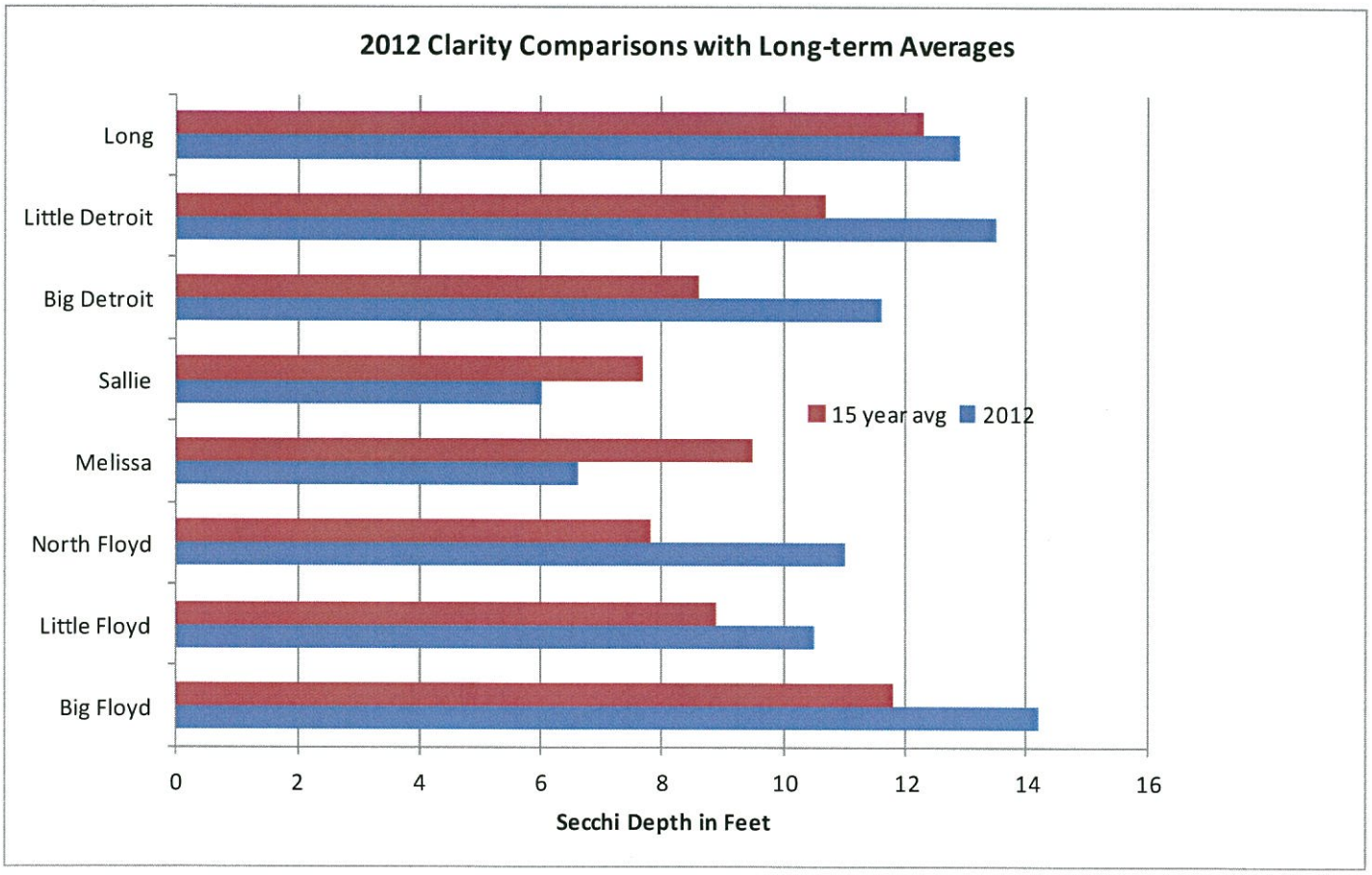
In addition, volunteers augmented staff data collection efforts with numerous Secchi disk readings as a part of the MPCA's Citizen Lake Monitoring Program. In this manner, about 116 observations were obtained on seven additional District Lakes, and another 60 observations were added on those lakes targeted by District staff.

The details of the lake sampling program are indicated in the following table.

Lake	Clarity	Profile	Chla	TP	OP	Level	Bottom TP	Veg surv	Shoreline surv	Volunteer Clarity
Curfman	0	0	0	0	0	65	0	yes	no	no
Big Detroit	5	5	5	5	5		2			19
Little Detroit	0	0	0	0	0		0			10
Melissa	4	4	5	5	5	6				12
Sallie	4	4	5	5	5	25				15
Long										11
North Pearl	8	8	8	8	9				1	
Pearl	8	8	8	8	9		1		1	
Floyd						35				37
North Floyd	8	8	8	8	9		1			12
Little Floyd	8	8	8	8	9		1			
St. Clair	7	7	7	7	7					
Dart	4	4	4	4	4					
Wine	7	8	8	8	8				1	
Other Lakes									2	
	59	64	66	66	70	131	5	0	5	116

2012 LAKE WATER QUALITY

Most District lakes responded favorably to 2012 conditions which featured unusually little spring and summer runoff. Of the main District lakes depicted below, all but Sallie and Melissa surpassed their 15 year average for clarity, in some cases, on Little and Big Detroit, and North Floyd, by several feet.



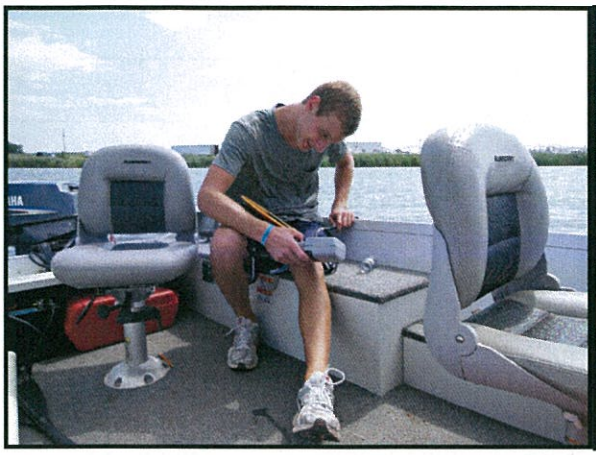
However, the annual averages disguise the fact that most lakes had noticeable clarity problems in late July and August. In general, this is a normal pattern, but the persistent above average lake temperatures led to particularly vigorous algae blooms in 2012.

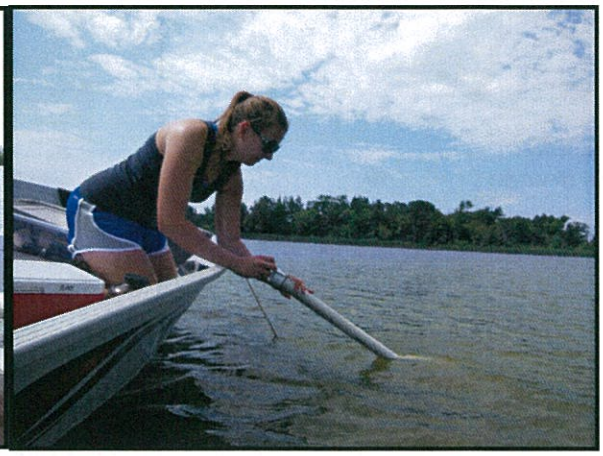
The improvements were particularly dramatic in comparison to the 2011 conditions where spring and summer runoff was high, bringing more nutrients to the lakes, and the summer saw very warm lake temperatures.

Chlorophyll A and phosphorus conditions were consistent with the clarity results on those lakes for which data were collected.

MONITORING NEWS

Lake sampling was completed on a biweekly basis. Sampling was conducted on nine lakes in the watershed by the summer interns; Brody Wiedmann and Savannah Fritz. Samples were tested for TP, OP and Chl-a. Bottom samples of Big Floyd, Little Floyd, Pearl, North Pearl and Big Detroit were also taken towards the end of the season. The interns also completed Shoreline Surveys on six lakes within the District.

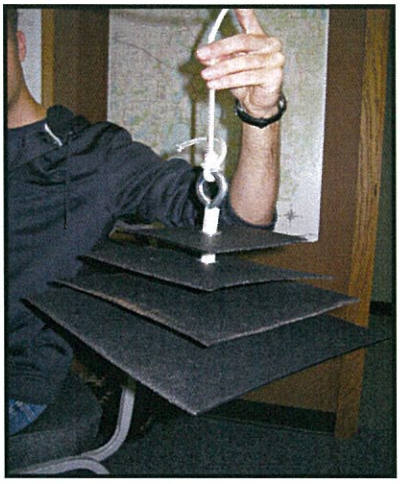




The District also deployed six HOBO units at different stream sites. The units located at both Campbell Creek sites are pictured to the right. These HOBO units automatically take water level and barometric pressure readings. The readings were downloaded once a month by the summer interns . After the data was downloaded, the HOBOs were redeployed and finally disassembled at the end of the season.

The fear of infestation of Zebra Mussels has grown substantially. Early detection of Zebra Mussel infestations may lead to adoption of mitigation measures to reduce impacts. The District constructed and deployed Zebra Mussel samplers near public accesses on several District lakes.

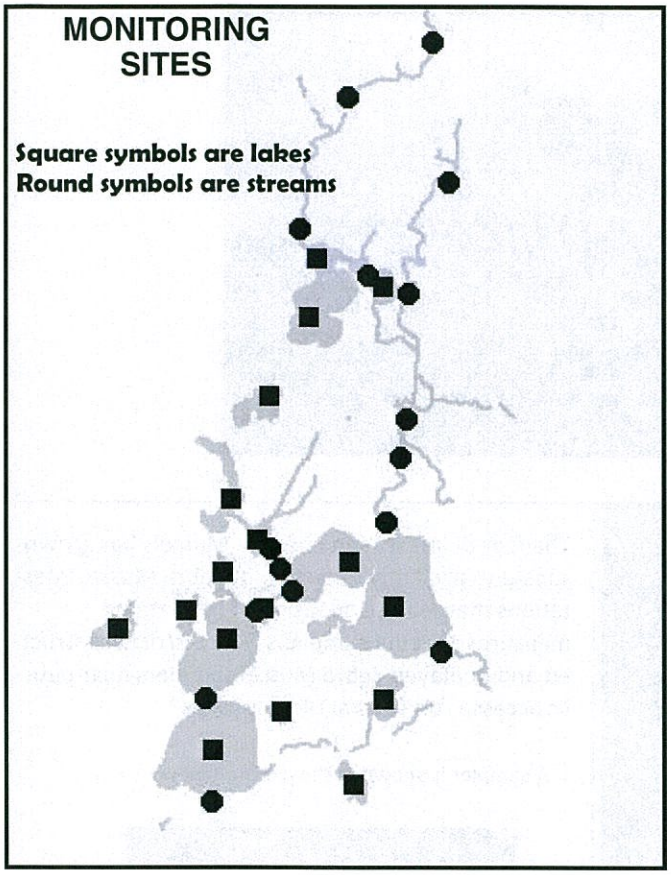
A sampler is shown in the picture below.



An automated sampler was deployed at the Jacobson Property on Pearl Lake (left). It was also checked on a bi-weekly basis and at times when heavy rainfall occurred. Typically, this site had no flow and the sampler was not able to take accurate samples. However, one significant storm on June 19, 2012 produced a small flow, but no samples were taken by the automatic sampler.

2012 STREAM WATER QUALITY

The District regularly monitors attributes of streams at 19 sites. Mostly,the emphasis is on recording stream levels, but at certain key sites, concentrations of TP, OP and Suspended Solids are determined. These results permit the development of estimates of the movement of discharges and nutrient flows through the District.



Item	Number
Stream Sites	19
Gage readings	349
Continuous gage readings	6 sites
Discharge Calculations	10
TP Loading Estimates	10
TP samples	144
OP samples	21
SS samples	24
Ratings	19
Gage surveys	4

Good Water Quality Year

2012 Stream data reflected the precipitation conditions that began in mid-summer 2011. After seven months of below average precipitation, with little snow, wetlands were dry , soil moisture levels low. The spring thaw produced little runoff. Streams, often discharging a large part of their total volume in the early spring, had 2012 flows that were a small fraction of normal. For example, CC1's highest flow in 2012 was 6 cfs, compared to 51 cfs the year before. Flow levels on most stream segments for which there are comparable data were on the order of one-fourth of those in the previous year. In 2012, the Pelican River at highway 34 crossing had an average of about one-tenth of its 2011 flows.

By mid-July discharges were very low, and by the end of August non-existent in many stream segments.

Measured phosphorus and sediment concentrations were also lower than in recent years, often by dramatic amounts. As a consequence, and taking into account the low flows, sediment and nutrient loads were much less than normal throughout the system. At the Highway 34 crossing of the Pelican River, average loadings were about 25% less than in 2011, and farther upstream in Campbell Creek TP loadings averaged about half.

Campbell Creek Culvert Project

Highway 149 which crosses Campbell Creek was reconstructed in 2012. An important part of the project was replacement of the culvert and the road ditches which carry runoff to the Creek. The District worked closely with the County and its contractors to ensure compliance with District regulations concerning structure placement, construction sediment control, and other attributes of the project.

A Runoff Event

Though the year was characterized by low rainfall and lack of runoff in general, there was one significant runoff event resulting from a 2-inch rain occurring in about one hour on June 19. Upstream creeks and ditches rapidly filled to overflowing as did stormwater collection systems. The event also revealed some un-controlled runoff problems from a portion of the Detroit Lakes Industrial Park.

Runoff flowing into Big Detroit (above)

Campbell Creek Samples

Campbell Creek

PEARL LAKE DIAGNOSTIC STUDY

In 2010 the District was awarded $47,188 from the MPCA to perform a diagnostic study on Pearl Lake. Pearl Lake is one of the few lakes within the District that has declining water quality. Over the past decade, phosphorus levels have increased, and as a result, water clarity, especially in the dead of the summer, is very poor.

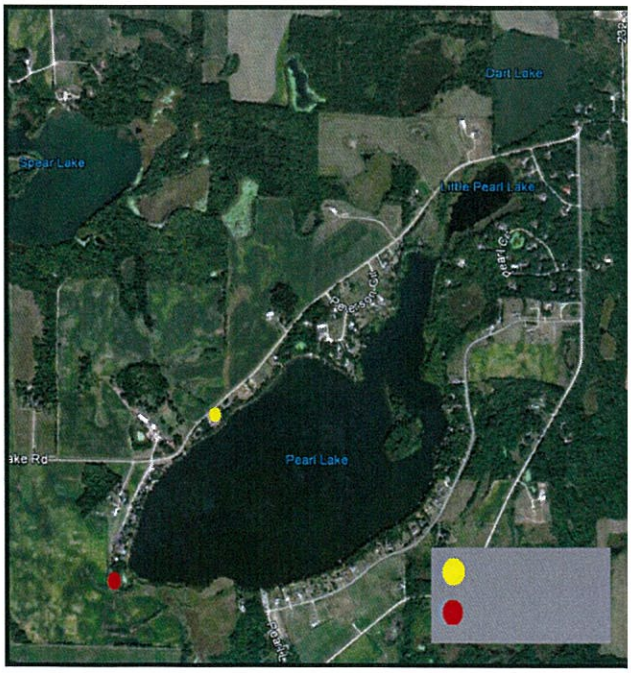
This comprehensive diagnostic study investigates in-lake conditions and the lake sub-watershed area to identify sources of nutrients. At the two lake inlets, automated sampling stations collected flow and nutrient data. In-lake sampling included water chemistry profiles (Phosphorus, temperature, dissolved oxygen, pH, conductivity) . The project includes nutrient modeling, lake sediment core sampling, vegetation surveys, shoreline surveys, and recommendations for Best Management Practices to reduce nutrient loads to Pearl Lake.

By the end of the 2012, three full years of lake and inlet monitoring data had been collected. In 2012, only one inlet monitoring station was installed on the west side inlet to measure flow, velocity and sample data. In 2010-11, an additional automated sampler was installed on the east side of Pearl Lake but was removed due to lack of flow data collected. This site was observed in 2012, but did not produce any flow. Unfortunately, in 2012 like 2011, there was no flow throughout the growing season except for one storm event that produced very little flow. A shoreline survey was conducted and data gathered on land use within the watershed. Becker County performed a septic survey which determined a 6% failure rate of 71 individual septic treatment systems.

Merritt Consulting was added to the work plan in 2011 to quantify the evapotranspiration and groundwater component of the hydrologic cycle. Wenck completed a bottom sediment core study later in the summer. The report concluded the phosphorus release rates have a high potential for recycling into the water column during periods of oxygen deficiency (anoxia).

Data was also collected in 2012 on Dart Lake, which is located North of Pearl Lake. Interns, Fritz and Wiedmann sampled it four times over the course of the summer. Like other lakes, Dart was sampled for TP, OP and Chl-a. Secchi disk readings were also taken upon sampling. In 2011, Dart was only sampled once toward the middle of July, it produced a Secchi reading of five feet.

The outlet on the South end of Pearl was inspected by Guetter, Bob Merritt and Savannah Fritz, one of the summer interns, and it was discovered that the outlet has a very well defined channel. However, there was no flow into the lake by means of the outlet. Merritt, along with Fritz and Wiedmann, installed a shallow ground well to monitor the groundwater. Three weeks after installed the well dried up and there was not enough data to record.



In 2013, the nutrient budget will be completed and a final report with findings and recommended implementation plans will be submitted to MPCA in June 2013.

AIS INITIATIVES

Watercraft Inspection Program

The District continued its support of AIS Inspection programs by assisting in upgrading the survey form used by inspectors making contact with boaters. The form is designed to reveal patterns of boater use on lakes, and to assist in understanding the nature of risk of movements of AIS from lake to lake. District personnel also assisted in the processing of the results from these surveys conducted at Detroit and Floyd Lake public accesses.

A small grant also was given to Lake Detroiters to support payment of inspectors at three public access sites on Big and Little Detroit Lakes. Approximately 2200 inspections were carried out at these three sites. An additional 600 inspections took place at Floyd and Little Floyd accesses.

Aquatic Invasive Species Legislative Summit, January 14th, 2012

Nearly 400 were on hand for this second annual event, held at the Minnesota State Community and Technical College in Detroit Lakes. The session featured DNR, District, Lake Associations, and other speakers who discussed the effectiveness of the 2011 legislation and other progress that has been made in the battle against AIS. Citizens were also invited to express their views.

Several of the Legislators in attendance offered strong support for a greater State commitment and promised to work toward that end in the upcoming session.

It is generally believed that the Summit played a significant role in promulgation of numerous changes in the State's Invasive Species regulations.

County AIS Task Force

District staff were heavily involved in the creation and support of the County's Task Force appointed to enhance relationships between local and state government agencies and organizations.. The primary objective of the task force is to identify and develop steps for preventing and combating AIS if found; and
present further recommendations to the Becker County Board. Hecock and Guetter were both members of the task force which had numerous meetings during the year.

Inspection programs, volunteer or paid, were not notably successful. There were an insufficient number of DNR inspection training sessions, resulting in only 90 trained inspectors in the County. Only a few lakes were added to the roster of lake-based inspection programs. New and existing programs provided inspections at only a small portion of the times during which boaters used public accesses. Also, there was some push-back from lake residents who felt that they were being asked to accept a disproportionate share of the responsibility for preventing spread of AIS. Other accomplishments included:

- Considerable information on AIS risk from boater use of public accesses were obtained from survey data.
- While some inspection programs may continue, and others emerge, a different model is needed if we are to be aggressive in discouraging lake-to-lake spread of AIS by boaters.
- Utilizing funds from DNR Awareness grants and local sources, a wide variety of educational resources were developed. Additional efforts are needed to ensure that these resources are activated and implemented effectively.
- It is unclear to what extent there has been increased enforcement of AIS rules.
- A full-time AIS Coordinator is needed for Becker County.
- The Task Force was too large (and contained persons without direct knowledge of AIS); some subcommittees (e.g., Rapid Response Plan) were too large.
- Clear lines of authority between AIS coordinator and County Staff are needed.
- There may be some opportunities for coordination of prevention actions among governments within the County, and among adjacent counties and the Tribe.

AIS Symposium in St. Paul, MN

The District was instrumental in planning the very successful meeting on March 19 and 20 at the Kelly Inn in St. Paul. The District joined Minnehaha Creek Watershed District, the Minnesota Association of Watershed Districts, Aquatic Ecosystems Restoration Foundation, Minnesota Coalition of Lake Associations, and Minnesota Waters in this project.

In attendance were more than 200 representing a cross-section of organizations including lake associations, city and county officials and staff, park board members, watershed districts, state and federal agencies, and private companies. Attendees included 5 PRWD managers and two staff. In addition, numerous state legislators, and Senator Klobuchar were present. The event drew widespread media coverage.

The program covered a broad range of management topics dealing with invasive plants and animals. There was some emphasis on various aspects of chemical control, but bio-controls and other management techniques were also presented.

Watercraft Inspection Approaches

The District prepared a 16-page brochure offering specific information on how to Clean and Inspect water related equipment including boats/trailers, pontoons, wakeboard boats, sailboats, kayaks, fishing gear, dive gear, hunting gear, and docks/lifts.

Park Fest

The District joined Becker COLA in offering a display at the City of Detroit Lakes annual Parkfest celebration in June at the Detroit Lakes Pavillion on the shore of Little Detroit Lake. The display featured very popular hands-on zebra mussel samples, and a test of knowledge about various aquatic invasive species. Children were awarded colorful wristbands for their participation.

Involvement with State Committees

During 2012, the Minnesota DNR's Aquatic Invasive Species Management Stakeholders Committee included Administrator Tera Guettter as a representative of Minnesota's watershed districts. Deliberations of the Commission were wrapped up early in the year. Many of the committee's recommendations were incorporated into legislation that was signed into law in May, 2012, or were adopted as policy by the DNR.

Guetter also participated in the DNR's Annual "Round Table" deliberations, a large meeting of stakeholder, DNR personnel, legislators, and others held each January in St. Paul.

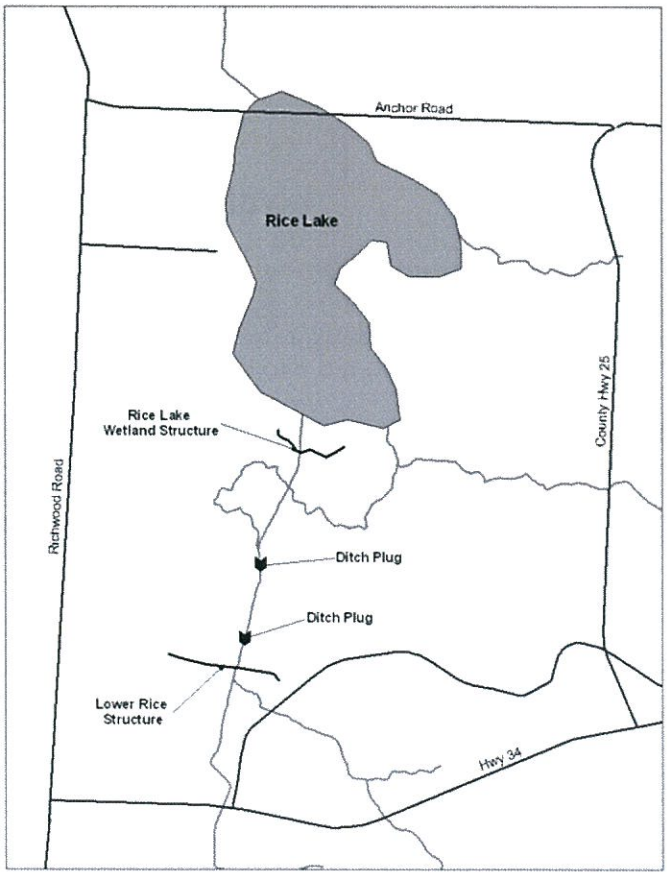
In late 2012 Guetter was appointed to a 15-person DNR Aquatic Invasive Species advisory committee.

Rice Lake Nutrient Reduction Project

The Rice Lake Nutrient Reduction Project will reduce total phosphorus (TP) loading to downstream recreational water bodies including Detroit, Sallie and Melissa Lakes by 1,200-1600 kg/yr. The Rice Lake wetland will increase from its current area of 434 acres to pre-ditched water levels of approximately 896 acres, thereby restoring natural wetland hydrology conditions. The project area flowage rights include private lands (503 acres), MN DNR Wildlife Management area (510 acres), and City of Detroit Lakes land (145 acres).

Since 2003, the District is jointly working on this project with the Natural Resource Conservation Service (NRCS). From 2003-07, The NRCS– Small Watershed Assistance group conducted an in-depth assessment study on Rice Lake wetland to analyze best management practices for reducing phosphorus exports, with wetland restoration selected as the most technically feasible option. The NRCS Wetland Reserve Program ("straight WRP") is assisting with private land easements on program eligible properties. However, since no MN RIM funds are involved (other projects rank higher due to wildlife benefit) the District is making up the land rights payment difference on 405 acres ($172,000-PRWD; $345,000-NRCS WRP). Currently, the District is using a MPCA Clean Water Partnership (CWP) loan ($450,000) to pay the WRP rate difference and also for properties not eligible for WRP (less than 7 yr ownership, small acreage). PRWD land rights acquisition costs are totaling $577, 516. The District is nearing completion of property acquisition (latter 2010) and needs to secure additional funding for project engineering costs. NRCS is committed to project construction costs; however, they are requesting the District pay for engineering designs estimated at $250,000 (construction estimated between $1.2 – $2.0 Million).

There are a number of governmental agencies involved with the project. The Rice Lake project technical committee, formed in early 2005, has agency representation from the ACOE, NRCS, BWSR, DNR, MPCA, and Becker SWCD. The committee meets on a regular basis to review project status and provide agency assistance. Other non-government project stakeholders are the affected landowners, Lake Detroiters Lake Association and the Detroit Lakes Chamber of Commerce.



The restoration will increase the depth and duration of inundation on the partially drained Rice Lake Wetland creating more natural wetland hydrology conditions. The project will increase the wetland depths by an average of 2.O feet by the construction of two dam structures, Anchor road elevation improvements, and ditch modifications (plugs, spoil bank removal). In addition to the water quality benefits, approximately 78 additional acres of Type I wetland vegetation will be restored as well as approximately 462 acres of Type 2 through 7 wetlands will be created or enhanced. This expansion includes 178 acres of Type 3 wetland to enhance needed primary brooding and nesting habitat for several species of migratory waterfowl.

SPECIAL PRWD 2012 INITIATIVES

Item	Project Partners	Timeline	Status	Cost/Funding
Watershed Plan Environmental Assessment	NRCS- Small watershed group	2005-2007	Completed	$500,000 - NRCS
Land Rights $1,277/acre or buyout				
A. Private flowage easements PRWD acquired - 98 acres	MPCA - CWP	2008-May 2010	16 completed	$50,000 CWP grant completed $356,000 CWP loan
B. Private flowage easements WRP with PRWD match *No RIM fund match*	NRCS	Aug 2009 - present	13 of 14 signed 2011 completion date	$345,000- NRCS $172,000- PRWD/ CWP loan
C. City of Detroit Lakes land easements - 145 Acres	City of Detroit Lakes	Nov-11	In progress	Donated
D. State and Federal land easements - 510 Acres	MN DNR, USFWS	Upon completion of private land rights	In progress	Donated
Project Engineering – Construction designs	Clean Water Fund/ BWSR	2010	30% design plans completed	$250,000 Clean Water Fund/BWSR grant request
Construction*	NRCS	2011-2012	To be completed	$ 400,000 NRCS $75,000 PRWD
* **Construction Includes: Rice Lake structure** (access road, concrete structure, embankments, dewatering); **Ditch channel improvements** (ditch plugs, removal of spoil banks); **Lower Rice Lake structure** (access road, concrete structure, embankments, dewatering); **Anchor Road improvements and access parking**				

In 2012, engineering plans and designs for Anchor Road improvements, water control structures, and access areas were completed.

Research on Flowering Rush Control

Ecology and Management of Flowering Rush in Detroit lake

In the summer of 2012 the research team consisting of Madsen, Wersal, Marko and Skogerboe reported results of 2010 and 2011 research. The key findings included:

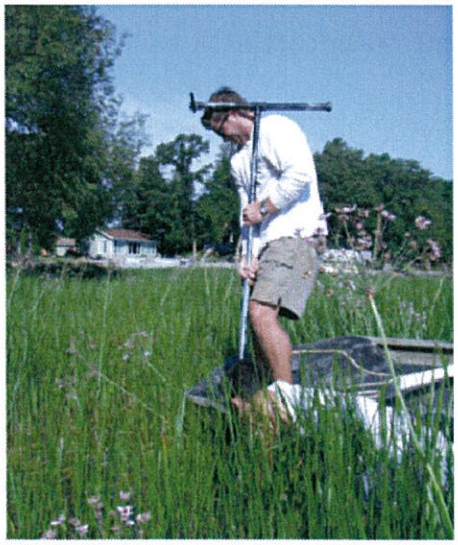
- Flowering Rush is invading native plant populations and habitats, including hardstem bulrush
- Flowering Rush is not establishing in uninhabited area
- Flowering Rush growth in terms of height and biomass and density, increases to a depth of 4 feet and declines in deeper water.
- Bud density is negatively correlated with depth. Buds are capable of dispersing with any sediment disturbance.
- Contact herbicides such as diquat will, at a minimum, reduce the Flowering Rush nuisance with minimal impact on native plant diversity.

Towards developing greater effective management methods for Flowering rush, in 2010 the District contracted with Dr. John Madsen, Geosystems Research Institute/Mississippi State University and Dr. Michelle Marko, Concordia College to study the plant life/growth cycle, ecology, and plant biomass in relation to water depth. This new information will be used to assist the Army Corps of Engineers chemical application research to target optimum treatment timings to increase FR management effectiveness.

Hundreds of plant samples and sediment cores are collected throughout the year and analyzed.

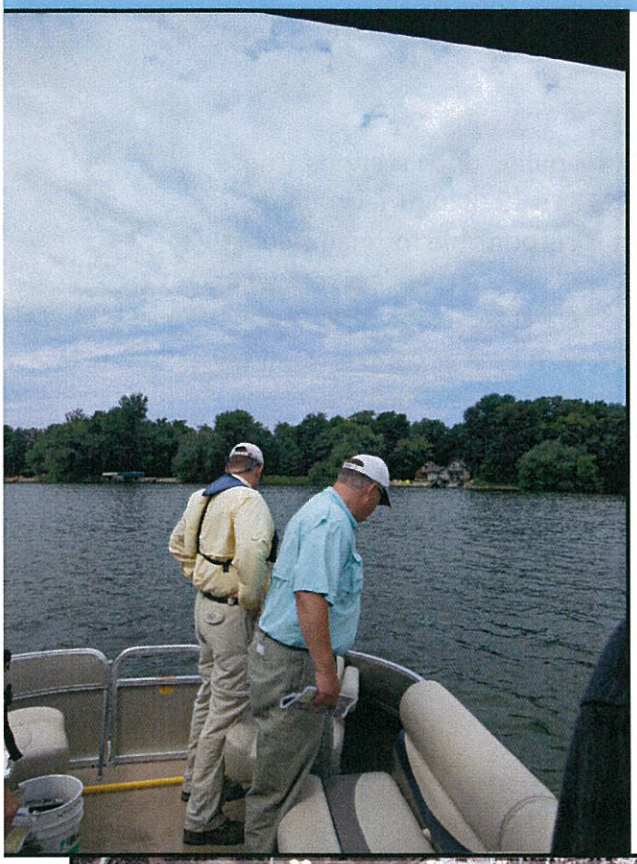
Costs of this effort were $61,075 in 2010, and $91,075 in 2011.

On August 15 Managers participated in a 3-hour tour of Flowering Rush infestations and flowering rush treatment sites on Big and Little Detroit and Curfman. Managers were briefed on progress and prospects.

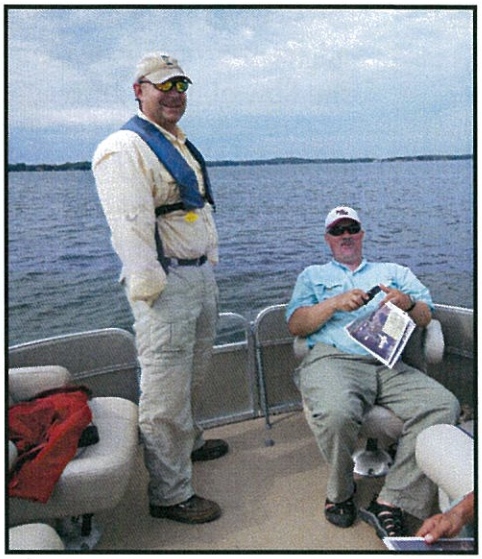


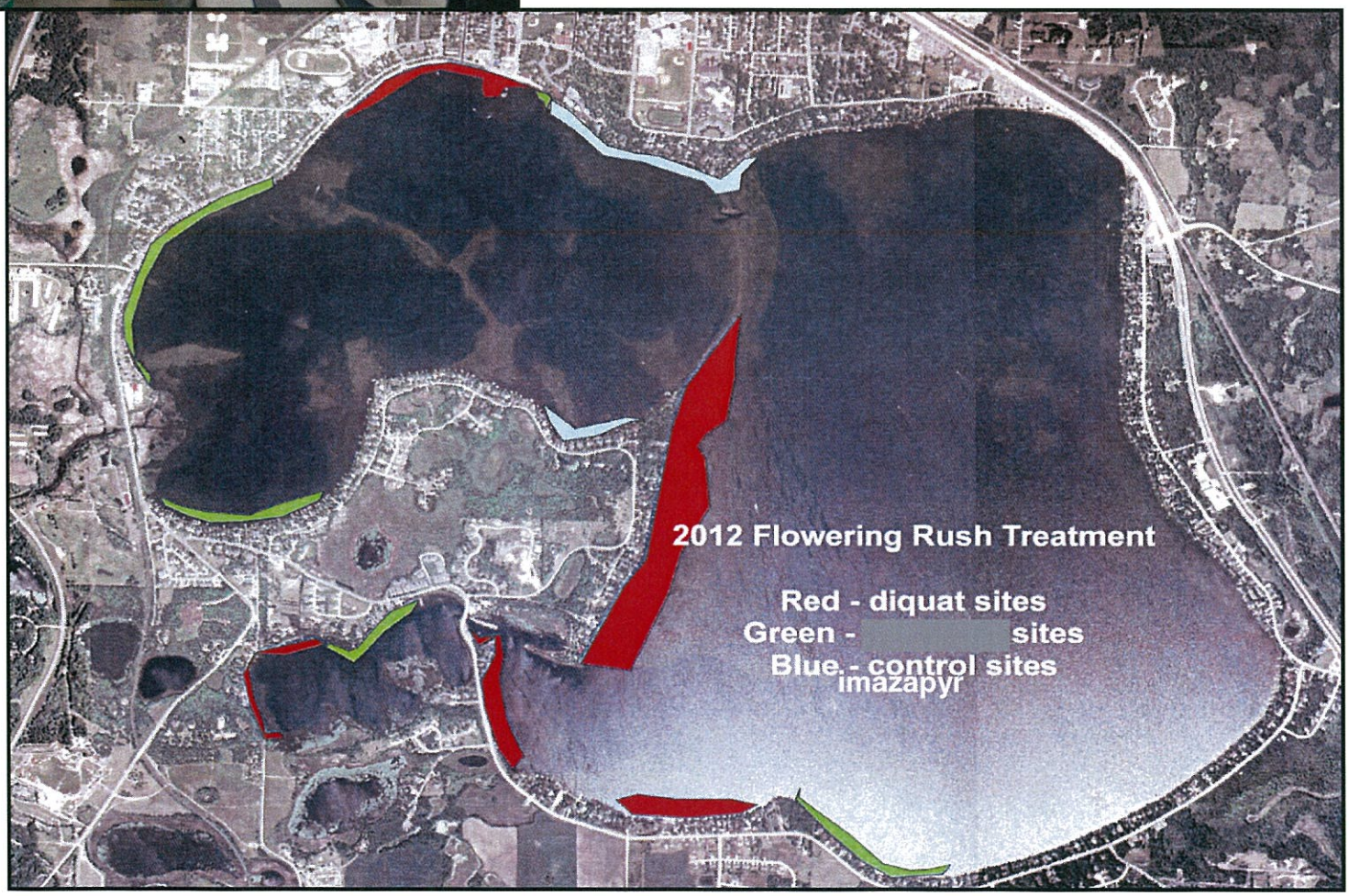
MSU Graduate Student Brad Sartain samples flowering rush on Detroit Lakes, July 2012. Photo by author.

Phenology work continued - learned that biomass on FR continues to accumulate until early autumn. Work continued to find out the depth distribution of biomass and field herbicide treatment tests.



On July 12th, 2012 PRWD staff joined DNR officials to review submergent treatment plots on Detroit. There was general agreement that 2012 early summer treatments had been extraordinarily successful in controlling Flowering Rush. Pending favorable results from the research efforts, it was agreed that similar treatments will continue next year in the same areas and expanded to other heavily infested areas.





Ditch Management

The District has statutory responsibility for the management of 3 public ditch systems. These ditches were dug in the early part of the 20th century, from 1913 to 1918 in order to benefit adjacent property owners by facilitating drainage. The District is responsible for maintaining the flow of water through these ditches.

Nearly all of the District's Ditch management efforts have to do with beaver control. Beaver dams cause problems with the ditch systems and many need to be removed each year. It is District policy not to remove the dams in July and August due to negative downstream water quality impacts on lakes. The figures below give some idea of the extent of beaver problems in 2012:

Ditch 11-12: Beaver Control—$355

Ditch 13: Beaver Control/dam removal—$3,153

Ditch 14: no action required—no funds spent

Ditch 11-12 Excavation.

The District also carefully reviews any proposals to build or replace culverts or add any drainage system to the ditch in order to ensure that flow levels are adequately maintained.

The cost of these programs are paid for by assessments on those lands which benefit from the ditches.

2012 Permitting

District Rules and Permitting Program

The District's Water Management Rules and permitting program works to ensure that those altering shore impact and bluff impact zones of lakes and rivers, impervious surface changes, subdivisions, highways, parking lots and certain steep slope properly manage stormwater runoff and prepare plans for proper erosion and sediment control. District staff inspect permit sites and enforce permits as needed. In some cases the staff solicits input from professional engineers.

Permits Issued

	'11	'12
Shore Impact Zone Alterations	29	61
Impervious Surface, storm water management	10	8
Subdivision, plats, or planned unit development	0	1
Road, parking lot, bridges, culverts, storm sewers	2	5
Total	41	75

District Engineer's Report

The District Engineer, Marlon Mackowick of Wenck Engineering, reviewed storm water plans for County Highway 22, State HWY's 10 and 59, and several street rehabilitation projects. In all cases, the Engineer recommended that the requested permits be issued. The Engineer also provided input on the Anchor Road reconstruction portions of the Rice Lake Project, and supervised the delineation of affected wetlands. An Environmental Assessment Worksheet was prepared and submitted to the Minnesota Environmental Quality Board. A plan for steps needed to complete the Rice Lake Project was prepared. The Engineer also assisted with the sediment phosphorus release study on Pearl Lake.

Citizen Advisory Committee

Towards a 2015 Revised Management Plan

The District's Management Plan will be revised in 2015. Given the details and complexity of the plan, the difficulty of amending it, and the consequent need to be careful about its comprehensiveness, plan preparation requires inputs from many constituents, and will require a significant commitment of effort.

In November, 2012, District Managers hosted a session aimed at generating stakeholder input to the process of preparing the next plan. A cross section of citizens, lake associations, governmental units, sportsman groups and others were invited. Approximately 20 attended the session held at Minnesota Technical College in Detroit Lakes. One intent was to expand the numbers of those involved as District Advisors.

At the end of the session, participants were invited to complete a survey aimed at soliciting opinions on existing District initiatives, and suggestions for new directions or programs. Based upon the data obtained, the following conclusions were reached:

- There is little interest in contracting existing programs
- By large majorities, respondents indicated preference for maintaining, or even expansion of activity in most categories.
- Half or more felt that Education and phosphorus controlling BMP's should be expanded.
- Written comments were all over the place, but in one way or another four mentioned streamlining /coordinating regulatory activities (with city and state) . Some pushed for more emphasis on lake management planning.
  Aside from some gentle suggestions about better coordination in regulation from the city folks, no other response patterns related to respondents' affiliations were detected.

In addition, the discussion led to the suggestion that a series of specific topic focus sessions should be planned. Topics under consideration include Lake Management Plans, off-line storm water treatment, lake levels, the future of roadside pickup, coordination of regulations,

St. Clair TMDL Plan

Lake St. Clair was designated as a water that is "impaired" for recreational use because of high nutrients by the state of Minnesota and the United State Environmental Protection Agency in 2009. Because several areas within the lake's watershed are being considered for major development (new roads, intersection expansion, expanded airport runways), and because the City of Detroit Lakes sewage treatment plant is going through a permit review process, the District asked that the preparation of a Total Maximum Daily Load Plan be undertaken sooner rather than later. The rationale was that any of these proposed actions could have a significant effect on Lake St. Clair, and that provisions should be taken to minimize those effects.

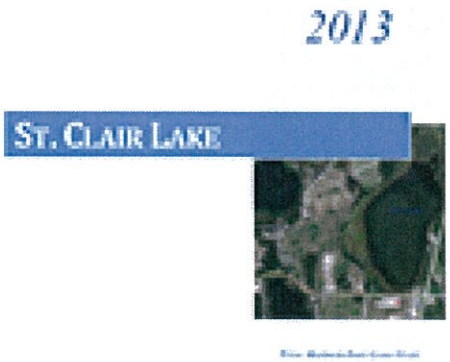
Working with the Minnesota Pollution Control Agency staff, it was decided that the District would contract with EOR Associates to undertake the development of a plan. The plan's objective is to set the maximum amount of Total Maximum Daily Load of phosphorus discharged to the lake, and to allocate the sources of those discharges.

The District provided to EOR a large amount of data and previous studies that were considered to have some relevance to the plan's preparation.

At EOR's request, a preliminary stakeholders' meeting was held on October 9th. A broad range of potentially affected parties were invited, and approximately 20 persons, representing the City, MNDOT, PCA, and various interested citizens, attended the meeting. Presentations by the PCA and EOR focused on the TMDL process, and the sources and roles of nutrients in degrading lakes. Information concerning possible options for reducing nutrient discharges was also presented.

An October 25th follow-up meeting was cancelled due to concerns about the District's lack of involvement in reviewing the modeling results and load allocations. In further negotiations with PCA and EOR by phone and in PRWD offices on November 16, past studies were reviewed, and there was a detailed discussion concerning the modeling approaches, assumptions and inputs, and load allocation source areas (regulated, non-regulated and special land use areas). A tour of the impacted area was conducted after the meeting.

It is anticipated the St Clair TMDL will be submitted to the State of MN and the Federal Environmental Protection Agency for final review and approval in 2013.



COLA and Lake Association Support

PRWD Continues Support of Becker COLA

Becker Coalition of Lake Association represents 30 lake associations associated with 40 Becker County lakes, including 10 which lie within the PRWD boundaries.

In 2011 and 2012 COLA and PRWD joined forces to conceive, plan, and implement the very well-received AIS Legislative Summits. The two organizations were instrumental in the creation of the Becker County AIS Task Force. The two groups also joined to obtain a DNR Awareness Grant which is being used to develop AIS educational materials. PRWD and COLA worked together in undertaking other educational efforts as well.

For its part, COLA is recognized as a leader among state organizations in the fight against the spread of AIS; it continues to provide leadership to MNCOLA , a statewide organization of County and regional lake association groups, which has been heavily involved in promoting stronger AIS laws, and more specific criteria for granting variances.

COLA is a strong PRWD ally in supporting a volunteer-based lake monitoring program— 28 COLA lakes, including many within the District have such programs.

In 2012 COLA completed a project called "The Next Step" which involved assembling existing data on 21 Becker County lakes to provide descriptive and prescriptive information on what lake associations should be doing in the future.

Other 2012 COLA activities included holding a candidate's forum, in which city and county candidates were questioned by the public on their attitudes towards water quality, AIS, shoreland regulations, and other water oriented issues.

PRWD also works directly with Lake Associations

Long Lake Betterment Association, Melissa-Sallie Lake Association, Floyd Shores Association, Lake Detroiters, Fox Lake Association are all active within the boundaries of PRWD. Taken together these organizations represent residents on 10 of the District's main lakes and represent over 1500 property owners.

The District interacts on a regular basis with these groups— several have representatives on PRWD's advisory committee, in most years District representatives make presentation at annual meetings.

EDUCATION

Presentations were made to numerous organizations and lake association groups. The District provided special emphasis on AIS, shoreline restoration, storm water drainage & native species/plants through booth displays. These efforts together with the District's website, printed materials and radio interviews are aimed at increasing awareness and understanding of water quality problems and solutions, and effecting long-term changes in behaviors detrimental to water quality.

Presentations/Booths

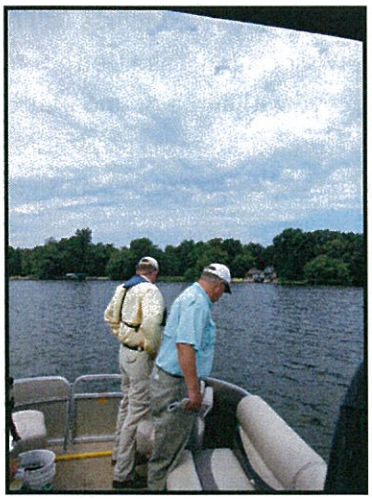
- Rain Barrel Art Class
- Water Festival Presentation
- Becker County Fair Booth
- Parkfest
- AIS Summit
- City of Detroit Lakes AIS meeting

Social Media

- PRWD Facebook Page
- Monthly KDLM radio interviews

Attendance by managers/staff at MAWD events

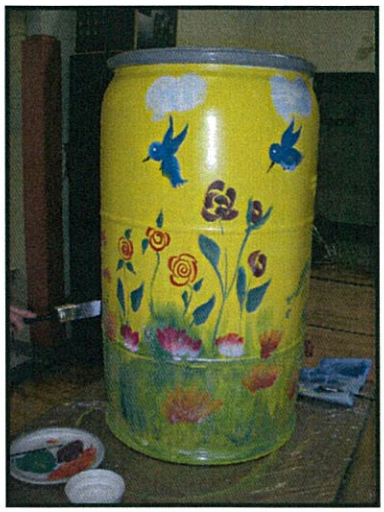
- AIS Symposium
- Summer Tour
- Annual Meeting and Trade Show



Administration

- Flowering Rush Pontoon Tour with DNR
- Becker County AIS Task Force
- Lake Detroiters
- COLA
- Concordia and NDSU Limnology class tours

Rain Barrel Art Class through Community Ed



For the second year in a row, the Rain Barrel Art Class is back by popular demand! The class was held on June 7th and had eight participants. Jamie Omberg cleaned, installed the faucets and the screens and primed 20 barrels along with help from one of the summer interns.

Becker County Fair Booth

Summer Interns, Savannah Fritz and Brody Wiedmann created and manned the District's display at the County Fair.

The booth featured information about Aquatic Invasive Species located in and around our watershed as well as the effects of storm water runoff. The booth also featured an AIS quiz available for the public to test their knowledge.

This booth was a great educational opportunity to talk one on one with local residents about environmental issues effecting our community.

2012 ACCOMPLISHMENTS

District-Wide Activities	2012 Accomplishments
Education	News articles/Monthly Radio Interviews – Flowering Rush Research, AIS Management TV3 interview – St. Clair Lake TMDL Presentations/Meetings with Becker County/City Officials, Rotary, Lions, Lake Associations (Detroit, Floyd, Pearl, Melissa/Sallie), Concordia College, NDSU Becker COLA/PRWD/Becker County – DNR Public Awareness Grants Becker County Fair Booth, Water Festival, Fischer Farm, Community Ed class – Rain barrel Art, DL Parkfest MAWD Legislative Meetings; Becker AIS Legislative Summit Sponsor Minnesota Association of Watershed Districts – Ed committee; Session speaker Website – Updated site; Facebook Local Boat Show Booth Promoted AIS Lake Service Provider and Watercraft Inspector Training Convened Citizen Advisory Committee (CAC) to begin RMP update Summer Living Catalog Segments; DNR Roundtable participation BWSR Academy Annual Report/Financials-State Auditor/DNR/BWSR, Website/Facebook DNR AIS State Committee member/ MN DNR Roundtable Speaker – AIS/Zebra Mussels Becker County AIS Task Force
Data Collection (monitoring)	2012 Monitoring Plan and Implementation (streams/lakes, Pearl Special Project) (59 Secchi; 64 temp/DO profiles; 64 Chl-a; 70 TP, OP;19 stream ratings; 144 stream samples; 349 gage readings, 19 stream sites; 4 gage surveys; Lake TP bottom samples (5) Shoreline Surveys (5 lakes) New level logging equipment (6 sites)/site installation Database management (EQUIS/STORET) 2 summer interns Industrial Park storm event – grab samples Recruited volunteer monitors for 5 district lakes Pearl Lake Diagnostic study (CWP) AIS watercraft inspection forms and data collection/analysis
BMP's to Reduce Phosphorus and Sediment	Rice Lake Nutrient Reduction Project – easements, Anchor Road designs, soil borings, EAW Partnered with NRCS/SWCD/Landowners/operators for Campbell Creek Subwatershed Nutrient reduction project
Water Management Regulation (incl permitting)	Becker SWCD assistance with small site reviews. Large Site Permits Issued Permits- Website/map Becker County Zoning Ordinance Committee – update non-conforming rules
Lake Management Planning	St. Clair Lake TMDL Implementation Plan Began LVMP – Detroit, Sallie, Melissa Flowering Rush In-Lake herbicide research Flowering Rush tours – PRWD Managers ; Steve Hirsch, Director of DNR-Eco Waters Sponsored 2-day AIS Research Symposium, St. Paul Surveyed Advisory Committee on new PRWD direction for revised mgmt. plan
Septic System Management	Pearl Lake Becker ISTS inventory completed
Ditch Management	Beaver, dam, and tree removal on Ditch 11-12; 13; 14 Submitted Ditch Buffer annual report
General Administration	Annual/Fiscal reports to State Auditor/BWSR/DNR-Waters; 2011 Audit Managed Grants (BWSR, CWP, DNR AIS Aware, DNR FR research, DNR FR treat Managers/Staff attendance – MAWD Annual meeting/summer tour Updated job descriptions and salaries; advertised for 2 positions Updated 3 computers/monitors and software; printer/copier, 2 desktop scanners

Lake Water Quality Management Areas	2012 Accomplishments
Sallie-Melissa	Started St. Clair Lake TMDL Study; reviewed airport expansion, annexation, etc. In-lake research herbicide treatments for Flowering rush Member of Becker County AIS Task Force Recruitment of volunteer secchi disk reading monitor and watercraft inspector Compiled data/reports
Detroit/Rice	Rice Lake Wetland Nutrient Reduction Project - easements, land acquisitions, structure designs (WRP); BWSR Clean Water Legacy Grant ($250,000); DNR Lessard-Sams Outdoor Heritage Grant ($125,000) – Anchor Road Designs, soil borings, EAW Continued flowering rush herbicide treatment and mechanical harvesting of CLP Monitoring- bottom sampling/shoreline survey/HOBO unit installations –PR Detroit LA Meeting In-lake research herbicide treatments for Flowering rush Recruitment of volunteer secchi disk reading monitor
Long	Hwy 59/Hwy 10 Access road improvements Recruitment of secchi disk volunteer monitor
Floyd/Campbell	Worked with NRCS and Landowners - AG BMP Plan for Campbell Creek Area; provide BMP Cost-share assistance Advocated for Little Floyd Lake listing for Becker County ISTS compliance Study Floyd Shores LA Meeting Monitoring- bottom sampling (North, Little) /HOBO – Campbell Creek Becker CSAH 149 - Campbell Creek Crossing Recruitment of volunteer secchi disk reading monitors and watercraft inspector
Pearl/Loon	Continued MPCA Clean Water Partnership – Phase I Diagnostic Study Grant (2010-13) – Sediment Study, Lake/inlet monitoring Groundwater, Outlet/Discharge (MERRITT) Sub-watershed Attributes Shoreline Survey Dart Lake sampling; inflow monitoring Semi-Annual Reports (Feb, August); begin final report
Small Lakes	No action to report.
Fox/Munson	Recruitment of volunteer secchi disk reading monitors
Brandy	Recommended Wine Lake for TMDL listing. EPA added to TMDL listing

PRWD 2013 Budgets

	General	SADAF (Survey)	Utility	Harvest PIF	1B	1C	LMP-01
Income							
REVENUE							
Ad Valorum Tax	247,000.00						125,000.00
Grant							
Interest Income	200.00		150.00	20.00	10.00	30.00	8.00
Special Assessment					45,000.00	75,000.00	
Utility-Stormwater			215,000.00				
Total REVENUE	247,200.00		215,150.00	20.00	45,010.00	75,030.00	125,008.00
OTHER FINANCING SOURCES (USES)							
Misc. Income							25,000.00
Interfund Transfer		13,000.00	-50,000.00				-13,000.00
Insurance Reimbursements							
Interfund Administrative Fees	71,000.00				-4,000.00	-4,000.00	-7,000.00
Interfund Equipment Usage				7,000.00	-3,500.00	-3,500.00	
PERA rate increase aid	308.00						
Permit Rev/Site Inspect Fee-FA			3,500.00				
Total OTHER FINANCING SOURCES (USES)	71,308.00	13,000.00	-46,500.00	7,000.00	-7,500.00	-7,500.00	5,000.00
Total Income	318,508.00	13,000.00	168,650.00	7,020.00	37,510.00	67,530.00	130,008.00
Gross Profit	318,508.00	13,000.00	168,650.00	7,020.00	37,510.00	67,530.00	130,008.00
Expense							
CAPITAL OUTLAY	7,000.00	2,000.00					
DEBT SERVICE							
MPCA Loan SRF0154			33,000.00				
Total DEBT SERVICE			33,000.00				
GRANT MATCHES			15,000.00				25,000.00
CONSTRUCTION							
LSOHF-DNR GRANT							
DNR R-T-S Planting							
Easement Aquisition			251,000.00				
Total CONSTRUCTION			251,000.00				
DITCH EXPENSES							
Ditch Maintenance							
Total DITCH EXPENSES							
HARVEST							
Fuel-H				3,000.00			
Harvest Maintenance				3,000.00			
Herbicide Application					24,000.00	90,000.00	40,000.00
License/Permits				70.00	4,500.00	100.00	
Storage				599.00			
Total HARVEST				6,669.00	28,500.00	90,100.00	40,000.00
MANAGER							
Local Meeting	1,500.00				250.00	500.00	2,000.00
Per Diem	15,500.00						
Travel & Training-Mgr	7,000.00						
Total MANAGER	24,000.00				250.00	500.00	2,000.00
MONITOR							
Field Supplies		1,000.00					
Fuel-M		1,200.00					
Mileage		100.00					
Water Testing		5,500.00					
Total MONITOR		7,800.00					
OFFICE							
Advertising/Notices							
Communications					100.00	100.00	
Dues & Membership							
Insurance & Bonds		320.00			4,500.00	4,500.00	
Local Mileage							
Outreach							10,000.00
Postage							100.00
Printing			100.00				
Repairs & Maintainance		1,000.00					
Supplies					100.00		40.00
Travel & Training-O		300.00			100.00	100.00	
OFFICE - Other	48,450.00						
Total OFFICE	48,450.00	1,620.00	100.00		4,800.00	4,700.00	10,140.00
PAYROLL							
Payroll Taxes PRWD	21,000.00						
PERA PRWD	16,500.00						
Wages- Seasonal		10,000.00					
Wages-Regular	190,000.00				12,000.00	16,000.00	
Employee Benefits	25,000.00						
Total PAYROLL	252,500.00	10,000.00			12,000.00	16,000.00	
PROFESSIONAL							
Attorney Fees			2,000.00				
Consultant Fees			5,000.00				72,000.00
Engineer Fees/Tech Assist			5,000.00				
Levy Preparation			9,300.00		710.00	850.00	
Permit Review/Site Inspection			5,000.00				
PROFESSIONAL - Other	19,000.00						
Total PROFESSIONAL	19,000.00		26,300.00		710.00	850.00	72,000.00
Total Expense	350,950.00	21,420.00	325,400.00	6,669.00	46,260.00	112,150.00	149,140.00

n 11-12	Ditch 13	Ditch 14	DNR R-T-S Grant	CWP D/Rice	BWSR	CWP-Pearl	DNR VWI	DNR AIS	TOTAL
									372,000.00
			25,000.00					5,250.00	30,250.00
5.00	5.00	5.00		9.98	150.95	2.80		0.11	596.84
									120,000.00
									215,000.00
5.00	5.00	5.00	25,000.00	9.98	150.95	2.80		5,250.11	737,846.84
									25,000.00
2,000.00							2,209.56		-49,790.44
				419.00					419.00
	-2,000.00	-5,000.00							49,000.00
									0.00
									308.00
									3,500.00
2,000.00	-2,000.00	-5,000.00		419.00			2,209.56		28,436.56
1,995.00	-1,995.00	-4,995.00	25,000.00	428.98	150.95	2.80	2,209.56	5,250.11	766,283.40
1,995.00	-1,995.00	-4,995.00	25,000.00	428.98	150.95	2.80	2,209.56	5,250.11	766,283.40
						500.97			9,500.97
									33,000.00
									33,000.00
			-33.83						39,966.17
				6,205.23					6,205.23
			25,000.00						25,000.00
				200.00	25,002.80				276,202.80
			25,000.00	6,405.23	25,002.80				307,408.03
1,500.00	1,500.00	-1,500.00							1,500.00
1,500.00	1,500.00	-1,500.00							1,500.00
									3,000.00
									3,000.00
									154,000.00
									4,670.00
									599.00
									165,269.00
				21.30	5.55				4,276.85
				337.50					15,837.50
									7,000.00
				358.80	5.55				27,114.35
						911.38			1,911.38
									1,200.00
						214.20			314.20
						1,265.00			6,765.00
						2,390.58			10,190.58
							79.98		79.98
									200.00
50.00	50.00	50.00							150.00
									9,320.00
					19.43				19.43
							585.00		10,585.00
									100.00
									100.00
									1,000.00
							194.58		334.58
									500.00
									48,450.00
50.00	50.00	50.00			19.43		859.56		70,838.99
				25.81					21,025.81
									16,500.00
									10,000.00
									218,000.00
									25,000.00
				25.81					290,525.81
400.00	400.00	400.00		1,036.00	1,436.00				5,672.00
				500.00		185.60	5,190.00	9,199.75	92,075.35
					37,796.49	1,032.90			43,829.39
									10,860.00
									5,000.00
									19,000.00
400.00	400.00	400.00		1,536.00	39,232.49	1,218.50	5,190.00	9,199.75	176,436.74
1,950.00	1,950.00	-1,050.00	24,966.17	8,325.84	64,260.27	4,110.05	6,049.56	9,199.75	1,131,750.64