The NFCRWD has received a 2013 BWSR Clean Water Assistant Grant to restore 3 wetland locations along county ditches. These locations will help reduce nutrients, sediments and downstream flooding, on the North Fork Crow River and District lakes. These 3 locations have a total anticipated yearly pollutant removals of 200 tons of total suspended sediment (TSS) and 235 pounds of phosphorus (TP).

This project will assist in the protection and restoration of the District’s water resources and help the District reach the Rice Lake TMDL phosphorous reductions goals.

Aquatic Invasive Species (AIS) have become a growing concern in the Minnesota, especially in the NFCRWD. These species can have a detrimental effect on a lakes water quality, along with recreational suitability. Everyone in the watershed needs to do their part to keep AIS out of local lakes. Zebra mussels and Eurasian milfoil are the two big names that have already infested nearby lakes, but there are more harmful AIS that are moving closer to MN waters. There will be increased inspections throughout the NFCRWD, so remember to CLEAN, DRAIN and DRY your watercraft after removing it from the water. This is also a MN law, if you do not CLEAN and DRAIN your boat, you could receive a citation.
The summer of 2012 had many different weather patterns that can affect water quality. We saw some of the earliest recorded ice outs, near zero snow melt runoff and a summer dry spell, creating an unique year. These conditions gave the plants and algae in lakes a longer time to grow, increasing aquatic vegetation growth and algae blooms that happened in our area.

Stream sites are monitored for water level, velocity, clarity and several quality parameters including temperature, pH, dissolved oxygen, conductivity, turbidity, phosphorus, E. coli, nitrogen content and the amount of suspended solid material contained in the water. This is done every two weeks from spring melt through freeze up in the fall and also after significant runoff-causing rain events. The graph to the right shows the summer averages for the flow (cfs) and Total Phosphorus (TP) concentration. This data can help us better understand which areas in the watershed are contributing more of the phosphorus and where the Watershed needs to focus to help us reach the Rice Lake TMDL goals.

Lake sites are monitored every month during the open water season. Lake monitoring is accomplished using a cooperative effort between lake association volunteers and NFCRWD staff. A measure used to quantify these results is Carlson’s Trophic Status (TSI), which is a benchmark for lake water quality. **Eutrophic** (TSI 51-70): Decreased transparency, lack of oxygen in the lower levels during the summer, weed problems evident, warm-water fisheries only. **Mesotrophic** (TSI 41-50): Water moderately clear; some probability of no oxygen in the lowest levels during summer. The graph on the left shows the TSI averages for the 2012 lake monitoring sites.

The Secchi depth is a measurement of water clarity. Water transparency directly affects the amount of light penetration into a lake. Algae and suspended particles from erosion make the water cloudy and decrease the Secchi transparency in a lake; therefore, the lower the Secchi depth, the higher the algal concentration and lake productivity. (from RMB labs)

All water monitoring data is provided to the Minnesota Pollution Control Agency each fall and combined into a database for use in water quality assessment (http://pca-gis02.pca.state.mn.us/eda_surfacewater/index.html). Current and historical lake data for each site monitored by the district is available online by visiting RMB Labs at www.rmbel.info and utilizing the lake data portion of that site.

Thank you to the lake associations and their members who assisted with water quality monitoring this year, especially John Hanson, Al Schmidtbaumer, Karen Langmo, Kevin Farnum, Fred Vagle and Tom Weber. Also, thank you to those who submitted rainfall data, served on district committees, and contributed to other district projects.
Educational Efforts

NFCRWD partners with other local agencies to provide educational events each year. NFCRWD staff and the Middle Fork Crow River Watershed District staff have been working with students at the BBE schools.

2012 Youth Educational Events
Pope Water Festival
Stevens Conservation Day
Earth Day at Prairie Woods
Continual education events with BBE schools
Crow River Annual Clean Up

2012 Adult Education
“View From the Tractor Seat” by Dave Legvold—conservation agriculture presentation
AIS task force—Representatives from Sportsman’s groups, Lake Associations and the NFCRWD working to reduce the risk of AIS
AIS training—DNR training for volunteer boat inspectors, to protect NFCRWD surface waters from AIS

The NFCRWD Website has a lot of new water quality education material. The website is updated frequently with information about District, projects and related water quality materials. Please sign up for the NFCRWD emailing list (on front page of website). This will be a cheaper and faster way to get information out to landowners in the watershed. www.nfcrwd.org

2012 Water Quality Projects
Reducing erosion and nutrients transportation:

Agricultural Best Management Practices
30 Rock Inlets (replacing open tile inlets)
1 Woodchip Bioreactor
1 Controlled Outlet
Partnered with County SWCD, CROW and local Lake Associations
2 NFCR Bank Stabilizations
Lakeshore Restorations
Koronis Ministries Gully Stabilization
Ditch Buffer Strip Establishments
8.81 miles of Ditch Buffers Acquired

Project Partners:
CROW, Koronis Lake Association, Kandiyoji CO, Meeker CO, Stearns CO

Citizens Advisory Committee (CAC) - The NFCRWD holds CAC meetings annually. This is a great way for the citizens in the watershed district to talk to the managers and staff of the NFCRWD. Participants provide updates on past projects and upcoming projects in the watershed. This committee allows citizens the ability to voice their opinions on District activities. If you are interested in joining the CAC, email or call the NFCRWD office and you will be added to the email list to keep you up to date on meetings. Next meeting Spring 2013 (late April/early May)
Drainage Authority

The NFCRWD is acting drainage authority for County and Judicial Ditches within the District boundaries. Drainage activities operate under Minnesota Statute 103E Drainage.

JD - 1 (Pope/Stearns)
The JD 1 Culvert Sizing Study was completed and a public meeting was held to present the findings. Repair work for Branch 7 was approved and work began in December. The repair will be completed in the Spring of 2013. Branch 10 - Trees in Pope County were removed and the ditch was repaired. Buffers were seeded by landowners. Branch 11 - Inspected and the repair of the system was approved and completed from CR 18, northeast to Hwy 26. Spoils will be disked and seeded in 2013. Buffers were inspected and treated with herbicide or mowed, where needed.

JD - 2 (Stearns/Kandiyohi)
The Viewer's Report was completed, a public hearing was held and the Redetermination of Benefits Viewer's Report was Board approved. Repairs were completed, 8 side inlet drop pipes were installed and the spoils were leveled.

CD - 4 (Meeker)
Plans for a stop log water control structure were designed and submitted to the DNR and a maintenance agreement was produced by the DNR. Data was collected and preliminary engineering was done to determine the viability of a wetland restoration/water retention project. Preliminary approval was given by the agencies for the project and a grant was applied for and awarded through the BWSR Clean Water Fund. Repair was completed on three eroded meanders and along County Road 25. An eroded bank on the south side of 375th Street was also repaired.

CD - 5 (Stearns)
The buffer strip was treated with herbicide and mowed where needed. A side inlet drop pipe was installed to reduce erosion.

CD - 6 (Stearns)
A portion of Lateral A was repaired.

CD - 21 (Stearns)
Buffers were seeded.

CD - 32 (Stearns)
A landowner meeting was held to discuss repairs and the Redetermination of Benefits. The Board approved the Redetermination of Benefits and appointed viewers. Viewers met with District staff and began work. Two side inlet drop pipes were installed to reduce side inlet erosion.

CD - 36 (Stearns)
A landowner meeting was held to discuss a repair request. A survey of the ditch was completed.

CD - 37 (Stearns)
A repair was requested and the ditch was surveyed to determine as built and current conditions.

CD - 43 (Meeker)
The Viewers continued work on the Redetermination of Benefits.

Beaver and dam removal was ongoing where needed.
Financial Report

2012 Summary of Revenues & Expenses

Revenues

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grants</td>
<td>37,851.22</td>
</tr>
<tr>
<td>Watershed Dist. Levies</td>
<td>255,575.67</td>
</tr>
<tr>
<td>State Aid</td>
<td>3,983.80</td>
</tr>
<tr>
<td>Drainage Reimbursements</td>
<td>100,544.83</td>
</tr>
<tr>
<td>Interest Income</td>
<td>15,481.44</td>
</tr>
<tr>
<td>SRF Loan Proceeds</td>
<td>77,390.49</td>
</tr>
<tr>
<td>SRF Receivables</td>
<td>124,092.51</td>
</tr>
<tr>
<td>Other</td>
<td>6,925.42</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td><strong>$621,845.38</strong></td>
</tr>
</tbody>
</table>

Expenditures

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Expenses</td>
<td>121,369.22</td>
</tr>
<tr>
<td>Employee Benefits</td>
<td>23,513.75</td>
</tr>
<tr>
<td>Managers Expenses</td>
<td>13,005.47</td>
</tr>
<tr>
<td>Payroll Tax/Expenses</td>
<td>18,943.29</td>
</tr>
<tr>
<td>Contract Labor</td>
<td>1,635.00</td>
</tr>
<tr>
<td>Office Operations Expenses</td>
<td>28,508.76</td>
</tr>
<tr>
<td>Professional Education</td>
<td>5,345.66</td>
</tr>
<tr>
<td>Public Education</td>
<td>3,136.62</td>
</tr>
<tr>
<td>Legal</td>
<td>4,276.41</td>
</tr>
<tr>
<td>Misc. &amp; Dues</td>
<td>3,203.93</td>
</tr>
<tr>
<td>Audit &amp; Accounting</td>
<td>12,575.00</td>
</tr>
<tr>
<td>WSD Ins. &amp; Bonding</td>
<td>7,864.00</td>
</tr>
<tr>
<td>Data Collection, WSD Projects &amp; Grants</td>
<td>62,098.67</td>
</tr>
<tr>
<td>Ditch Maintenance</td>
<td>116,151.69</td>
</tr>
<tr>
<td>SRF Loan Payments</td>
<td>77,390.49</td>
</tr>
<tr>
<td>SRF State Repay</td>
<td>133,356.06</td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td><strong>$632,374.03</strong></td>
</tr>
</tbody>
</table>

Complete audit reports are available at the North Fork Crow River Watershed District Office.

Plans and Goals for 2013

- 2013 Conservation Drainage Grant: secure landowner contracts, install projects
- 2013 Clean Water Assistant Grant: install wetland restoration project, locate additional project sites and secure easements
- Seek and secure grant funds for NFCRWD water quality projects and the Rice Lake TMDL Implementation
- AIS Protection for local rivers and lakes
- Water quality monitoring of surface and storm water, minor watershed diagnostic study
- Continue to partner on water quality projects with other agencies, lake associations and landowners
- Education events for landowners and District youth
- Provide low interest loans to landowners for septic and feedlot upgrades
- Determine ideal areas to potentially retain water and restore wetlands
- Permitting of tile and open ditches that outlet into County Ditches
- Perform ditch inspections for repair needs and buffer compliance
- Drainage system maintenance, as needed
- Continued Redetermination of Benefits
- Ditch Buffer Establishment
- Ag BMP field day

Septic and Feedlot Upgrade Loans: In 2012, loans were given to 8 residents to upgrade septic systems totaling $77,390.49

2013 MPCA State Revolving Fund Loan Continuation Project: The NFCRWD was approved for $500,000 for feedlot and septic upgrade loans. This is a 3-year project. Interested landowners should contact the District for more information.