NFCRWD Agricultural BMP Cost Share Grants
The NFCRWD received a 2013 BWSR Conservation Drainage Grant to continue protecting District soil and water resources. The grant provides cost share for 100 alternative tile inlets (replacing open inlets) and 2 saturated buffers. The NFCRWD is seeking interested landowners to implement these practices. Installing these practices is cost shared: 75% grant money and 25% cost to the landowner. THE NFCRWD approved the installation of 40 rock inlets and 1 saturated buffer during 2013.

The NFCRWD 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. The anticipated total yearly pollution removal at these 3 locations is 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 reduction goals.

Two project sites are under development with projected 2014 installations. The grant provides cost share to continue protecting District soil and water resources. The grant provides cost share for 100 alternative tile inlets (replacing open inlets) and 2 saturated buffers. The NFCRWD approved the installation of 40 rock inlets and 1 saturated buffer during 2013.

Inside this issue:
Water Monitoring
Educational Efforts
2013 Projects
CAC
Drainage Report
Financial Report
Plans For 2014
Septic & Feedlot

Board Meetings
are the second Monday of each month.
7 p.m.
April - November
1 p.m.
December - March

Board of Managers
James Wuertz - President
Meeker County
Bob Brauchler - Vice President
Kandiyohi County
John Hanson - Secretary
Stearns County
James Barchenger - Treasurer
Pope County
Gary Berndt - Manager
Stearns County

Staff
Josh Reed - Administrator/
Drainage Inspector
Christine Knutson - Bookkeeper/Administrative Assistant
Christopher Lundeen - Technician

www.NFCRWD.org

Manure Applications - Minimum setbacks near waters
- Lake, Stream
- Wetlands (10+ac.)
- Ditches (w/o berms)
- Open tile inlets
- Well, quarry
- Sinkhole (w/o berms)
- Downslope
- Upslope

Surface Application
300’**  25’**
300’***  25’***
300’  0’
50’  50’
50’  50’

Incorporation within 24 hrs.

*100’ vegetated buffer can be used instead of 300’ setback
For non-winter applications (50’ buffer for wetlands/ditches)
**no long-term phosphorus buildup within 300’
(counties can be more restrictive than State Rule 7020)

Feedlot Helpline: 1877-333-3508

Aquatic Invasive Species (AIS) - The NFCRWD hired DNR trained AIS boat inspectors to inspect boats entering and exiting public accesses on District lakes. The inspectors surveyed boaters, provided AIS information and inspected boats to ensure they were clean of AIS and contained no water. These inspections reduced the risk of AIS contamination of District waters and also educated the boaters on the affects of AIS and MN AIS laws. Make sure to inspect your own boat (CLEAN, DRAIN and DRY) before entering or exiting any body of water. (For more Information from 2013 inspections see page 3)
In the summer of 2013, we saw some of the latest recorded ice outs, improved water clarity and a late summer dry spell. These factors created ideal conditions for aquatic plant growth, which is better for our lake’s ecosystem and fish habitat than the alternative algae growth.

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.

The NFCRWD tested for E. coli samples during the 2012 and 2013 seasons. The graph shows the average results from the 2013 season. You can see a direct correlation between the E. coli results and the phosphorus results. The current E. coli standard for recreational waters is 126 mpn/100 ml.

Lake sites are monitored every month during the open water season. Lake monitoring is accomplished through 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 2013 lake monitoring sites.

All water monitoring data is entered into the Minnesota Pollution Control Agency database. The data is used for water quality assessment (http://pca-gis02.pca.state.mn.us/era_s preseasonwater/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 Schmidtbauer, Karen Langmo, Kevin Farnum and Tom Weber. Also, thank you to those who submitted rainfall data, served on district committees, and contributed to other district projects.
NFCRWD partners with other local agencies to provide educational events each year. NFCRWD and Middle Fork Crow River Watershed District staff have been teaching BEE students about water quality and quantity issues.

**Educational Efforts**

**2013 Youth Educational Events**
Paynesville Waterfest
Pope Waterfest
Stevens Conservation Day
Earth Day at Prairie Woods
Continual education events with BBE schools
Crow River Annual Clean Up

**2013 Adult Education**
Drainage Informational Landowner Meeting
AIS Task Force—Representatives from Sportsman's groups, Lake Associations and NFCRWD working to reduce the risk of AIS
AIS Boat Inspections
Lake Association Meetings

The NFCRWD website has 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 home page of website). This will be a more economical and quicker way to provide information to landowners in the watershed.  [www.nfcrwd.org](http://www.nfcrwd.org)

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**2013 Water Quality Projects**
Reducing erosion and nutrients transportation:

**Agricultural Practices**
- 40 Rock Inlets approved (replacing open tile inlets)
- 1 Saturated Buffer
- Ditch Buffer Strip Establishments
  - Acquired 3.7 miles

**Wetland Restorations**
- Project Development at 2 Locations

**2 Water Retention/Bank Stabilization areas**
- Rice Lake & Lake Koronis (Partnered with County SWCDs, CROW and local Lake Associations)

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**2013 AIS Boat Inspections:**
4 DNR trained AIS inspectors working approximately 35 hours a week.

**Total Hours: 1936**

<table>
<thead>
<tr>
<th>Boat Access</th>
<th>Inspection Hours</th>
</tr>
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<tbody>
<tr>
<td>GL TWP</td>
<td>184</td>
</tr>
<tr>
<td>Koronis Hwy 55</td>
<td>1126</td>
</tr>
<tr>
<td>Koronis City</td>
<td>167</td>
</tr>
<tr>
<td>Rice S</td>
<td>326</td>
</tr>
<tr>
<td>Rice N</td>
<td>133</td>
</tr>
</tbody>
</table>

**Total Boats Inspected: 2895**

<table>
<thead>
<tr>
<th>Boat Access</th>
<th>Incoming</th>
<th>Outgoing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grove TWP</td>
<td>36</td>
<td>4</td>
</tr>
<tr>
<td>Koronis Hwy 55</td>
<td>1404</td>
<td>607</td>
</tr>
<tr>
<td>Koronis City</td>
<td>122</td>
<td>42</td>
</tr>
<tr>
<td>Rice S</td>
<td>397</td>
<td>211</td>
</tr>
<tr>
<td>Rice N</td>
<td>51</td>
<td>21</td>
</tr>
</tbody>
</table>

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Citizens Advisory Committee (CAC) - The NFCRWD holds CAC meetings annually. This is a great way for District citizens to talk to the managers and staff of the NFCRWD. Participants provide updates on past 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 will be in the Spring of 2014.
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 Branch 7 Pope/Stearns**
Repair was completed. A new crossing was approved and installed (landowner expense) due to being landlocked.

**Branch 8 Fork 1**
Weed and tree growth was treated with herbicide.

**Branch 10**
Weed and tree growth was treated with herbicide. Woodchip bioreactor erosion was repaired and reseeded.

**Branch 12 Crossing Repair**
Raymond Township, Sec. 33 - A damaged undersized crossing was replaced with a 60” x 50’ CMP. A crossing was installed with a 48” x 50’ CMP on Spur 2, Fork 6.

Landowners expressed concern regarding flooding on the top end of Branch 12. The entire branch was inspected. Projects to reduce flooding and nutrient loading were explored. A survey was completed at the convergence of Fork 4 with Branch 12 for a possible realignment to elevate a bottleneck which was causing erosion and flooding of Branch 12. A wetland restoration project is under development on Br. 12 north of Hwy 18.

**Fork 6, Spur 2**
A landowner requested a permit to replace the open ditch with 30” tile. The district received a favorable opinion from the engineer and approved the project. The Stearns County TEP and the Army Corp. have denied the permitting for the project. The District continues to work with agencies to resolve this issue.

**JD – 2 Stearns/ Kandiyohi**
Buffers were established and treated with herbicide for weed growth

**CD - 4 Meeker County**
3,500’ of ditch was repaired in Union Grove section 8. Upon inspection, 2 buffer violations were discovered and violation letters were sent.

The District had multiple meetings with the DNR and affected landowners. The DNR agreed to allow a gated control structure for future basin draw down capability. The landowners continued to disagree with elevations and resist the project. The project was tabled until further DNR action was taken.

**CD - 5 Stearns County**
Weed and tree growth was treated with herbicide. A drop pipe was installed to stop side inlet erosion. 2 buffer violation letters were sent and the buffers were restored.

**CD - 7 Stearns County**
A repair request was submitted and a portion of the ditch was surveyed. A manure spill was discovered on Lateral A. The branch was inspected. The County and MPCA were alerted and followed through with inspections.

**CD - 21 Stearns County**
Minor repair was completed and rip-rap was installed to halt erosion. A buffer violation letter was sent.

**CD - 32 Stearns County**
The Viewers continued working on the redetermination of benefits process.

**CD - 36 Stearns County**
An engineering report was completed with cost estimates. It was determined that the cost of repair would not justify the benefits. Landowners were contacted and the report and decision was explained.

**CD - 37 Stearns County**
The system was repaired from Hwy 13 to County Road 201 and spot cleaned on the top end of the system.

**CD - 43 Meeker County**
Redetermination of Benefits meetings and public hearing were held. The Board approved the Viewer’s report. A contractor bid was accepted. Staff met with landowners. The majority of the system was repaired. Drop pipes and new culverts were installed.

Beaver removal activity was ongoing where needed.
Financial Report

**2013 Summary of Income & Expenses**

**Income**

- Grants (Deferred Revenue=$89,816.16) 25,610.84
- AIS Project Contributions 13,597.76
- Watershed Dist. Levies 255,685.44
- State Aid 3,864.45
- Drainage Reimbursements 120,237.67
- Interest Income 14,985.51
- SRF Loan Proceeds 35,210.14
- SRF Receivables 125,801.63
- Other 2,951.90
- **Total Revenues** $597,945.34

**Expenses**

- Employee Expenses $126,057.84
- Employee Benefits $23,544.00
- Managers Expenses $10,364.53
- Payroll Tax/Expenses $19,937.44
- Office Operations Expenses $13,606.23
- Professional Education $4,754.81
- Public Education $3,551.26
- Legal $2,400.00
- Misc. & Dues $1,705.96
- Audit & Accounting $12,975.00
- WSD Ins. & Bonding $7,846.70
- Data Collection, WSD Projects /Grants $34,681.87
- AIS Project $24,213.46
- Ditch Maintenance $181,223.22
- SRF Loan Payments $35,210.14
- SRF State Repay $193,756.36
- **Total Expenditures** $695,828.82

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

**Plans and Goals for 2014**

- 2013 Conservation Drainage Grant: secure landowner contracts, install projects
- 2013 Clean Water Assistant Grant: install wetland restoration projects, locate additional project sites and secure easements
- Seek and secure grant funds for NFCRWD water quality projects and the Rice Lake TMDL Implementation
- AIS Inspections 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 SRF 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 2013, loans were given to 4 residents to upgrade septic systems totaling $35,210.14

**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.

THE NFCRWD partnered with Stearns County on a PCA CWP grant. The project will reduce stormwater runoff on the North Side of Lake Koronis and provide bank stabilization on Peterson Point.