

Meeting Minutes
North Raccoon River Watershed Management Coalition Annual Meeting
Friday, April 12, 2019 at 10:00 am

The quarterly meeting of the NRRWMC was called to order at 10 am by chair Keri Navratil, city of Storm Lake. Roll call was completed with 24 members present via a combination of in-person attendees, conference call and proxy vote which represents a quorum. (The acronym NRR in these minutes stands for the North Raccoon River watershed.)

Motion to approve minutes from January, seconded, and approved via unanimous voice vote.

Update on initiative with IAWA (Iowa Ag Water Alliance) by Sean McMahon:

Since the last meeting, the NRRWMC applied for an IDALS grant that would have provided additional funding mostly for technical assistance and additional staff. The proposal was unsuccessful, but may be leveraged in other proposals. A project with the Iowa Soybean Association was granted funding through the National Fish and Wildlife Foundation to expand on the concept of diffusion hubs. More info will be provided on this project later in the meeting.

Update on planning services by EOR-RDG team via Greg Pierce, Pat Boddy and Pat Conrad:

Water quality goals:

The North Raccoon is a heavily working watershed with nearly 78% of its land area in row crops. The average nitrate concentration from 1999-2018 has been documented to range from 8.9-12.3 mg/L courtesy of IAWA; historic nitrate levels from 1945-1946 = 2.71 mg/L from Chris Jones, University of Iowa-IIHR. An upward trend in nitrate concentration has been documented from 1985-2005 from a monitoring site near Sac City. Recent blog by Chris Jones shares that a 3 to 4-fold increase of nitrates is observed since 1950, and stream discharge has increased 2 to 3 times across Iowa over the past century within major rivers in Iowa.

We also see an *E. coli* issue in the North Raccoon River. When considering the amount of livestock production in the watershed, Chris Jones again has analyzed the human equivalent of waste generated in the NRR to over 9 million people. This has been monitored specifically in impaired NRR sub-watersheds. Impairments can be defined as excessive nutrients such as N and P, or *E. coli*, herbicides, turbidity or algal blooms. When impairments are documented to a certain level, a TMDL (total maximum daily load), as defined by the EPA, is determined to establish a reduction goal. From these analyses, the NRR has numbers to work with to establish goals and they are big numbers. These biological baselines present more meaningful goals than the NRS alone in terms of establishing safe drinking water and recreational opportunities. Both standards (TMDL and NRS) will be considered in the plan.

Flood reduction goals: Coordinating with IIHR modeling to develop flood reduction alternatives. Practices include grass waterways and nutrient removal wetlands.

Planning approach: The team is focused on tiered approach similar to a pyramid with a base of soil health, then in-field practices, edge-of-field practices, and riparian management. The team is documenting the current rate of practice adoption and determining the needed rate of adoption.

Strategic framing of NRR plan: the planning team shared with the group an early chapter outline of the watershed management plan and the results of small group meetings from December. A mission statement and purpose was provided. What has been heard over and over again in small group discussion is the need for better relationships, a sense of community and accountability, and shared goals. Also identified is a need to improve predictive modeling, the need for smart policy, and more collaboration, especially between upstream/downstream and urban/rural stakeholders. Better predictive modeling would allow for more accurate projections for future planning in the NRR. We have been warned the resulting plan will be a big document. Seventeen potential chapters were presented in their outline.

Q&A Highlights: Another way to think of a TMDL standard is like a diet for our waterways. In that analogy, the DNR acts like a nutritionist in prescribing a diet for a weight loss goal. Slides from this presentation will be distributed to the group and will include Pat Conrad's narration.

Update from Iowa Watershed Approach by Dan Gilles, IHR:

Dan has been running some models to determine where ponds make sense in the watershed. The ACPF tool has been run in only in the northernmost third of the watershed. The flat, prairie pothole topography of the NRR makes farm ponds challenging within the NRR, though some counties and sites within the watershed are favorable. But what is the right size to achieve the goals needed? Some discussion ensued on targeting 200 acre-feet or 40,000 acre-feet of drainage. Is it better to try for many 2 acre ponds, or a smaller number of 50 to 100 acre ponds? Pat Oswald was mentioned as an expert on these questions.

But first an update on flooding in southwest Iowa. A bulk of the flooding hit where the Platte River in Nebraska flows into the Missouri River and then south. Antonio Arenas with IFC compiled satellite imagery of flooding and snow cover over the flooding time period. The East & West Nishnabotna watersheds experienced flooding. On March 16 the point of convergence of these two rivers was wider than the Missouri River. Two weeks later on March 31 the E-W Nish had subsided somewhat and the Missouri River had swelled to a width of 6 miles.

For cities within the NRR over the same time frame, inundation can be seen as a result of snow accumulation that with rain rapidly resulted in flooding. Snowfall across Iowa was especially thick this winter with an average of 36 inches within the NRR.

Overall like many other states Iowa experienced a 38% increase from normal precipitation in 2018. Variation was wide across the state with ranges from -1% to +70% by county. Though within this increase in intensity and variation, the largest peaks of streamflow consistently hit in May and June year over year.

Q&A Highlights: We are in the middle of a billion-dollar disaster that is not finished. Whatever the assessment of the damages, 20% of that figure will be made available for flood mitigation projects throughout the state. The board was encouraged to keep an eye out for damaged locations that could benefit from a project and share those sites with the planning team.

Update on Swan Lake by Marius Agua, NRRWMC watershed coordinator:

At least 15 landowners have signed letters of intent in the 3 HUC-12 watersheds of the NRR headwaters. 77 HUC-12s in the NRR have had analysis run by the ACPF tool to identify and locate relevant conservation practices.

Motion to approve the project at Swan Lake made by Katie Rock, Polk SWCD, seconded by Hillary Reed, city of Laurens, and approved via voice vote.

Approval process framework – planning committee is Mike Beeler, Jim Frederick, Fred Long, Clarence Siepker, and Jack Butler. Motion to delegate a joint committee of executive and planning sub-committee to approve decisions needing 75% until at least the Q3 meeting by Mark Hanson, Dallas county; seconded by Mike Beeler, Dallas SWCD. Approved by unanimous voice vote. Discussion to tentatively hold a monthly board wide conference call in the time in-between quarterly meetings. Concern that a limit on the dollar amount that could be approved should be in place. A joint exec-planning committee meeting should happen in the next three weeks.

Facebook page for NRRWMC: (<https://www.facebook.com/NorthRaccoonRiverWMC/>)

Motion to adjourn, seconded and approved by voice vote at 12:30 pm. Our next quarterly meeting will be Friday, July 19, 2019 in Lake City.

Public comments:

Keith with Webster county encouraged other county supervisors in the watershed to sign on to letter concerning the inclusion of drainage districts within the jurisdiction of WOTUS (Waters of the U.S. ruling by the EPA).

Overview of North Raccoon National Fish and Wildlife Foundation Conservation Partners work with Iowa Soybean Assn.:

- Project title is "Diffusing Technical Assistance Through Targeted Outreach"
- North Raccoon was selected due to existence of a few successful local watershed projects
- Overall goal is increase demand for conservation and align farmers and landowners with current funding opportunities
- Project innovation is to use Farm Journal/Trust In Food database assets to customize outreach
- Project partners are NRCS, watershed project coordinators, ISA, IAWA, Farm Journal, and City of Des Moines
- Phase 1, approx. 6 months: Data segmentation, pre-survey, and development of conservation messaging
- Phase 2, approx. 2 years: Outreach, farmer and landowner engagement, conservation adoption, benefits tracking, and post-survey

Map of project area:

