# NPS Task Force Meeting January 15, 2025 - NDDEQ Normandy Building

#### Attendees: (see sign-in sheets)

#### Welcome/Call to Order

• Meeting called to order by Emilee Novak 8:36AM 1/15/2025

#### Review/Approve January 9, 2024 meeting minutes

- Motion to approve: Rhonda Kelsch
- Second: Matt Olson
- No discussion
- 2024 meeting minutes approved

# Project proposal review/comment process - Emilee Novak

FY25 Section 319 project proposal presentations

#### **Envirothon** – Phase VII (ND Envirothon, Andrea Peterson)

- It is a hands-on, problem-solving, natural resource competition (for high school students)
- Goal to increase public awareness and understanding of NPS sources and solutions (aligns with ND NPS Management Plan Section 2, Goal 3)
- Project objectives are to promote Envirothon, stimulate interest in natural resources, host annual state competition
- Promo video (made by student participants) unable to connect sound to room, see presentation file to rewatch
- Competition engages students with soils, wildlife, prairie, aquatics, forestry
- Participation has increased from 2021-2024 in number of teams in each region, and new regions have started hosting competitions (Mouse River Loop, Sheyenne River Loop, Icelandic)
- Over 50 past competitors have gone on to natural resource careers

- (comment) Appreciate the inclusion of info/education surveys following events, very informative, and the fact that they are addressing comments and survey responses and adapting as needed.
  - Andrea expresses this is year 4 in the job, and each year is learning and implementing new things towards success.
- (general question on info/ed projects) The primary goal for NPS is to restore water quality, so how are long-term outcomes of improved water quality measured? Also, great presentation.
  - The promo video shows that students are interested in participating, and when they compete they will learn and take that knowledge forward. It is difficult to track high school students long-term (unless they come back and volunteer; we are unable to access personal information such as emails to send follow-up questions long-term). It is a goal to continue trying to figure out how we can

further track the value. Teachers have a passion for the program (as shown with more getting involved), so we know the information is getting out there in these ways.

# Menoken Farm – Minimizing Pesticide Use (Burleigh County Soil Conservation District, Seth Boechler)

- Menoken Farm is a conservation demonstration farm, with indoor and outdoor demonstrations and resources. Everything at Menken Farm is based on the 5 soil health principles. Above all, the Farm is for information and education. There have been 256 group tours/events hosted since 2012 and nearly 6,000 visitors.
- Primary focus: water quality, wind/water erosion, salinity
  - Other areas of focus are not less important, they all work in cooperation (soil carbon, soil biology, food safety, nutrient density)
- Goal: demonstrate and education diverse crop rotation with cover crops & livestock which may allow reduction/elimination of pesticides
  - Less pesticides will improve water quality, human health, soil health, have lower input costs; applies to both urban and rural communities
- Next step: building on previous phases (Planting Green, which was seeding a cash crop such as soybean, into a green growing cover crop such as winter rye)
  - Previous phase still used chemicals, instead of using chemical to terminate the rye, will mow with sickle mower at low height (successful trial last year upon harvesting)
  - Also tried to grow a cash crop into an established perennial (attempted winter wheat into an established alfalfa field)
- How it will be done: BCSCD and supervisors will develop and deliver a cropping and grazing plan that allows reduction/elimination of pesticides, including monitoring (soil health, product nutrient density, pesticide testing in soil and in product, etc.)
  - Will test whether a spring application of pesticides will still show up in the fall; above all inform and education communities on the benefits and struggles of eliminating pesticides in food production

- Do you do your own testing for pesticides?
  - Have used various labs in the past, but often received inconsistent results from multiple labs; Farm is not performing any of the pesticide tests.
- Section 5 talks about demo project monitoring, numerical water quality data and species data. How is this incorporated?
  - Don't have any bodies of water on the Farm so it's difficult to track aquatic species, but with the erosion testing we can see if what is being done on the Farm is helping to reduce erosion or if what we are doing is reducing pesticide in soil or plant that we can assume that we would be stopping it from flowing into the water.
- Are you using and analyzing specific pesticides (such as those identified by the ND Dept of Ag pesticide program)? Any correlation of what is normally showing up and what is applied?

- Not familiar with which pesticides are identified on ND Dept of Ag program list, but the Menoken Farm goal is to completely eliminate using any pesticide (not focusing on any single one or group). Assume that Roundup and Dicamba are the ones most heavily used in the state.
- Regarding the summary/history of what has been done, how do you measure success from this project? How do you measure success from outreach and what has been done outside of Menoken Farm as a result?
  - This is very difficult to do. We can have many events and demos but we cannot force anyone to do what we're doing. We ask people to report back what they have been doing and what's worked for them. Seeing repeat visitors indicates effectiveness. Attendance has grown every year (with the exception of 2020 Covid impacts), which also suggests people may be putting in practices on their own landscapes.
- Do you conduct surveys following tours?
  - Have not been doing this. In the past the board was not supportive of this, but now see the importance. Moving forward they will do surveys following events. Tours are more difficult to represent in surveys because attendance numbers can be highly variable.
    - (suggestion) In surveys you could have a 'How did you hear about us?' question to determine the main driver of attendance and participation (word of mouth? Other?)
- (comment) Regarding information and awareness for urban communities, it is critical to reach these communities. Thinking about the amount of chemical that is applied to urban lawns. It likely exceeds the amount out at the Farm. There is a high amount of misuse in urban areas, this is a big issue.
  - Agree. Education on lawn fertilizer application and overuse is so important. The urban side of education and event involvement is challenging.
- (comment) It is appreciated that the Farm provides on-site demonstration plots. In that way you're almost talking to the farmer from a producer standpoint. Menoken is forthcoming about challenges which is so appreciated from a producer standpoint. They feel more prepared to try things and take next steps. Also, a lot of concepts are covered at the Farm with the urban (high-tunnel) and rural demonstrations. Producers are happy when someone else can try and fail and learn before they do.
- (comment) Regarding partnerships and the urban connection with pesticides. In ND source water protection is voluntary and there are ongoing efforts for municipalities to get work done on the ground. Suggest the Farm try to work with municipalities in urban areas on this education.
- (comment) BMPs are only based on what we've tried, so we must continue to try new techniques or our BMPs will become stagnant Menoken Farms is doing just that.

# ND Water Education – Phase VIII (ND Dept of Water Resources, Tina Harding)

- See handout with printed slides
- This program increases knowledge, understanding, and appreciation of water resources, and creates water resource stewards

- How it's done: we have indoor/outdoor supplemental teaching aides, provide unbiased educational tools, structure programs to 'teach not preach,' and promote lifelong and lifespan water education
- Achieving goals: Will have interactive education tools, multi-sensory tools and experiences, focus
  on relevant issues, solution-oriented, measurable (want to make sure what we're doing is
  making a difference, and adjust based on this information), provide scientifically accurate
  information
- Who uses the program: everyone (many folks in this room have even used)
- How it's done: delivery network from project director >>> students
- What is Project WET: previously 'Water Education for Teachers' now stands for 'Water Education Today' which is meaningful because they teach more than just teachers
  - Curriculum based tools
  - Implemented in over 90 countries in the world, and into outer space, all 50 states
  - o Began in 1984 in Bismarck, ND (at that time specifically groundwater & surface water)
  - Teaching principals are based on core beliefs
  - o Curriculum guides are aligned with national education standards
  - Project WET applies to non-science courses and education as well
  - Teacher trainings in-person and online
- Recommend visiting discoverwater.org
- New trainings available on climate, water, and resiliency
- Connecting kids with water/ag/food, water where they live, and water reuse
- 13 water festivals in 2023, nearly 8,000 students grades 3-5; 20+ outreach programs serving nearly 17,000 grades K-12; additional educators and facilitators trained
- Increase in dollars asked for because the demand has increased
  - New programs in Grafton and Drake
- Nearly 170,000 students attended since 2009
- Seeing participation from tribal schools

- Is there any difference in approach to reach out to rural educators in rural areas compared to higher population areas?
  - The festival location, even if in a highly urban area, includes and invites all of the surrounding areas, including rural communities.
- Is there a different strategy to encourage more rural educators to participate?
  - Project offers 4 graduate credits in 5 days to encourage teacher participation
  - Have also strategically located festivals so that rural schools can participate
  - Bussing situation has been an ongoing challenge
- (comment) It would be interesting to see how many towns are represented on a map (rather than the map of festival location).
  - There is a need in the north, along HWY 200, and in the south-central part of the state.
- This project is not just education, it is changing behaviors.

# Prairie Waters Education and Research Center – Phase VII (Valley City State University, Andre Delorme)

- Prairie Waters is an environmental education center
- Four areas of emphasis: educational activities K-12, teacher workshops, professional workshops, VCSU macroinvertebrate lab involving student research/education/outreach related to water (macro lab is NOT funded by 319 but it builds into other Prairie Waters goals and focus areas)
- K-12 education is the biggest part of what Prairie Waters does (focus on water quality with aquatics collections). Also, outreach programs (especially in the winter when doing activities outdoors is more limited), EcoEds, water festivals, River Watch program (high school students and teachers looking at water quality, do work on a neighborhood river/stream)
- Teacher workshops: much of this is for River Watch teacher training. Includes partnership with VCSU and other entities and Project WET workshops
- Professional workshops: working with state agencies, SCDs and NRCS, NDDEQ water quality testing certification program (had this pre-Covid, looking to restart)
- Macro lab and student research (again, not funded by 319)
- Post-Covid recovery: participation is now back to pre-Covid numbers, and looking to continue increasing numbers
- Recent relocation: within last two years Prairie Waters had to relocate, now at Valley City national fish hatchery
  - Closer to the VCSU campus
  - But, less space (used to be able to house 100 students, now can only bring in 40 at a time), trying to increase the number of schools that come and increase winter activities to balance this
  - Planning on renovations to camp Tonweya
    - Previously a Girl Scout camp that has been turned over to Prairie Waters, but building needs renovation
    - Have already been using the grounds, great area for outdoor activities in the meantime
    - Fishing pond and stream, Sheyenne River, hatchery a variety of aquatic resources for activities
  - Overall, a good move
- Since writing the grant Prairie Waters has been awarded a two-year \$19,800 grant by the Pembina Pipeline Corporations Community Investment Program
  - Grant will be used to defray bussing costs (bussing is a big financial hurdle for schools to participate)
    - In the processing of putting this together, will not be paying full cost for any school, but will contribute to offset costs (especially for rural schools)
- Asking for 34 months of funding through 319
- Prairie Waters is stationed in Valley City but efforts are to cover the entire state with workshops across all regions
- VCSU funds 25% of salaries for Education specialist and lab manager
- We work with many partners
- We have three personnel: Andre, Bonita, Louis

- Have you been able to identify why River Watch numbers have not bounced back? (big fan of the River Watch program)
  - River Watch is down to 3 schools and only one is very active. It's difficult to find the right teacher and to find money (didn't put it in the Prairie Waters grant). It might be helpful to give teachers a stipend since they are volunteering their time.
    - The Red River basin river watch program has very involved teachers
    - Part of Prairie Waters challenge is they only have 3 staff, and River Watch happens in fall/spring when staff are busiest

**Red River Basin River Watch and River of Dreams** – Phase III (International Water Institute, Danni Halvorson & Asher (Project Specialist))

- A basin-wide program (sister program in MN run under the same organization)
  - Also have program in Manitoba they helped to get started
- Background: began 30 years ago in small school in MN
  - Watershed education activities were added in 2010 (before then was only a water quality monitoring project)
  - ND pilot in 2013
  - 2017 funding began the River of Dreams pilot
    - Project has since received funds through 319 and other programs
  - 16 ND schools in 2020 with first NPS funding
    - Today: 25 ND schools participating
- Objectives: cross-curriculum approach, critical thinking, sense of responsibility and stewardship, connect students to their local watershed, cultivate interest and appreciation, career opportunities
- Accomplishments: 1,121 student in River of dreams; annual River Watch Forum 10 schools/100 students; River Explorers 28 events/400 students; 35 WQ & macro monitoring; overall 65 unique events and 650 students reached (multiplied by them taking information back tot heir families and communities)
- River of Dreams
  - This is the newest program and includes grades 4-6 (all about understanding a watershed)
  - Classroom activities, watershed tours, vocabulary
  - Canoe launch (unique student identifiers so people can find them and go online, students can look to see where they ended up)
  - o 600 student ND
  - > 1,000 in MN
- River Watch
  - o Grades 7-12
  - Water quality monitoring is the backbone
    - Same equipment professionals are using in their assessments
    - Students monitor 4-10 sites in their community, big contribution to datasets across 30 years

- Biological monitoring (macroinvertebrates), upping level of assessment and understanding
- River Explorers Program
  - Getting students interested in recreation and creating river stewardship
  - Forum done annually, theme will be recreation in 2025
  - Teams propose plans for their watershed to manage recreation
- MN K-3 program in development, if successful could bring to ND
- 8 desired outcomes for 2026
  - STEM assistance
  - o River of Dreams
  - o River Watch
  - Expecting program numbers to grow, especially for River of Dreams (other states and countries are adopting)
  - UND NSF grant working with schools on the steps of watershed education, taking it back home and teaching a cross-curricular approach in other disciplines being taught
- These programs are educational (align with NPS goal 3), transferrable to any watershed, and fun for all ages

- Regarding the fast growth of River Watch in ND, how many of those that initially started with pilot project are still going?
  - Probably all of them. There is one this year that is sitting out because of teacher turnover at a small school.
  - What would you attribute to the high amount of growth over a short amount of time?
    - A lot of ND schools have been ready for it. There was press and coverage on what was being done just over the border in MN.
    - We offer substitute teacher reimbursement and travel reimbursement. We try to make it as easy as possible or schools; meet them where they are at in terms of offering it as extracurricular, etc. Also, our staff go to all of these places themselves.
      - It is challenging to find the right teacher sometimes. In MN they tried to have the schools do it on their own but it didn't work well that way, they needed more guidance.
- Is funding specifically for the Red River Basin for River Watch and River of Dreams?
  - Yes.
    - Comment on Prairie Waters River Watch being statewide, wherever there is interest. This complements where other similar programs are not available. For example, there used to be a Prairie Waters River Watch group in Minot.
  - IWI has been involved in statewide proposals, specifically on MN side
    - Recently discussed with ND Gateway to Science, but IWI has been historically RRB focused
  - (comment) Working with municipalities could be another focus area for program

- Water quality was well covered in this proposal and presentation. Are there other concepts covered (such as riparian areas, native trees, wildlife, fisheries, etc.)?
  - Yes, River of Dreams is half in classroom, half outdoor. We partner as much as possible. Some schools contact ND forest service for a plant/tree walk behind their school (species ID). We often partner with fisheries (more-so in MN) for field trips. The urban population density impacts would be interesting, and we can improve on looking at the impacts of city structure on water quality. Rural is well incorporated
- (suggestion): When working in Grand forks and Fargo you could incorporate a treatment facility tour. A big concern and challenge in this industry right now is continuity of workforce. Need to get younger generations exposed to these job opportunities and career paths.
  - Last summer students went to East Grand Forks treatment plant and then did same day kayaking on the receiving water body

# BREAK

## Thank You & Welcome – Karl Rockeman

## Maple River Watershed – Phase III (Cass County Soil Conservation District, Eric Dahl)

- Phase II adopted PTMApp, BMP implementation, monitoring/assessment, info/education
- Efforts will focus on highest priority watersheds
- Maple River watershed is mostly Cass County, but reaches into multiple counties
- Majority of the land is rural crop ag and a moderate livestock role (mostly in riparian areas)
- Row crop trends: continue to lose crop rotation diversity, losing high-carbon crop resulting in more soil erosion and soil degradation, presents challenges to manage intensive soybean acres
- Historical hydrology data showing more water is moving faster off of the landscape; this is one of many challenges
- Known water quality impairments: the most recent NDDEQ Integrated Report showed 11 reaches of Maple River not supporting beneficial uses (these are the 'TMDL segments')
- Primary goal: restore recreation use in watershed by reducing bacteria and nutrient loads
- Secondary goal: increase education and promotion of water quality management
- Resource concerns: water quality parameters
- (image examples of common farming practices not leaving any riparian buffers, soil erosion, rangeland health (overgrazing, poor water sources for livestock))
- Target BMPs: cropland (cover crop, pasture/hayland plantings, short-term management agreements) (will rely on PTMApp to help identify those areas), livestock (manure management plans, fencing and grazing exclusions, cover crops for grazing, watering facilities (helping get cattle spread out over the land rather than in riparian zones))
- Preliminary prioritization with IWI: completed an initial source assessment and identified priority subwatersheds; working to find better format for field scale to present to producer
- Education/Outreach program is growing More producers are interested in soil health practices

- PTMApp data is showing that seeing noticeable reductions is way out of reach of budget, so using education program as secondary goal is critical to support the longterm outcome
- o Organize producer-led field demos (new board member leading some)
- o Annual soil health workshop

- Can you clarify the problem you mentioned, bringing it (PTMApp) down to the field layer for producer, bringing parcel layer in to ID?
  - Need a more user-friendly field-scale model to bring to the field or have it ready if someone stops in to discuss what they can do
- With this being heavy corn/soybean country, what's missing? Are there specific BMPs missing that would help?
  - Don't' have a lot of flexibility with funding a practice, so finding a practice that can do 60/40 match is a challenge. The education is a big part (new producers finding ways to do things and finding new markets to add different crop types). Adopting that mindset and opening new doors to get the ground cover and improve water infiltration.
- Have you considered Pheasants Forever precision ag program?
  - Have used this in the past.
    - How about using their program in terms of staffing time?
      - Yes, this is done all the time (NDGF, USFWS, etc.), We have always wanted to keep as much of the county in the watershed project area as possible to make sure interested folks are eligible.
- The SCD receives a lot of feedback from the public on how easy it is to work with them and do implementation.
- (comment) Regarding canola on the landscape, is there opportunity there with a different system?
  - Yes. Any diversity in the system that can change things up is a step in the right direction.
- Thinking of long-term processes described, have you been able to use PTMApp to determine how long the 'long-term' might be? The sustainability of practices? (are producers sticking with them?) Are you tracking any of the adoption of new practices?
  - Regarding long-term sustainability of practices, that's the idea. Every agency
    has it where you walk them through the first 3-5 years, that's always been
    the goal.
  - Regarding adopting of practices, we are tracking the best we can. For example, we had 17 contracts in 2024. We can highlight how many acres fell within the watershed to claim as a success. As far as tracking long-term adoption, we're a ways away from that.

# *Wild Rice River PTMApp Prioritization Project* – Phase II (Wild Rice Soil Conservation District, Kaylie Carver)

- Overview of the history of conservation in Sargent County
- PTMApp use began in the most recent phase
- Phase II will continue with prioritization of HUC 12s (in previous phase did HUC 10), eventually getting down to the catchment level
- Primary land use in the watershed is agriculture (about half actively cultivated currently)
  - Livestock and small grains are decreasing over the last decade
- Issues: overland flooding, erosion, overuse of riparian area
- Water quality sampling
  - Macroinvertebrate sampling took place in 2023, results pending (previous results showed sites are considered 'most disturbed')
  - High E. coli concentrations relative to state water quality standards
  - $\circ$   $\;$  High TSS and show an increase in concentrations downstream
  - High TN and increasing concentration over collection period,
  - High TP across all collection years, but all appear to potentially be decreasing
- PTMApp HUC 10 watersheds from previous phase to direct conservation efforts; district has the right to accept or deny implementation outside of these areas
- Phase II goals
  - Restore and protect beneficial uses, continue learning PTMApp, use scenario building to determine BMPs to achieve load reductions, continue monitoring and analysis and compare to PTMApp calculations and implement adaptive management, education and outreach (has always been an important aspect of district function) and expand this from producer focus to entire community focus
  - High Tunnel (district has had under an NRCS grant that has expired) as an urban conservation tool
  - Social media/digital outreach when possible
- District has list of preferred practices and applied practice
- Budget: new watershed coordinator and high tunnel items change outreach fund numbers

# Questions?

- Are Easements (mentioned in Objective 2) outsourced?
  - As new coordinator, have not had any experience with this. Possibly NRCS staff in office helped with this in the past.
- Do you have reports on BMPs adopted over phase I?
  - Not available for meeting today, but can find and share.

Antelope Creek Watershed/Wild Rice Corridor – Phase VII (Richland County Soil Conservation District, Jen Klostreich)

- Accomplishments by phase, wide variety of BMPs over the years
- Well decommissioning , now cost-shareable
- Septic system examples
- Richland County TMDL listings despite ongoing BMP implementation

- Success with streambank stabilization (previous Outdoor Heritage Fund grant, 90% cost share, but it's hard to get people to give up land and follow-through)
  - (example of restoration) This particular example saw benefit to also partner with CRP for producer compensation
- District is public facing, developing relationships and trust factor, procedure form with stepby-step on what they can expect has been helpful
- There have been many successes, but more work is needed
- Board members are going between Richland and Cass, cross-county to move things forward and connect with the public

- Are the septic systems supported by BMPs new home purchases? Or, existing homeowners coming forward?
  - Some of this, some of existing homeowners; most banks require assessment of septic for mortgage loan.
  - Most folks just don't know what their system is doing, especially if it's a straight-line pipe.
- Regarding septic systems, do you have a specific criteria for which will be funded? How are you identifying? Word of mouth?
  - Date has changed, but it is a 10-year period. So, if it's installed prior t the date and within a proximity of 1 mile to the river or tributary. Also, it has to be deemed 'failing' or 'improperly installed.' We use a procedure form and do soil testing. There is no county public health unit so the information is sent to Cass County. Jen does the site visit herself. Initially sent out letters to all within 1 mile of Wild Rice, but have not needed to send out letter again because the list remains full. Had a meeting with all of the installers when this first came up to get to know the process (making clear there will not be fine or anything like that).
  - (comment) Cass County has adopted Jen's procedure form in the beginning, now has gotten to the point that they turn people away and prioritize those in directly proximity to waterways
  - We are very up front that they are not regulatory. We let them know that if they do not return the form there will not be any follow-up. The procedure form was a good addition because it indicates to us when they return it that they actively want to move forward.
- Are there any considerations of groundwater with well decommissioning and septic upgrades?
  - Yes. SE water is one of the letters of recommendations for the proposal.

# Park River Watershed – Phase III (Walsh County/Three River Soil Conservation District, Josh Anderson)

Online (virtual) presentation

• Blue-green algae issues on Homme Dam, a critical recreational water body (fishing, swim beach, campground)

- 29,300 ug/L microcystin in Sept 2024 (state standard is 8 ug/L)
- Elevated TP across sampling sites (both above and below Homme Dam)
- Main concern: ongoing soil erosion, wind erosion, getting BMPs on the ground
- Doing a lot of campaigning related to BMPs and soil health practices
- Partnership with local NRCS, success with EQIP dollars spent in the county (uptick in cover crops, residue management systems, etc.)
  - This is good for the broader scope of Walsh County, though some of these programs outcompete what the SCD can offer
- Staffing challenges: full-time watershed coordinator last season, has since vacated but also has since joined the board
- Secondary focus: education and outreach ("show and tell" model)
- Program successes: hiring local college students to come on as watershed technicians in the summer. Some have gone on to write and speak on how much working in the watershed has changed their perspective. Important to grow the next generation of conservationists.
- Public Awareness and BMPs: soil health tours, news articles and interviews highlighting efforts and awareness, county water quality team (NDSU ext., ND rural water, NRCS, local community members), county water quality summit (forthcoming)
  - County water quality team will develop a watershed-wide plan identifying critical areas of concern, have target meetings with landowners in critical areas of concern, develop long-term goals and vision within the parameters of the next grant cycle and further down the road
    - One of the initiatives is the county water quality summit
    - Also the county water festival
- Phase III targeted outreach in critical riparian area near Homme Dam, streambank restoration project (Kensington neighborhood of Park River, engineering schematic available for distribution), additional sampling sites to monitor pre/post restoration site, preliminary discussions on future phases focusing further east near Red River confluence, bolster education and outreach (focused on intersection of soil health and water quality in support of BMPs)

- Can you please expand on the streambank restoration project? What is the cause?
  - In the Kensington area of Park River (E of main town area) there is a sharp bend in river where spring flows erode the bank. We are looking to add a buffer and stabilization. Several landowners in that area that have lost considerable amounts of their backyard property. The SCD sees this as a water quality issue (erosion) and restoration would help to increase BMP awareness of what type of work can be done. SCD predecessor had a plan in place for this project so current staff are looking to follow-though on what the landowners were expecting from this project.
- Will restoration return to native species?
  - Reclamation portion will be on east bank side where there is not a lot of room for planting because of slope. Materials would be native grasses.
- Do you have a list of BMPs that were adopted through phase II?

Yes, not available for meeting today but can share for distribution. Two BMP projects were proposed and planned, but one ordered a seed mix that was not in compliance with required practice and the other was a comprehensive plan for a goat ranch that is still in development, but the landowner decided against implementation due to cost. Other BMP items were implemented before current staff started. A comprehensive list can be shared.

# Powers Lake Watershed - Phase V (City of Powers Lake, Kenny McDonald)

- A unique project
- Goal: to achieve and maintain fully supporting status and reduce nutrient loading into lake and reduce nutrient cycling within lake
- Watershed BMP accomplishments (previous phases focused throughout the watershed)
- Feasibility study done on reducing in-lake nutrient cycling
  - Number one option was dredging, but was prohibitive based on cost
    - Glendive MT company could build a small dredge
    - Held a public meeting and voted on moving forward with dredging project
       All but one in favor
  - Location selection for dredging and disposal site
    - Disposal site adjustment through time
  - Dike system throughout disposal site which provided options; it's used like a lagoon system
  - 900 feet of hose on the lake itself, another 1500 ft (avg) to disposal site, requires quite a bit of pumping; produces a slurry mix
  - Cell 1 receives, overflows to cell 2
    - Can clean out cell and use again; post freeze-thaw produces great topsoil, used for local yard plantings, used for spreading on old CRP land, very rich in nutrients (high P)
  - Dredge removal 80,000 cubic yards removed, > 120,000 lbs of P removed (consistently testing sediment), > 60,000 lbs of N removed (though can be more variable due to moisture content)
    - Double the average nutrient richness of average cropland
      - Farmers that are interested are sometimes too far away to haul
  - The why: for future generations to have an accessible place for the community. The lake is right on main street in town. There are less than 400 people in town but events in the summer bring 100 kids out to the lake.
  - o "The lake is a reflection on the community that lives within its watershed"
  - When people see the lake being cleaned it brings people to town

- Are the cells acting like a giant septic tank?
  - Yes (explanation of cell connection and process)
- Can dirt be stockpiled? Does it need to continue to dry out?

- Yes, but even when it's moved out of cells it's got wet content. That's why it's tough to move longer distances. We keep a lot of it stockpiled so throughout the following year people will come and get some. It's a great relationship builder.
- How much can the dredge hold?
  - The dredge does not hold any, there is a floating hose to shoreline and other hoses to pump to the holding site. It's constantly pumping.

## Bowman-Haley Watershed (NEW) (Bowman-Slope Soil Conservation District, Sierra Lee)

- Mission: use cost-share to implement BMPs to restore WQ and education the public on WQ & NPS issues
- Long-term goal: reduce HABs by reducing nutrient inputs
  - Continue past efforts of BMP implementation
- Medium-term goal: riparian health restoration of the watershed, reduce NPS along tributaries
  - Slow down algae growth in reservoir
- Short-term goal: reduce nutrients entering the reservoir
  - Implementing BMPs, providing NPS education
- Bowman-Haley is a 1,732 acre impoundment at confluence of Grand, Alkali, Spring creeks
- Land use is majority grassland/pasture, one-third cropland and minimal development/water
- Statement of need: 303d listed for nutrients (P), recurring HABs advisory/warning
  - Current P levels are greater than historical levels and ecoregion levels
  - TN/TP levels in tributaries are above guidelines
- Milestone table
- Coordination plan: other agencies (SCD will be lead project sponsor) including NRCS, NDSU Ext, NDDEQ
- Evaluation/monitoring plan: development of Sampling and Analysis Plan (subject to change)
- Project BMP table including planned practices and anticipated costs, anticipated accomplishments (does not include some engineering estimates)
- Public involvement: annual public event, annual conservation daze, preschool and elementary visits and lessons, social media posts, quarterly news letters

# Questions?

- (comment) It's good to see a new proposal from the district. It looks like there have been projects in the past. Applaud you for being willing to come back and take on another watershed project.
  - Agree. They are a new coordinator but they have a good relationship with previous coordinator as a resource.

# END PRESENTATIONS

**Project Discussions – Recommendations for Funding** 

Budget Breakdown 319 program – see handout

- Definite budget number is not available until congressional appropriations, but can base anticipated funding on trends
  - Have hovered around high 3 million mark for past 6 years
  - Over 6 years within the same 250,000 dollars
  - Part of funding goes to internal staffing and support
  - Funding or calculations for funding pool to set aside for "development dollars" for assessment work or projects that come in on the fly (they want to do implementation but first need water quality data to justify), these are typically around \$20k/project
- Have roughly \$4 million of requested funds (estimated)
  - From getting this ballpark number, 1 million is set aside off the top for internal staffing and assessment potential projects
    - This leaves roughly \$3 million, which is not enough to support each of the proposed projects
      - Need overall general consensus from task force on whether there are projects that lack the desired components, or have any adjust the length of time (for example, education and info support projects are typically 3 years), can also cut funding total, watershed projects operate in 4-4.5 years (though funding is for 5 years)
- What's the process to refine selection? Does it go back to grant people to explain or rewrite?
  - Task Force at this meeting will narrow the field to identify what projects have merit based on what was proposed today, then any small details back-and-forth will go through Emilee Novak
  - Budget list will get revised based on task force input, then will get submitted through NDDEQ internal review and approval
- Was there a difference in the amount spent on education versus watershed projects?
  - Yes, watershed (BMP) projects need to make up 50% of the grant funding, which is luckily what we're looking at this time
    - Currently a lot of discussion federally on what that number should be
  - Looking at total for each (watershed vs I&E) \$2 million, but a bit more of a cut out of I&E
- Process moving forward after today's discussion:
  - EN will send a follow-up email with instructions on how to submit your feedback (fillable pdf and Microsoft form link)

# Individual projects discussions

# **I& E PROJECTS**

# **Envirothon Program**

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- In 7<sup>th</sup> phase, primary focus in high school but they do reach a lot of student
- Comments/concerns?
  - Great they included that they changed and adapted based on the feedback they received. They are making a conscious effort to stay relevant.
  - How does their proposal compare to what has been received in the past?
    - $\circ$   $\;$  Comparable. Last time they requested about the same.

- They have many partnerships, especially with SCDs.
- Appreciate the variety of what they touch on (not just water quality).
- Many volunteers are professionals in the field, providing direct networking for participants.

## Menoken Farm

- Good application. Seth was perhaps a bit humble on explaining the magnitude of what Menoken has done and who it has reached; they are willing to share and make adjustments to operations at the Farm to make things easier for people to come and participate. They are always going to look for the next step in innovation and reduction, and it's a close resource.
- Also reaches some of the older producers. Many ed projects are focused on k-12, but the Farm works to connect with all including the older generation of producers.
- Heard more than once from presenters, "we are going to get more reception and engagement when the message comes from a peer," and Menoken brings it to a boots-on the ground; their meetings include panels of producers.

## ND Water Education – Project WET

- Budget has gone up slightly, by about \$20,000 but with inflation that is unsurprising
- Several Task force members have been a part of these festivals
- Great that it's statewide educational program
- It's understandable that the teachers are strapped
- Would have liked to seen some of the accomplishments highlighted, it was in the slides but would be helpful to have that emphasized
- How are all the publications/brochures funded?
  - Funded nationally through a separate project entity that took it over from ND in the past
  - Project costs are travel, distributing materials, trainings, assisting with education development
- One of the task force members attended a training for individuals to put on a water festival, some of the 319 costs support that training; task force member helped out with multiple festivals last year. The value is clear
- Other states have their own 'Tina' to coordinate
- Outside of project WET Tina has put together other frameworks, in part based on project WET curriculums
- 16 tasks for \$200,000 dollars is a lot of work. Commendable
- Tina is a very resourceful contact
- Not specific to any project, but important to keep in mind the goal of how to restore water quality (NPS management plan goal 3). How are these activities leading on that path. Tina mentioned 'changing behaviors.' This as a key component, it's more than just raising awareness. Is the education being done lead to changing behaviors? Recognition that other components such as soil health and forestry are an important part of that. It's important to think about how water quality improvements are going to be measured long-term.
- The previous 3 projects discussed have a scope of changing behaviors
- Not having this taught anywhere needs to be part of the discussion, we need to provide the opportunity for individuals to learn

- Tina highlighted that everyone learns differently, providing different platforms
- When working with kids the redundancy is important. In case kids miss the opportunity in one grade, they get it through a different program in a later grade

# **Prairie Waters Education and Research Center**

- Regarding their budget, they have the Pembina grant so can they reduce their transportation costs?
  - The transportation cost in the proposal is specific to their staff, it is not offset by the Pembina grant
- Bottom of page 6, list of activities. Some events that 319 is also funding...is there doublereporting in some of this?
  - No, not on the numbers (they report based on their events). They also list things in the presentation they have 'supported' which can be misleading
- Some struggle with the deliverables. They used to have trainings but no longer have this
- Budget question: none of the other grants have admin costs, is that ok?
  - Restricted above 10%
    - Grant says 15%
      - Effective January 1 is was upped from 10 to 15%
- Talked on capacity for their resources
- Can we make recommendations to them on what we like and suggest to reduce grant total by X percent?
  - Yes, we can. If we see the project merit and want to give them more time to get settled in the new facility, could request they reapply next year
- Don't want to get too critical on salary line, that is a huge hurdle to maintain coordinators and staff
  - Can instead focus on scope of project items, training the professional was the starting framework of project
- Acknowledgement of River Watch challenges with teachers involvement
- Possibly too many eggs in too many baskets, ask that they narrow their focus, recenter project and rebuild
- They have always been an in-person resource, don't really have online tools
- Total budget of projects will require a substantial cut from the total
- Suggest giving them a year or two of funding and request they reapply so things can be reevaluated
  - Would they just get funded for the first year?

# Yes

 Reminder for folks to look at objectives and items when making comments, on what should/should not be included to provide guidance to applicant on how to rework if needed

# Red River Basin River Watch and River of Dreams

- Reaching a lot of kids and schools for a reasonable budget
- Looking at the population concentration in ND, their efforts are in a good place
- Each objective has a full salary line item? Paying teachers as a stipend?

- 1.31 FTEs, using some of the other as match?
  - Objective 1 budget table
    - Also, mileage very high were they getting this money for bussing?
      - They go to the schools themselves
      - They are based out of Fargo but their staff is spread out
- Would have been nice to have a little bit more information on budgets, considering how much money is being requested
- Appreciate the originality/hands-on opportunities they are bringing
- 2 year or 3 year?
  - 3 years (36 months)
- Practical aspect of real-world problem solving for participants
- Most expenses are reasonable, not sure how to cut if it's already only 3 years
  - Could just fund a year if not wanting to cut the program entirely

# WATERSHED PROJECTS

# Maple River Watershed

- Consistently getting BMPs on the ground, but scope changes year to year to accommodate what's happening in the watershed
- Agree with Eric's approach to maintaining a larger watershed scale for broader BMP implementation opportunities with any interested landowners
- Appreciate the point about the water quality data, impossible to get to fully supporting trend, maybe focus on a general improvement rather than returning to 'fully supporting'
  - o Success opportunities to highlight general improvement trends
- Recognition of the unique challenges of Red River basin watershed projects
- Great to see the partnership across counties, Cass and Richland
- Eric has also worked cross-collaboration such as with the ag department, has been successful with this

# Wild Rice River PTMApp Prioritization Project

- Matt Olson acknowledges conflict of interest having been previous project coordinator
- Important area with so much happening in the Red River basin
- Very standard project for what 319 is looking to support
  - Plus they have extra PTMApp tool to support decision-making
- Coordination plan lists a lot of people, this shows a level of thinking of how to make things happen

# Antelope Creek Watershed/Wild Rice Corridor

- Highest requested, but is also the regular go-to to get BMP dollars spent, most of her budget is on BMPS
- Extremely effective coordinator, no doubts, has proven time and time again

## Park River Watershed

- Background from Phase II: folks working on the project now have not gotten a lot of BMPs implemented
- The project scope is more similar to an I&E project rather than an implementation project
- Other grant received? SCD trust? Very small window to spend a lot of money
- Notice in budget table that the \$200,000 dollars did not carry over? Would be a BMP?
  - Yes, would be a BMP
  - Concern for anticipated timeline projected (this fall/next spring)
- Talked a lot on Homme Dam, but how does the stream bank stabilization support HABs?
  - Streambank stabilization is downstream of the dam
  - o Could look to split these initiatives, and selectively fund the streambank stabilization
  - Homme Dam is backup source of water for Park River, but Grafton water source is Park River, so possibly this is where the streambank stabilization came from
- Feels like proposal is going in multiple directions. HABs, landowners, wells, streambank stabilization.
- Perhaps a narrowed scope could be funded, they could apply for other components separately
- Struggle to classify as a watershed project, so the funding should specifically focus on BMP work
- Who would be matching the streambank funding?
- If they can successfully deliver the streambank restoration that would be a successful BMP
- Would bring it closer to a \$200,000 project fund?
  - Likely, will evaluate
- Current phase is funded through the end of 2025

# Powers Lake Watershed

- Emilee Novak will be revising NPS management plan for ND, have received input from other program coordinators on return of investment on in-lake and in-stream practices
  - Required they do landscape BMPs, but this has since been taken out of the proposal
    - Has already addressed a significant portion of the landscape, so finding new landscape projects to do is challenging; hobby farms, etc. A lot of what drove this grant proposal was essentially free disposal site
      - Word has gotten out around town, and the community has said over and over that they want to see this project continue
- Has powers lake ever had problems with HABs, E. coli, fish kills?
  - This lake used to have issues with fish kills, it's not really a swimming lake. Tributaries are challenging for inputs, need to get flow monitoring because of high variability
- Consider cutting project down from 5 years?
  - Can try 1 year to see if they will have the staffing support available
    - But then would they be ineligible for years 2-5?
- Dredge parts/equipment make this project very costly
- Had BMPs for the first three years
- Suggest all take a closer look on partial funding or not funding

#### **Bowman-Haley Watershed**

- SCD is actively working on a project with USGS which will produce a model on HABs in the reservoir
  - Anticipating that supplemental data from SCD/DEQ project will support model and model can be applied to other water bodies (such as Patterson Lake)
- Tight budget, not frivolous, but if there is success up front can reapply early
- New project
- *Streambank/shoreline projection how much? No unit of measure* 
  - Targeting land in ownership of the county
- Nice to see a western ND project

Due date for written task force comments and project evaluations:

Friday February 14, 2025

Thank you everyone!

End meeting 2:04pm 1/15/25