

UPPER BIG BLUE NRD WATER QUALITY MANAGEMENT PLAN

Implementation Phase



In Partnership With



STAKEHOLDER MEETING 3 SUMMARY

Zoom Meeting

Wednesday, February 17, 2021

6:00 p.m. - 8:00 p.m.

ATTENDEES

Present	Name	Project Role
X	Marie Krausnick	Project Team - UBBNRD
X	Jack Wergin	Project Team - UBBNRD
X	Adam Rupe	Project Team - JEO Consulting Group
X	Andrea Gebhart	Project Team - JEO Consulting Group
	Elbert Traylor	Project Team - NDEE
	Josh Bowers	Panelist (NRCS)
	Andy Bishop	Panelist (Rainwater Basin Joint Venture)
X	Nathan Pflueger	Panelist (Pheasants Forever)
	John Bush	Panelist (Nature Conservancy/UBBNRD)
	David Cast	Stakeholder - Landowner/Operator
	Adam Darbro	Stakeholder - Municipality
X	Tena Ehlers	Stakeholder - Landowner/Operator
	Anthony Kreifels	Stakeholder - Landowner/Operator
X	Gayle Marsh	Stakeholder - Landowner/Operator
X	John Mittman	Stakeholder - Agri-Business
X	Gary Moody	Stakeholder - Landowner/Operator
X	Patty Morner	Stakeholder - Landowner/Operator
	Steve Moseley	Stakeholder - Recreation
X	Doyle Onnen	Stakeholder - Land Management
X	Leslie (Les) Pohl	Stakeholder - Landowner/Operator
	Aaron Sindelar	Stakeholder - Agri-Business
X	Jess Spotanski	Stakeholder - Landowner/Operator
X	Brent Swartzendruber	Stakeholder - Landowner/Operator
	Matthew Perrion	Technical Resource (NGPC)
	Steve Melvin	Technical Resource (UNL Extension)
X	David Eigenberg	UBBNRD
X	Rodney Verhoeff	UBBNRD
X	Chrystal Houston	UBBNRD
X	Ronda Rich	NRD Board Member
X	Bill Stahly	NRD Board Member
X	John Miller	NRD Board Member

MEETING MINUTES

Note: These minutes are not intended to be a transcript of the meeting, but a summary of the discussion that took place. Digital audio recordings of the meeting are available upon request.

Presentation available at www.upperbigblue.org/WQMP

1. Welcome

- Opening remarks by facilitator Andrea Gebhart (JEO)

2. Project Overview

- Overview of current efforts provided by Andrea Gebhart (JEO)
 - Use stakeholder input to identify and prioritize best management practices (BMPs) to implement in the target areas identified in water quality management plan (WQMP)
 - Stakeholders are not signing up to implement at this time, rather helping NRD understand what resources and programs would be most useful and beneficial for district landowners/residents
- Project website (upperbigblue.org/wqmp) created to host stakeholder meeting materials, as well as links to additional resources.

3. Stakeholder Hellos

Stakeholders introduced themselves and which BMPs (if any) they are most interested in implementing. BMPs discussed include:

- Cover crops
- No-till farming
- Filter-strips

Questions/Discussion

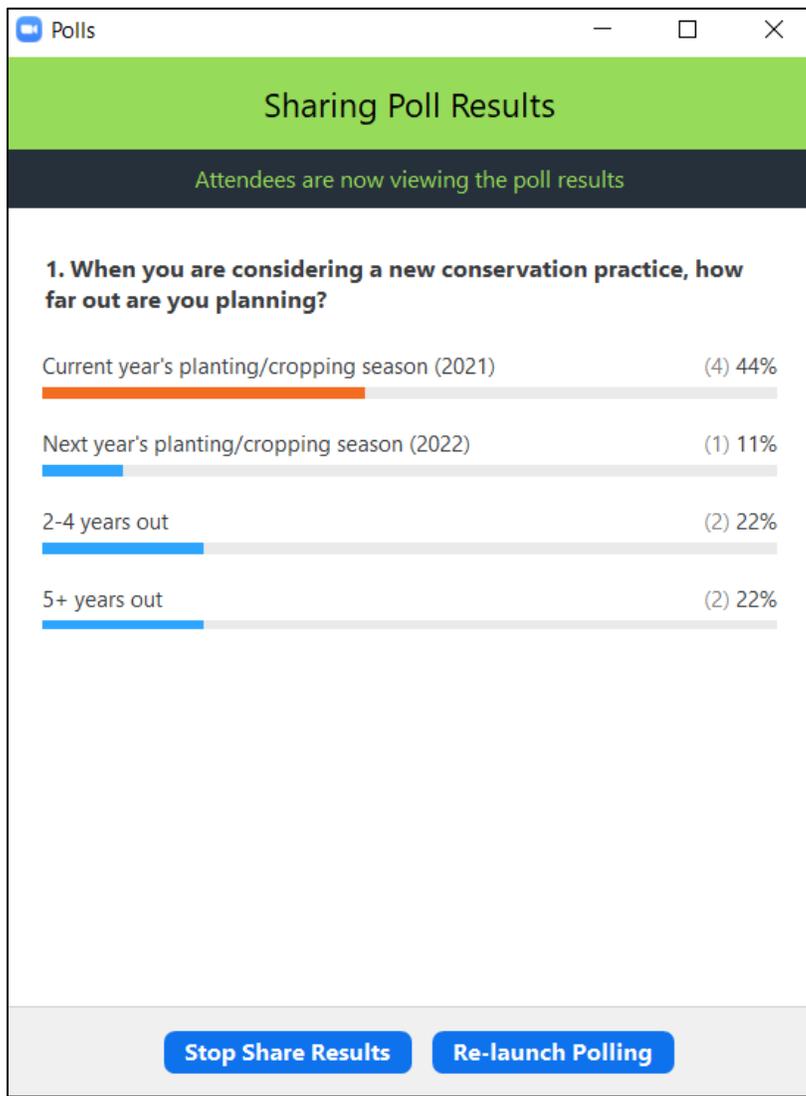
- Gayle Marsh (Landowner/Operator): Doyle, you are already running filter strips. So how wide away are you running them from normal? What do you do for weeds? Do you mow or spray? I am worried about weed seedbank effects.
- Doyle Onnen (Landowner/Operator): I have been fortunate and have been able to keep seedbanks clean. We have not had many problems with weeds. Grasses that are established flourish because of the good soil. Wildlife habitat can be created from these filter strips. A wildlife program on top of implementing filter strips would bring in funding.



Grasses used in the filter strips must be tailored for the specific area, and we have been using brome grass.

- Gayle Marsh (Landowner/Operator): There are no banks in my area but lots of flooding occurs. So, I do not know how filter strips will work in this area. Logs can come down the river and get into my crop areas. I do not understand what can be grown that will not be destroyed in flooding events.

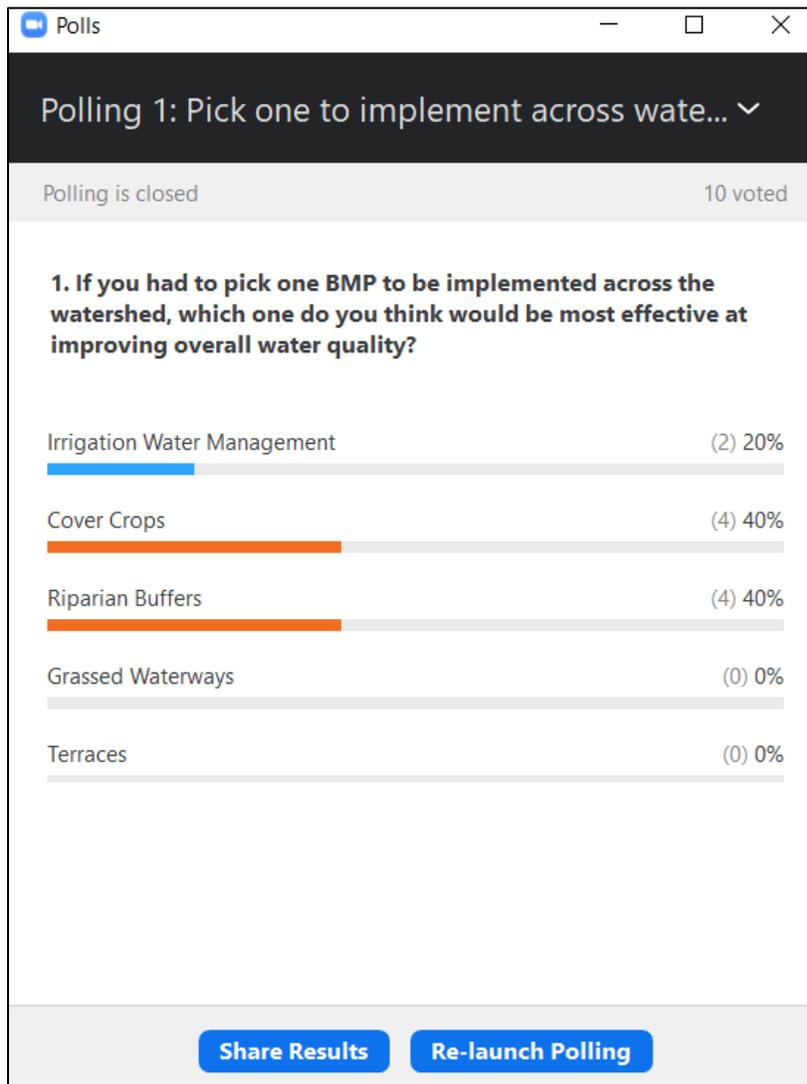
Andrea Gebhart (JEO) sent Poll Question #1 to attendees. See below for results:



4. Implementation Strategies

Water Quality Management Plan (Adam, JEO)

- Adam introduced and explained strategies: soil health, improved efficiency of inputs, use of voluntary BMPs, wetlands, and healthy riparian areas.
- He also talked about the “Menu” of BMPs identified within the WQMP
 - Variables in implementation, based on: individuals’ preferences, site factors, pollutant treatment efficiency (*E. coli*, TN, TP, sediment, atrazine), and opportunities
- Poll Question #2 sent to attendees. See below for results:



- Stakeholder Discussion
 - Gayle Marsh (Landowner/Operator): How is there a 50% reduction of atrazine for the Irrigation Water Management BMP? Grassed waterways are only showing a 30% reduction which is a noticeable difference.
 - Adam Rupe (JEO): That reduction is done through improving irrigation so there is less runoff. These numbers are pulled from various scientific studies, so they might be averages. Sites factors play a big role in how affective these BMPs ultimately are.

Impact of BMPs in Target Areas (Adam Rupe, JEO)

- Adam discussed the impacts/effectiveness of BMPs, using the Recharge Lake Target Area as an example
 - Recharge Lake (49 acres) & drainage area (8,549 acres)
 - Estimated costs – total: \$5,875,000
 - Modeling shows that it is possible to meet state water quality standards
 - Implementation of BMPs within the watershed have a huge impact, but in-lake practices will also be required to meet state water quality standards.

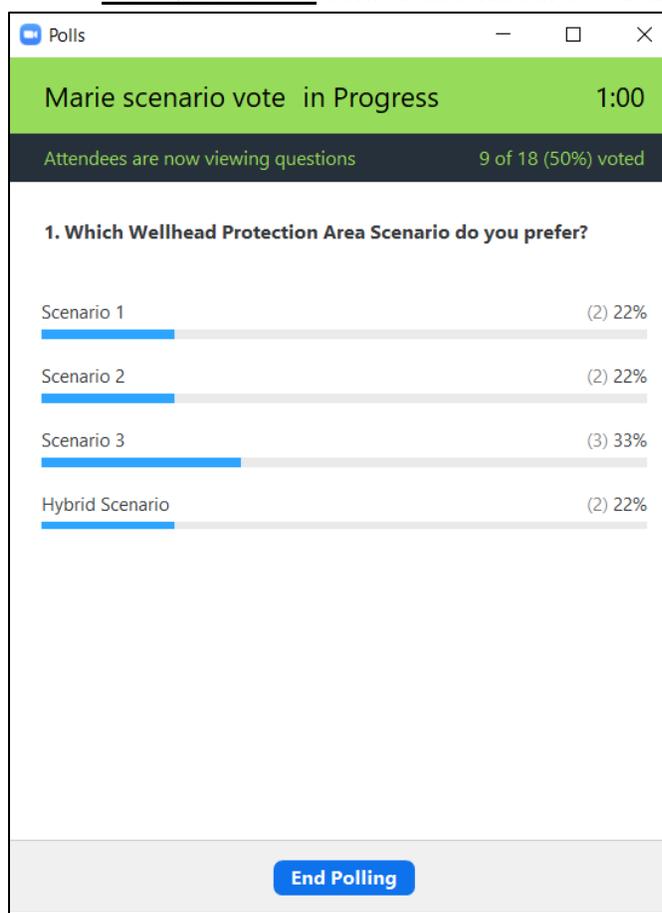
- Stakeholder Discussion
 - Les Pohl (Landowner/Operator): How have the water quality improvement estimations for Recharge Lake been made?
 - Adam Rupe (JEO): Water quality sampling data that has been collected from the lake. Modeling has shown what the estimations are. There are assumptions built into the modeling.
 - Gayle Marsh (Landowner/Operator): Is Recharge Lake used for drinking water?
 - Marie Krausnick (UBBNRD): No, it is not used for a drinking water source. It was built as a recharge project to study how quickly water moves through geology to get to an aquifer. It is now used as a recreation area. People do swim in Recharge Lake.
 - Nathan Pflueger (Pheasants Forever): I am surprised that in-lake work is predicted to reduce nitrogen and phosphorus. Can you expand on that? I imagine land practices also must be put in place to reduce pollutant build-up in lake.
 - Adam Rupe (JEO): There is a legacy of pollutants built up in the lake that can be removed. But yes, land practices must be implemented, otherwise the lake will continue to be loaded with pollutants.
 - Doyle Onnen (Landowner/Operator): How many acre feet of water is usually in Recharge Lake?
 - Jack Wergin (UBBNRD): The lake depth does fluctuate with pumping. I will find that information about acre feet.
 - Doyle Onnen (Landowner/Operator): Is the in-lake work done with a dredging process?



- Adam Rupe (JEO): You can drain the lake to dredge it, or hydraulically dredge, but that is more expensive and not preferred. Ultimately, an engineer would help to design the process.
- Jess Spotanski (Landowner/Operator): What percentage of acres will need BMPs put on them to achieve these goals?
 - Adam Rupe (JEO): We will try to treat as many corn and soybean acres as we can. Some type of BMP will be on most all those acres.

Potential Implementation Scenarios (Marie Krausnick, UBBNRD)

- Marie discussed three scenarios of possible BMP targeting, based on targeting cover crops to wellhead protection areas (53,471 acres)
- Scenario #1
 - Cost share for seeding only – total annual cost: \$427,768 (50% of total acres)
- Scenario #2
 - Stair step payments over 3 years – total cost: \$1,203,096 (50% of total acres)
- Scenario #3
 - Larger upfront payment, but a 5 year commitment – total cost: \$4,812,390 (50% of total acres)
- Poll Question #3 sent to attendees. See below for results:



- Stakeholder Discussion
 - Brent Swartzendruber (Landowner/Operator): Idea for high clearance ground applicator for cover crops.
 - Marie Krausnick (UBBNRD): The NRD may not own it but grant dollars and private dollars can be used to make that happen. Co-ops can help to run it and farmers could get a discounted rate to use it on their properties.
 - John Mittman (Agri-Business): How would this work on continuous corn to have a 3-or 5-year scenario? I do not think it would work well on continuous corn, but it probably would work well on soybeans. Those are the issues I see with scenarios #2 and #3.
 - Marie Krausnick (UBBNRD): There are opportunity and research going on for inner seeding in August or early September. Aerial application is not a great deal because seed is lost. In the next few years, there will be tools for corn.
 - John Mittman (Agri-Business): This could potentially be in the future, but right now I do not see it as a practical method.
 - Gayle Marsh (Landowner/Operator): Another potential issue with cover crops: I have had 15-inch corn rows for 22 years and I feel like if you have different spacing between the crops there will be different machines needed.
 - Marie Krausnick (UBBNRD): What about having a custom seeder or applicator with a drill the day the combine leaves the field? If there is a system for this, then would there be some farmers who are interested?
 - Gayle Marsh (Landowner/Operator): I had a drop spreader mounted on the corn head, but the problem is that there is not enough growth. Snow interferes with harvest. I am not interested in rye grass cover crops because I already have too many problems with rye on my wheat crop acres.
 - Brent Swartzendruber (Landowner/Operator): The best time to get growth started is by mid-August.
 - Andrea Gebhardt (JEO): What of the financial incentive was most appealing?
 - Les Pohl (Landowner/Operator): None of the scenarios are very appealing. They all cost money, and you need to prove to a farmer that this will work before they buy it. They need to see it work. It is a lot of money to spend if you do not see a benefit out of it.
 - Gayle Marsh (Landowner/Operator): I think it would work farther south for these scenarios. But further north, cover crop on corn acres really do not work well.
 - Les Pohl (Landowner/Operator): I agree, I do not see how cover crops would work on my corn. I do not think I could get a growth going in time.
 - Brent Swartzendruber (Landowner/Operator): Since residue is such a problem maybe different cover crops could be selected for the type of farming that is being done. I would suggest the NRD managing the applying rig because when I harvest, I do not want to think about anything else. If the seed is going to



be applied affectively by a machine without me being involved, it is appealing to me and I will pay the cost. The entire field needs to be spread with seeds, and if spots are missed, it is a problem. If seeds are applied effectively early in the year without me needing to be too involved, and it is “streamline”, that would be welcoming.

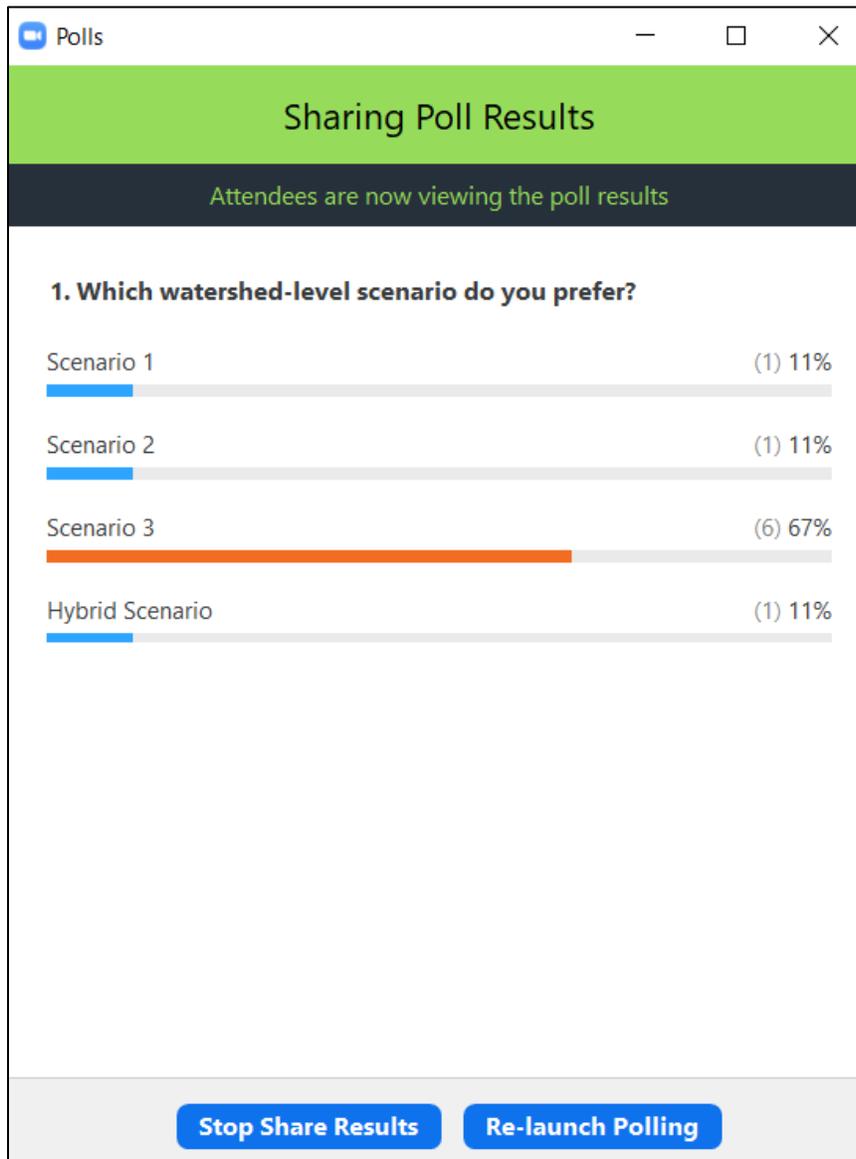
- Doyle Onnen (Land Management): Another problem you run into is time when you harvest. You must think about labor and getting someone who is good at this and during harvest, labor is tight.
- Brent Swartzendruber (Landowner/Operator): I have yet to see where there is a no-till drill that can come in after harvest and do an effective job. I really have not seen one in corn residue, especially. You probably need to look at a 30 ft wide machine which would be very expensive.
 - Marie Krausnick (UBBNRD): The drill we use in project grow is a 26 ft drill that a director in Butler County owns and allows us to borrow it. But it is dry-land corn that is has been used on.
 - Gary Moody (Landowner/Operator): To me, your cover crops do not work well on heavily irrigated ground. Ground preparation is important in this area. The drill probably works better on dry land.
 - Marie Krausnick (UBBNRD): Maybe the program would be a no-till incentive instead of a cover crop incentive in those corn-on-corn areas.
 - Gary Moody (Landowner/Operator): That could be true. Corn on corn no-till is really a problem. You can lose lots of bushels per acre which is an issue sometimes with no-till. No-till holds your soil in place, and strip till is an issue. To me, your cover crops are the corn stalks on heavily irrigated ground. It holds the ground in place. Corn-on-corn no-till is not a guarantee either for holding ground in place.
 - Adam Rupe (JEO): What I am hearing is that scenarios should be structured on what the crop rotation is.
 - Gayle Marsh (Landowner/Operator): I agree with Adam. Cover crops after corn is a flop that happened to me one year. Winter can decompose biomass after corn but cover crops will not work. Cover crops will work on beans. Corn-on-corn is hard enough by itself to grow, and it is very popular. They so till when they do it because they need to turn the earth black.
- Comment from Chat: Maybe continuous corn growers could utilize waterways and filters strips more or grow some beans.

Potential Implementation Scenarios (Jack Wergin, UBBNRD)

- Jack discussed three scenarios of possible BMP implementation, based on full watershed treatment, specifically within the Beaver Creek and Recharge Lake Watersheds (142,340 acres)
- Scenario #1



- Increasing cost share within the target area from 75% (existing) to 85% for buffer strips, grassed waterways, terraces, and cover crops – total cost: \$15,000
- Scenario #2
 - Utilize a “whole field approach” and leverage additional funding from partners to implement buffer strips, grassed waterways, terraces, and cover crops
- Scenario #3
 - Adjust cost share based on potential results, based on location and potential impacts of the practice, to increase targeted adoption of buffer strips, grassed waterways, terraces, and cover crops.
- Poll Question #3 sent to attendees sent to attendees. See below for results:



- Stakeholder Discussion
 - Patty Morner (Landowner/Operator): Is there a possibility down the road for this to motivate landowners to put even more highly erodible soils into crop land? Taking areas that are highly erodible and then going to the NRD for a reward when it does not work. Is there going to be a cutoff saying that there is a statement saying that it is only applied to land that is already crop land.
 - Jack Wergin (UBBNRD): Since filter-strips are very popular, maybe we could give a first-year incentive payment for starting for a 5 to 10-year program and then give you a last year incentive payment. Then it costs more for the producer to install the filter strip.
 - Marie Krausnick (UBBNRD): When you look at these 2 watersheds, most everything is developed. There could be a little area for people to make into more cropland, but it is mostly all accounted for.
 - Patty Morner (Landowner/Operator): I am just concerned this might be a deciding factor in someone starting to farm who might be have been on the fence about it prior to hearing about these incentives.
 - Adam Rupe (JEO): This could appear as cheap insurance, so it could be good to have a safeguard in place.
 - Marie Krausnick (UBBNRD): It was probably more the \$6 and \$7 corn that got farmers to start breaking pasture and making more crop land.
 - Jack Wergin (UBBNRD): We do have producers farming through drainage areas and they get washed-out and sediment gets down into places like Recharge Lake. Getting those in-grass buffer strips might cause some farming issues, so having that cost-share incentive is important to show that we are giving farmers “something for their trouble”.
 - Adam Rupe (JEO): Are there any thoughts on if the NRD would start this more targeted program how they could then outreach to those producers who own land that might be ideal for buffer strips to be in without them feeling like they are being targeted or called-out?
 - Gayle Marsh (Landowner/Operator): My grandfather would go around about 50 years ago to local farmers in person to talk with them. Nothing ever became of it. Face-to-face when it is not planting or harvest season would be a good idea. I like the idea of this, but I am worried about this becoming political with the Waters of the United States starting to mandate this like they did up in Minnesota. Get some of this started before it is mandated.
 - Andrea Gebhardt (JEO): Who is the person to go and have these conversations? Should it be an NRD staff member? Should it be someone like Nathan Pflueger working in a partner agency? Do you want a 319 staff member to come out? They are funded through the state, so they are like state officials.
 - Adam Rupe (JEO): Maybe a co-op person?



- Gayle Marsh (Landowner/Operator): I think we want farmers who are local neighbors to come. No one with a suit or clipboard should come.
- Jack Wergin (UBBNRD): The NRCS staff is out there a lot, and I think they are respected. To highlight these high-risk areas, our current land treatment program is implemented in the eastern part of the NRD where the topography is different. Maybe it is driven by the land characteristics. The land map model we run does not show how people are farming, it just shows soils type and topography. We do not want anyone to be called out like they are doing a bad job, but rather we want to tell them about the characteristics of the land they are working on and how that map model can identify high risk areas. Also, the map will show BMPs that might improve that land which we can show the producers, too.
- Les Pohl (Landowner/Operator): I would like to see crop scouts and agronomists talking to producers about this stuff. These are the people who know the lay of the land and are out there walking your fields. The NRD is looking at a computer-generated map and that is the last person I would want to talk to. I would rather talk with someone who has been out on the land and has seen what is going on. I want to talk with someone who knows as much about the land as I do about any BMPs that I can do to improve the land and make me money in the long run.
- Jack Wergin (UBBNRD): That is a good point. In the past we have had some education things with consultants. For example, for our variable rate irrigation program we have worked with ag consultants who have helped to sell that program.
- Adam Rupe (JEO): That is great idea that I have not heard yet!
- Marie Krausnick (UBBNRD): It would be great to have John Mittman's perspective as an agri-business consultant. How does the NRD engage with agri-business consultants to help promote conservation?
- John Mittman (Agri-Business): You could have a meeting sometime to go through those programs once this is all established.
- Marie Krausnick (UBBNRD): How many times do you have an operator or landowner to approach you to talk about an area that washed or drowns out and is there any money out there that could be put aside to put measures in place to prevent this? Does that ever happen?
- John Mittman (Agri-Business): Yes, we talk about all that a lot. Lots of people do not want to mess with NRD because it is not worth it with the money you are getting. They will practice this to help out, but getting into programs with little dollars is not what they will do.
- Doyle Onnen (Land Management): I will talk a little about the perspective of the landowner or farmer. They will want to know that with Section 319 and Scenario #3 they will not get involved with people at a state level. They want it taken care of with people at a local level. They do not want to get involved with too many people. They do not want someone coming in from the outside.



- Jack Wergin (UBBNRD): I think this Scenario #3 will mostly be run by the NRD. We will estimate how many programs of these we can run over 3 years and then make a 319-grant application. These producers and landowners will mostly work with the NRD or also the NRCS to help set up some of the BMPs.

4. Choose Your Own Adventure / Discussion

Note: The following questions were shown in slides, but were not discussed due to time constraints.

1. How do you convince a landowner/producer to change practices if it does not increase net profit in the short term?
2. How do we change perception of every acre of land needing to be farmed?
3. Who would you prefer to approach you about conservation practices on your property – and why? (NRD staff member, crop consultant, farm manager, neighbor, etc.)

(Email responses to Andrea Gebhardt when you can.)

5. Next Steps

- As always, let Marie, Jack, or anyone from the NRD know if you have additional thoughts, comments, or questions. Feedback is always welcome.
- Summary Report of Stakeholder Group Input
 - Will have opportunity to review/comment
- Public Meeting/Input
 - **March 2021** – either in-person or virtual?
 - Discussion
 - Gayle Marsh (Landowner/Operator): I think you need to have both kinds of meetings. Many producers do not own computers because of their age. Other people would rather do face to face, or the younger generation would prefer virtual. I prefer face to face with handshake.
 - John Mittman (Agri-Business): I prefer a public meeting, too, but I do not know how good of a turnout you will have.
 - Doyle Onnen (Land Management): I think we should have both meetings. I do not know how the turnout will be in the in-person meeting. It might be a better meeting since it is a small group discussion. I think you will have to do both.
 - Gary Moody (Landowner/Operator): I am not afraid of an in-person meeting, but sometimes you might get more input on the virtual meeting. You probably must do both.



- Andrea Gebhardt (JEO): A hybrid meeting is a great idea and is good feedback to have.
- Marie Krausnick (UBBNRD): I think you could pull off a hybrid meeting easily and add in a recorded component and leave it open for a few weeks. Virtual interaction could continue after the event much like the Water Quality Management Plan. There were different stations and those could be recorded for people to watch and comment on after they have taken place.
- Adam Rupe (JEO): If we have an in-person meeting, is there a time frame to follow for that? What dates would be considered? I know planting season is coming up soon. We want to avoid those busy dates.
 - Gayle Marsh (Landowner/Operator): The meeting should be before crops start coming up and field work is starting up.
 - Les Pohl (Landowner/Operator): April 1st is too late.
 - John Mittman (Agri-Business): The meeting should be held by March 15th.
- Jack Wergin (UBBNRD): I think it increases our chances of getting these grant dollars when we say we have had these conversations with stakeholders and landowners and this program is what they want to do.
- **Meeting Date(s) in March TBD**

