

Draft Notes
Agriculture NPS Subcommittee
16 April 2014
Urbana-Champaign Sanitary District

Summary:

- I. Introduction
 - a. A few final decisions are still needed for the rough draft of the agriculture nonpoint section of the nutrient loss reduction strategy (NLRS)
- II. Funding Option Conclusions
 - a. An aggregate tax proposal should not be included
 - b. An environmental utility will require further exploration outside the NLRS, but a short statement of an intention of exploration would be appropriate
 - c. Nutrient trading or tradable permits does not seem feasible at this point
 - d. Growing existing cost share by more formally targeting priority watersheds
 - i. NRCS is willing to adjust rating system to focus more on priority watersheds
 - ii. IEPA will include more information about funding plans
 - iii. Developing a subcommittee in the NRCS State Technical Committee seems like an appropriate venue in which to coordinate watershed targeting
 - e. Making practices more profitable still requires economic research on many BMPs
 - i. Tax breaks modeled after the forest management or filter strip models might be a useful tool
 - f. Marketing certification for “conservation practices” needs to be market-driven, and presently there is not a demand in Illinois for this type of certification
 - g. A revolving fund devoted specifically to agriculture could be a useful funding mechanism
 - i. Utah developed one with \$3 million in seed funding from the state and now has several billion dollars available for improvement projects
 - ii. Not all projects using SRF money would need to be conservation projects, but they should all have a conservation tie-in.
 - iii. IEPA is working to include broader coverage for existing SRF projects
 - h. A tax system, modeled after Minnesota’s Clean Water Legacy Fund has a high funding potential
 - i. Small addition to sales tax, and a portion is devoted to clean water projects. In Minnesota, this number is approximately 33%
- III. Regulatory elements
 - a. Requiring soil labs to report data does not seem useful at this time
 - b. Voluntary conservation certification received support to explore further to identify what additional information is needed
 - i. We should poll other states and determine their level of success with these types of programs
 - 1. Minnesota’s voluntary program

2. Kentucky's regulatory program
 - ii. An exploratory committee (Agricultural Water Quality Certification Exploratory Committee) should be developed to inquire into this—the Council of Best Management Practices indicated some interest in leading this idea. Should explore:
 1. Certification programs in other states
 2. Incentive options
 3. Who would certify and how
 4. Regulatory certainty
- IV. Outreach and Education
- a. Outreach and education are vital to the success of the NLRS
 - b. A mechanism is needed to help producers see results of their efforts
 - i. Programs like N-Watch are a good place to start
 - ii. As technology improves for N and P monitoring of tile drained effluent, producers will be able to see the impact of BMP implementation
 - c. Efforts should include Extension, SWCDs, CCAs, NGRREC, and KIC, and practices should potentially be included in the Agronomy Handbook
 - d. There is already some work being done to include nutrient BMPs in continuing education requirements for CCAs
 - e. A committee should be developed to pursue this—tentatively the Outreach and Education Steering and Coordinating Committee
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Complete Notes:

- I. Introduction
 - a. Goals for nutrient reduction strategy: 45% reduction
 - i. Looked at voluntary strategies hit about 15% reduction around 2025
 - ii. Intermediate goal—15-20% by 2025 depending on credit for things already accomplished
 - iii. Other states: haven't got down to specific details, but have process in place to reach goals over x number of years
 - iv. How to hit the first 15%?
 1. Current programs
 2. How to verify that we'll hit this goal?
 - v. To fully hit 45% would need \$700 million
 - b. Methods:
 - i. Funding
 - ii. Regulatory elements
 1. Blend of voluntary and regulatory?
 - iii. Increased education and outreach
- II. Funding Ideas—strategy to pursue these ideas, not necessarily final decisions made in Nutrient Loss Reduction Strategy (NLRS)
 - a. Aggregate Tax
 - i. Tax on sand/gravel/on aggregates

- ii. Original idea was to generate funding for SWCD. Goal was to generate \$30 million in funding, looking at 25 cents a ton. Legislature wasn't interested in supporting this measure.
 - 1. Justification of the idea is that money would go to SWCD for cost share. Tax would be on product, but money would go to practices that would increase demand for product
 - 2. Also, taxes on natural resources and SWCD is tasked with protecting natural resources
- iii. Thoughts:
 - 1. Dislike proposing tax when taxed population aren't in room
 - 2. A bit of a stretch, but felt demands matched closely enough
 - 3. Legislatures were interested in local government, who are primary users
 - 4. Don't see connection between N and P
- iv. Conclusion: not pursue in NLRS
- b. Environmental Utility
 - i. Idea stage and would not be in place by May 7, but the idea of EU would be a tax/fee that would be spread across households. This would go to steering/directing committee. IAWA would like to discuss in NLRS. More of a public-private set-up and steering committee would determine how money would be spent. Would probably be outside state government. Main idea is that funding would be directed to practices that would be reducing nutrient runoff and pollution
 - ii. Thoughts:
 - 1. Most innovative thing on list. It tries to take a different approach. If was truly local and local people were really vested in it, those resources would be best utilized in that way
 - 2. Doesn't seem like it would be local. If we polled the general public, would nutrients come up on people's radar? How could we justify this concept to the general public?
 - 3. Concept is pretty fuzzy. Objective is clear: everyone pays and distributed to general environmental projects.
 - a. But details on who make decisions, what scale projects are on, etc. are fuzzy.
 - b. IEPA open to mention the concept in document, but don't want to be a lightning rod in NLRS, would like to have discussion outside this document
 - 4. Couldn't be local, because not enough money is in local areas
 - a. Could include multi-stakeholder
 - b. But maybe a watershed based group to determine what projects in each area that need to be pursued
 - 5. Conclusion: further exploration, especially outside NLRS
- c. Marketable certificates of conservation
- d. Tradable permits/nutrient trading
 - i. This is problematic because difficult

- ii. Fundamental—must meet own target first before selling credits, and producers would need to meet 45% before selling credits
- iii. In agriculture can trade credits
 - 1. Example of this: Fisheries have a fishing target; fishing concern can sell the permits if owner doesn't want to pursue. Done in atmospheric deposition, also
 - 2. But requires a limit, measure limit, allocate permits, and need some flexibility
 - a. Example: in point source, old plants couldn't meet conditions, but new could, so could buy credits or upgrade
 - b. Easier to see in point source because regulatory framework, but in NPS systems lacking targets
- iv. In Wisconsin, dischargers could work with producers in watersheds to see if they can share costs to improve water quality
 - 1. In point source strategy, one line saying "working toward this goal"
- v. Can't double count point source credits to agriculture
- vi. Always question with this is location: upstream, downstream. Example, if point source at the top of watershed, can trade with someone downstream?
 - 1. For example, can Chicago at the top of the watershed trade with anyone?
 - 2. February discussion: depends on goal. If trying to improve Gulf of Mexico, then doesn't matter, but if looking at local water quality is more complicated
- vii. Great Lakes Commission is working to do some trading in Fox River in Wisconsin
- viii. Conclusion: skip it?
 - 1. Well, could mention as a future direction if a cap were introduced agriculture
 - 2. Perhaps one line, saying an option if conditions are right in the future.
- e. Growing existing cost share or improved targeting in priority watersheds
 - i. Only have so much cost share money—NRCS, DNR, SWCDs—can spread everywhere or can really focus on where greatest reductions are needed. Achieving efficiency with existing funding
 - ii. While priority watersheds in NLRS, but haven't formally made connection in agriculture. Something we want to focus?
 - 1. Focusing cost share to priority watersheds
 - 2. What are our priority watersheds?
 - 3. Good idea—but still a big gap in cost-share
 - a. Absolutely, not one of these solutions will meet all the needs
 - 4. Modify statement: state can modify targeting, but NRCS can't really change that

- a. NRCS can adjust rating system to steer a higher percentage in certain directions
 - i. Yes, NRCS can do that. There are some programs that aren't specifically related to water quality. But don't have a problem targeting funds to priority watersheds.
 - ii. Think we need to go deeper into priority watersheds and look at landscape features, rank those to look at biggest amount of benefit
 - iii. Also option for regional initiatives, and that's something we'll lobby for—look at Illinois and Iowa, looking at states contributing to Gulf of Mexico hypoxia
 - b. New Farm Bill has priority watershed targeting
 - i. Upper Mississippi
5. Conclusion: include in NLRs, but what are priority watersheds?
- a. What are we looking at—in state water quality, waters that leave the state, or both?
 - i. Trying to come up with approach that takes more than loading into consideration
 - ii. Or can just use loading if everyone is favor of that?
 - b. When we first started talking about priorities the policy working group said wanted to think about local water quality, probability of success, protecting high quality streams, etc. but details are difficult
 - i. IEPA put a model out there, and haven't got a strong positive response yet
 - ii. Second version seemed good—some version of this seemed useful
 - iii. Check in with Policy working group on this
 - iv. But would like to retain the IEPA and DOA priority watersheds because already done work there, and we want to build on success
 - v. Some definite answer
 - vi. If wanted to look at Environmental Utility, would need to start by raising local interest and looking at local benefit
 - vii. Find some way of scoring where practices will have the most benefit
 - c. Room for a few more sentences in agriculture section about how prioritize cost-share?
 - i. NRCS will contribute a summary about that
 - 1. PowerPoint has details on how done that in the past
 - 2. NRCS adjusts rankings on a yearly basis

- ii. IEPA will identify funding plans
 - iii. Practices should be targeted to tile-drained and non-tiled, practices are specific to land use—would need to be targeting to landscape within watersheds
- d. Current committee or mechanisms that allows various agencies to coordinate on multiple levels? Do we need to think about this to make sure everyone is meeting together and discussing regularly?
 - i. Yes, seems that there is a need for this.
 - ii. Could the NRCS State Technical Committee address this?
 - 1. That would be a good mechanism
 - 2. Include that in the NLRS
 - 3. Can have subcommittees in the State Technical Committee
- f. Create a funding subcommittee?
 - i. How can the NLRS create a work plan to address these shortfalls?
- g. Making practices profitable
 - i. Broad practices—e.g. 80% of tile drained acres if need good reduction, or change in fertilizer application. Needs to make economic sense. So, things like grassed waterways, etc. that will need cost share. What steps can be outlined in the plan to help get us there? Some applied research is needed
 - 1. Nutrient Research and Education Council is doing some of this research—what nutrient reduction can achieve
 - 2. Include summary of what's already ongoing, do you feel that's sufficient, or is something missing? Any barrier might hit?
 - a. Whatever we come up with needs to include a strong outreach and education to reach people
 - b. Yes, the cost savings need to be where the education side: ex. Many acres don't need P all the time. Need to include these or the real cost of the nutrient reduction is really going to be much higher. Already view some of these practices are profitable, but need to identify targeted areas
 - 3. Anything else needed to reach this goal?
- h. Another potential way to think about making practices profitable would be tax breaks. Filter strips tax breaks, is that working?
 - 1. Was popular in the beginning, but fallen off a lot
 - 2. A lot of people see process of getting approve as a burden that isn't worth it
 - 3. Add more practices, but could add in. Would be legislative action.
 - a. Forest management plan tax breaks have been very effective

- b. 1/6 break from forest management
 - c. There was a consequence in addition to tax break—land would be taxed at market value
- i. Other thoughts:
 - i. Certificate for “conservation certificate”
 - ii. Must be market-driven—other examples, but asking if NRCS would certify things as “environmentally clean”. European markets want certification that things are grown with good environmental principles. Or grass-fed beef certification and would promote good pasture practices.
 - 1. Not sure how to include in strategy, but should be something to pursue
 - iii. Would be another tool in toolbox
 - iv. Wonder how much of agriculture pollution is coming from food products?
 - 1. In MN is things like wines and cheeses, specialty crops that are seeking this designation
 - v. Large pilots in this area, so mentioning this is probably fine, but it isn’t additional money flow. More about capturing a market
 - 1. Who would be driving this?
 - vi. Process would be onerous because of co-mingling
 - vii. Not really funding source, but is an incentive
 - 1. For example, would need to identify what market tracking
 - viii. Conclusion: maybe list as a possibility
 - ix. Revolving Fund:
 - 1. Utah has an agriculture revolving fund, started by legislature seeding program for agriculture loans—interest money comes back to fund, and fund grows. Went from 3 million from seed money, now is several billion
 - a. Don’t know if this would work for pollution trading, but department of agriculture handled, worked with districts to implement funding, and worked with NRCS to jointly fund projects
 - b. District did take a small fee for running
 - c. Department of Agriculture took care of dedicated source of revenue
 - d. A program that could generate a lot of funding
 - e. Could tie conservation to a required item to get loan, but money could be used for buildings, etc. as long as there was a conservation tie-in
 - f. Something that IEPA, Farm Bureau, etc. could promote
 - g. Regulatory Certainty
 - h. Comments:
 - i. IEPA has put forward legislation to include everything for clean water, and some states to address agriculture Might contemplate that a

bank in a certain county could manage funding in area, but this is one potential use for existing SRF

- ii. Utah had both types of SRF—set up so not competition
- iii. Conclusion: all portions of NLRS should include portions of details about SRF

j. Other comments:

- 1. Combine 319 funds with NRCS funds. This could provide more incentives, and NRCS could provide different funding rates for different practices
- 2. Find ways to combine programs to support bigger/more expensive projects
- 3. Can't bundle federal with federal, but could combine state and NGO money
- 4. Something to bring up with State Tech Committee
- 5. Currently process is on landowner, but NRCS is proposing a more formal process?
 - a. Yes
 - b. Turn key
 - c. Usually district can manage because can generate those documents for funding, etc.
 - d. Combine money to spread further, and pick the highest priority projects, and increasing agency efficiency
 - e. Next meeting is July 9, 2014—would this be appropriate, how form a subcommittee?
 - i. Call Christy and ask to be put on agenda

k. Minnesota Clean Water Legacy Fund

- i. Sales tax for 3/8 of a cent
- ii. 33% goes to clean water
- iii. Could generate more than a utility
- iv. Temporary—10 years
- v. Was a constitutional amendment

l. Conclusion:

- i. Different types of funding:
 - 1. Taxes and utilities
 - 2. Targeting existing funds
 - 3. New market incentives
- ii. Make sense to split these tools out in this section

III. Regulatory Elements

a. Soil data reporting by labs

- i. Baseline data for soil nutrient levels
- ii. Conclusion/endpoint: something we think is needed?
 - 1. Some issues: labs don't know how many acres those samples represent
 - a. Would have to include that question submittal form

- b. But lab doesn't have background information on that site
 - 2. Some issues with this, such as lots of labs
 - a. Would need to use tract numbers
 - b. Unclear how to pull this off
 - c. All these labs are private entities. They are not part of Illinois land grant mission
 - 3. Look at NPS challenges for P—would education for growers accomplish the same things?
 - a. Perhaps, if the major question is soil P levels need to go down
 - b. Part of getting more data, and application side. Sales are imperfect data at best
 - 4. Need a broader data set than that
 - 5. Something specific that could improve the data for the state?
 - a. Talked to retailers. Why not include the soil data in those forms? Some education with the retailers, that might generate big data sets over time
 - b. An example of where these data would be really useful would be say Lake Erie, because very controversial over where phosphorous is coming from. Paper just came out that demonstrated this, so more information on that would be helpful, but is that useful in Illinois?
- b. Conservation certification
 - i. Comprehensive nutrient management plan:
 - 1. Kentucky has a program like this that is regulatory
 - a. 6 types of operations with a list of BMPs that are selected
 - b. Department of Agriculture runs the certifying in KY?
 - i. Use accredited certifier or subgroup of interdependent certifiers
 - 2. Additional consideration. Many of the things we discussed could be hooked to other things, for example, responsibly grown product from a certified farm
 - ii. Voluntary approach:
 - 1. Minnesota people are all excited about this. Excited about the marketing recognition, voluntary nature, and the regulatory certainty. Unsure bullet proof method that could be applied to all states.
 - 2. Regulatory certainty
 - a. Would have to write that exception into the rule/law
 - b. Would need each agency involved to sign-off on each exception
 - c. Not regulatory relief, is exemption to new regulations
 - i. Yes, but would need to codify this in new regulations

- d. Government doesn't have a good memory. Institutional memory is lacking.
 - e. However, the threat of regulatory action—ex. Adding a species to endangered species list, and producers build habitat, etc. there is certainty that what they've done is good enough. Or CAFO requirements—for example, producer develop CNRP and there is a runoff event, they wouldn't be targeted over those events, because working on or have a way to address problem
3. If not a voluntary approach, if regulatory, then the question is: how many people does it take to run the program?
- a. If regulatory need then would need state people to run
 - b. If voluntary, could work with anyone
4. What is intent of this question?
- a. That's what we're asking; how far do you want to pursue it?
 - b. A non-monetary option: what are options for getting results?
 - i. This seemed like a type of approach that might include several strategies to address nutrient losses
 - ii. Certification process could provide some benefits
 - iii. Or could make mandatory,
 - c. But really is a way of creating a framework that might achieve higher levels of adoption. So our question is: is this something we should look at in the NLRs, something move forward quickly?
 - d. MN has done this as a pilot program, voluntary, but the commitment was done before strategy. They were already doing certainty program, this worked into their NRS well. We're coming from a different direction, and we could customize for strategy. Is it worth mentioning in document and move forward in the future?
 - i. Concept seems like a good one, devil in the details. Regulatory certainty depends on DOA and IEPA. Like the voluntary piece. Regulatory isn't only piece of puzzle. There is litigation piece, too.
 - e. Conclusion: reasonable concept to explore, but what would it take to explore more?
 - i. Minnesota developed an advisory committee, and they met for a long time. Hired staff to convene this program. Would be resource-intensive on the state level to get off ground. Would need a group set up to meet over the

years to decide what to do, also they have more nutrient criteria on the horizon. So, there is more motivation and driver for producers to get certificate.

- ii. Minnesota also has the money. And they have pressure from USEPA to adopt nutrient criteria, interest from USEPA and governor to adopt certainty program, while IL doesn't have those conditions
- iii. Like the idea of the committee. Would want to know how it's going in MN. We could do survey of what other states are doing, learn from their experience.
- iv. Fine with a few lines about exploring in the future. What would the group think if Council of Best Management Practices and someone from Department of Ag come up with a proposal on how to do this?
 - 1. Committee inclusive enough?
 - 2. This seems like the best we can do at this point

IV. Outreach and Education

a. Smartphone accessories for testing water quality (making nutrient loss tangible)

- i. Farm Assist (?)—SWCDs
- ii. Farm Bureau is supportive of this type of education. How to do this testing, what do the numbers mean?
 - 1. Could link to certification education
 - 2. Could be an incentive. Help with doing monitoring
 - 3. All commodity organizations have to do some outreach and education about why doing NLRs, what that means, why important
 - a. What include in plan?
 - b. Our industry is developing 4R for Illinois and is working with land grant universities, doing education with CCA board for curriculum of this. We can ask retailers to adhere to this, and then education about why have 4Rs, research, etc.
 - c. Much of this practiced every day, but not really looked at water quality
 - 4. For example, during wildlife area development we taught implementers how to measure change. If someone doing these practices, want to know, is it working:
 - a. Sensors, monitoring strategies, etc.

- b. 4R is a starting point, a way to focus, and the education component is critical. We prefer to not have to tell farmer what doing, rather a comprehensive approach
 - i. CCA board wants to “brand” it, so to speak, because abiding by principles
 - c. Land grant development, could put in Agronomy Handbook?
 - i. Potentially
 - d. Need to include Extension, SWCDs,
 - i. Ohio has developed a standards document, but we want to make Illinois’s a little more bottom up
 - 5. Conclusion:
 - a. Education and outreach is important
 - b. Something for producer education to see results
 - c. Something with CCAs and certification
 - d. 4Rs
 - e. Can break into two components:
 - i. What already doing—need to take credit for what doing
 - ii. And what we’re planning to do
 - b. Technical advisors continuing education requirements
 - i. Community/Junior college outreach
 - ii. We (Council of BMPs) can develop language for continuing education options
 - iii. Already are some units that provide those credits
 - iv. Things to think about would be who doing it, when, how, etc.
 - c. Also talking about how we’re doing this on Federal level, because production is not part of Extension
 - i. On the Hypoxia task force level is a push to start engaging land grant universities. At the last couple meetings that is becoming a focus. Finally seeing whole issue of hypoxia becoming more important to land grant university administration. Extension on state levels will see this programming
 - ii. How go to congressional delegation and let them know that this piece isn’t in it, and states can’t use federal monies to address the problem. This would improve federal funding it, and also improve education