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ROBERT L. COWLES
Wisconsin State Senator
2nd Senate District

JOINT COMMITTEES:
Audit Committee, Co-Chair

Testimony on 2019 Senate Bill 91

P3: Pollution Prevention Partnership ~ Wisconsin's Trading Marketplace

Senator Robert Cowles
Senate Committee on Natural Resources and Energy – March 19, 2019

Good morning committee members, I appreciate your time today to hear testimony on 2019 Senate Bill 91 relating to third-party water quality trading. This bill named P3: Wisconsin's Trading Marketplace, creates an opportunity to merge more advanced land and water management with some financial stability for farmers and other nonpoint sources dealing with the uncertainty of today's markets. P3 stands for Pollution Prevention Partnership. Senate Bill 91 promotes more water quality trades by introducing a third-party to create a marketplace for trades and to produce credits for nutrient reduction.

Senate Bill 91 has strong bipartisan support, with 50 legislators across both parties, including several members on this committee. In addition, the bill has the support of groups representing agriculture, business, local government, and natural resources.

The goal of Senate Bill 91 is to create water quality improvements. By introducing a third-party clearinghouse to help facilitate water quality trades, we can achieve more by partnering with nonpoint sources to reduce nutrients and sediment from reaching the receiving water than is possible under the current regulatory structure focused solely on point source dischargers. The Clean Water Act was not designed to regulate nonpoint sources, but the Environmental Protection Agency (EPA) has long recognized the need to incorporate all actors into any workable water quality plan. That is why in 2003 and again earlier this year in February the EPA has allowed and encouraged increased flexibility in meeting national water quality effluent limits though pollutant trading. By using the standards implemented through Wisconsin Pollutant Discharge Elimination System (WPDES) permits, Senate Bill 91 can create a market-based solution that benefits both point and nonpoint sources while achieving the goal of improving water quality.

Under these mutually beneficial water quality trades, nonpoint sources, such as family dairy farms, would reduce pollutants and run-off from entering a waterbody through the use of various technologies and practices. This reduction would be quantified as credits through a central clearinghouse and made available to be purchased by a point source, such as a municipal wastewater treatment plant or cheese factory, to attain compliance on their pollution reduction requirements in their WPDES permit. In this transaction, the nonpoint source receives an economic incentive for the sale of the generated pollution credits. Creating incentives to supplement unstable commodity market prices while reducing water pollution would be a welcome change to family farms throughout the state. Since nonpoint sources are not required to employ nutrient management practices unless cost sharing is provided, trading is one way to encourage all the pieces of the water quality puzzle are included.

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The concept of water quality trading as a point and nonpoint partnership is not a new idea, it exists today under current law. However, there are challenges in the current pollutant trading process which has left Wisconsin with only a couple of handfuls of trades. To simplify the current challenges executing trades, cheese factories and paper mills are in the business of making cheese and paper, and not situated to unilaterally find an unregulated dairy farm in a stringently defined area to identify practices the farm can employ to reduce pollutant runoff. Additionally, farmers are in the business of agriculture and are not always financially capable of carrying the risk associated with a point source's WPDES permit requirements on their own.

Senate Bill 91 alleviates these burdens and creates an independent marketplace for the generation and sale of pollution credits. The marketplace will follow the economics of supply and demand. Credits will be generated and priced due to the demand in a more flexible hydrologic area. Liability would be reduced by the verification of the generated credits through the clearinghouse to give point and nonpoint sources alike peace of mind. Furthermore, water quality trades under the P3 Marketplace are designed to always result in a net benefit to water quality. Trades must exchange the same pollutant or the same water quality standard. For a trade to be facilitated, pollutants will have to be avoided at a minimum of 1.2 to 1 ratio to generate a credit. This ratio not only ensures a net benefit unattainable under the current regulatory structure, but also considers the uncertainty inherent in landscape practices. Conditions such as slopes and soil types could require different credit ratios that are quantified through tables and modeling, currently in use by the Department of Natural Resources (DNR). The ratios are required to guarantee compliance under the point source permit.

The trading marketplace created in the bill works through a third-party clearinghouse. This clearinghouse would be required to contract with the Department of Administration (DOA), in consultation with the DNR, to be the entity responsible for facilitating a financially stable credit market between WPDES permit holders and nonpoint source dischargers. Additionally, the clearinghouse would be statutorily responsible for maintaining a bank of certified credits, selling credits, establishing methods for determining the quantities of credits produced through modeling and scientific protocols, with approval from DNR, executing contracts with the parties to undertake pollution prevention practices and services, maintaining a centralized registry on an internet-based platform to simplify transactions, and ensuring that transaction costs are minimized. The contract for the clearinghouse would run through DOA, like any other procurement contract, but would require that the clearinghouse is capable of facilitating contract terms and conditions, hold a reasonable amount of financial reserves, insurance, a reserve credit pool, have a developed fee structure, and are in consultation with DNR about the terms of their contract.

Additional third-party brokers, not the central clearinghouse but independent brokers, would also be facilitating credit sales. They could establish themselves anywhere in the state. These brokers are statutorily required to be approved individually by the DNR and are required to notify and report to the clearinghouse with the information necessary to a trade to help maintain the operation of the internet based registry. These independent brokers will be a major player in encouraging that the marketplace be functioning statewide.

Passage of this legislation would be an important step forward in advancing water quality in Wisconsin. Third-party trading could save some communities from passing multi-million dollar wastewater treatment plant upgrade costs onto residents for little water quality improvement, help keep manufacturers and food producers open and operating, and, perhaps best of all, help family farms with supplemental income. Despite any farmer's best intentions, the economic threats the dairy industry face often make it economically challenging to deploy new manure management technologies or require land to be removed from production to practice better land and water stewardship.

Thank you for your time today and I would be willing to take any questions you may have at this time.

JOEL KITCHENS

STATE REPRESENTATIVE • 1ST ASSEMBLY DISTRICT

Testimony for the Senate Committee on Natural Resources and Energy
Senate Bill 91
Tuesday, March 19, 2019

Thank you Chairman Cowles and fellow committee members for holding a public hearing on SB 91, legislation that will reduce the amount of contaminants in our state's water by creating a system for buying and selling pollution credits through a third-party central clearinghouse.

I would first like to thank Senator Cowles and Senator Petrowski, for all the hard work they put into this bill and for their testimony in explaining the technical aspects of this very complex and intricate proposal.

I am confident that their thorough testimony has given all of you a better understanding of what this legislation will actually do, so rather than repeating the same information you have already heard, I'm instead going to focus on what this bill signifies to me, and that is hope and optimism.

In this new era of a divided government, we have been hearing a lot of talk about reaching across the aisle and the importance of bipartisanship, but, for the most part, the only thing these words have amounted to is empty rhetoric.

But, as Senator Cowles mentioned earlier, we have a strong bipartisan mix of more than 50 lawmakers who've signed on as co-sponsors to this bill. I am hopeful and optimistic that SB 91 will be proof that the Senate, Assembly and Governor can work together when it comes to bettering the lives of all Wisconsinites. Politics should not influence something as important as protecting our natural resources and ensuring all of our citizens have clean water to drink.

I am also hopeful and optimistic because this legislation follows my philosophy of including all sides in the conversation so everyone has skin in the game. In Kewaunee County we have made significant progress in addressing our groundwater concerns through this approach. We need to continue to work toward these partnerships that lead to all parties – including the state as a whole – benefiting and reaching the desired results.

I think that is one of the main reasons that groups representing agriculture, conservation, business and local government are all putting their support behind this bill, which is designed to improve water quality, save taxpayer money, provide struggling family farms with supplemental income and keep manufacturers open and thriving. It truly is a win-win for everyone.

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JOEL KITCHENS
STATE REPRESENTATIVE • 1ST ASSEMBLY DISTRICT

But, more importantly, we have an obligation as lawmakers to protect our constituents and neighbors by doing everything in our power to make sure they have access to clean water. Clean water is essential to our economy and to the very health of our citizens.

That's why it is so critical that we act with urgency and don't sit on our hands. We have some meaningful legislation here that will help reduce pollutants in our water, boost the economy and strengthen the farming industry, and it appears that many others – like Clean Wisconsin, Wisconsin Manufacturers & Commerce and the Dairy Business Association – see that same value. We have a real chance to make some substantial headway in safeguarding our water and the health of our residents, and it would be foolish to let politics get in the way of this bill becoming law. I know that's what my constituents expect of me, and I'm sure yours feel the same way too.

For everyone watching and listening today, I also want to let you know that if SB 91 passes, we can't just pat ourselves on the back and rest on our laurels. While this legislation will help protect our state's water, it's not a magic bullet that will solve all our problems.

However, I am hopeful and optimistic that this is not the end of our efforts this session to improve water quality, but only the beginning.

Thank you for taking the time to listen to my testimony, and I ask that you please consider supporting this bipartisan bill. I will now answer any questions if you have them.

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Senate Committee on Natural Resources & Energy

2019 Senate Bill 91
Pollution Credit Trading Clearinghouse
March 19, 2019

Good morning Chairman Cowles and members of the Committee. My name is Todd Ambs, and I am the Assistant Deputy Secretary for the Wisconsin Department of Natural Resources (DNR). Thank you for the opportunity to testify on Senate Bill 91, which would authorize the establishment of a central clearinghouse for the trading of water pollution credits.

Current law authorizes the buying and selling of credits to meet required water quality standards. Point source dischargers – such as municipal waste-water treatment facilities or industrial waste-water dischargers – must adhere to specified discharge limits for pollutants, including phosphorus, under the terms of their discharge permits. To meet those limits, point sources may have the option to buy credits generated by nonpoint sources – such as farms. Those credits are generated when nonpoint sources employ practices that reduce the amount of phosphorus entering surface waters.

Trading water pollution credits is mutually beneficial to both point and nonpoint sources of discharge. Trading allows a point source discharger to meet their permit limits without potential major investments in treatment infrastructure at their facility. Nonpoint sources have an opportunity to access a source of revenue by selling generated credits. Beyond the monetary benefits, a reduction in pollutants entering a waterbody results in improved water quality, which benefits everyone.

Senate Bill 91 provides an opportunity for a third-party to establish a clearinghouse to facilitate these types of trades. The clearinghouse would be established via contract with the Department of Administration, in consultation with DNR. The bill specifies that the production and purchase of credits must result in an improvement in water quality and must take place within the same applicable hydrologic area.

The Department sees the value of a clearinghouse in assembling available credits to offer to buyers who may find it challenging to find their own trading partners. This type of mechanism would be a welcome addition to the water quality compliance toolbox.

DNR appreciates having had the opportunity to work with Senator Cowles' office during the development of Senate Bill 91. The agency has identified some areas where technical modifications may be warranted to ensure operation of a clearinghouse will mesh with the Department's permitting authority and Clean Water Act responsibilities. In this Year of Clean Drinking Water, we look forward to continuing to partner with the authors of this bill as we work toward our shared goal of healthy waters in Wisconsin.

On behalf of the Department of Natural Resources, I would like to thank you for your time today. I would be happy to answer any questions you may have.

P3: Pollution Prevention Partnership Wisconsin's Trading Marketplace

In Support of testimony on Senate Bill 91 before the Senate Committee on Natural Resources.

Newtrient LLC
Steven P. Rowe, CEO
March 19, 2019

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Maryland & Virginia Milk Producers Cooperative Association
UDA United Dairymen of Arizona
Select Milk Producers, Inc.
DFA Dairy Farmers of America
Prairie Farms
NMPF NATIONAL MILK PRODUCERS FEDERATION
SOUTHEAST MILK

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2

Current and Future State of Agriculture

Current	→	*Future*
Increased regulatory pressure on farms	→	Positively incent environmental improvements
Innovative technologies and practices that benefit the environment exist, but are not economically viable	→	Improved economics of environmental technologies and practices
Increased consumer appreciation of food, reduced trust in agriculture	→	Agriculture (Dairy) is part of the solution

NEWTRIENT

3

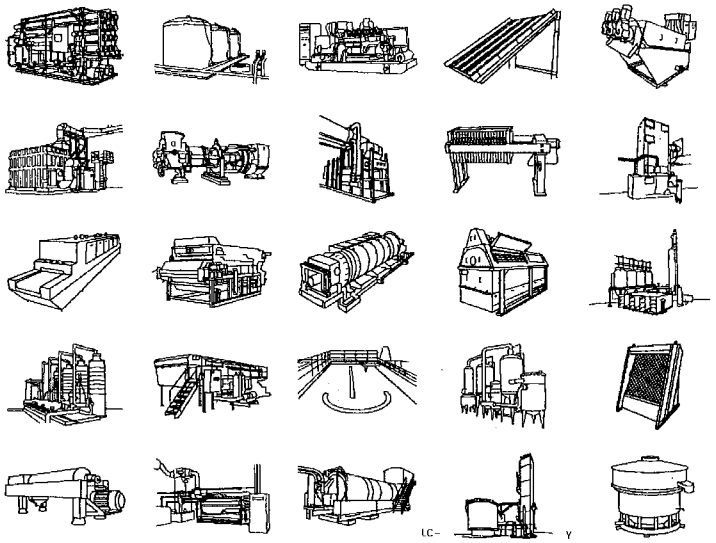
NEWTRIENT'S MISSION

Reduce the environmental footprint of dairy and make it economically viable to do so.

Promising Technologies/Practices are Available to Manage Manure and Recover Nutrients

Technology Types

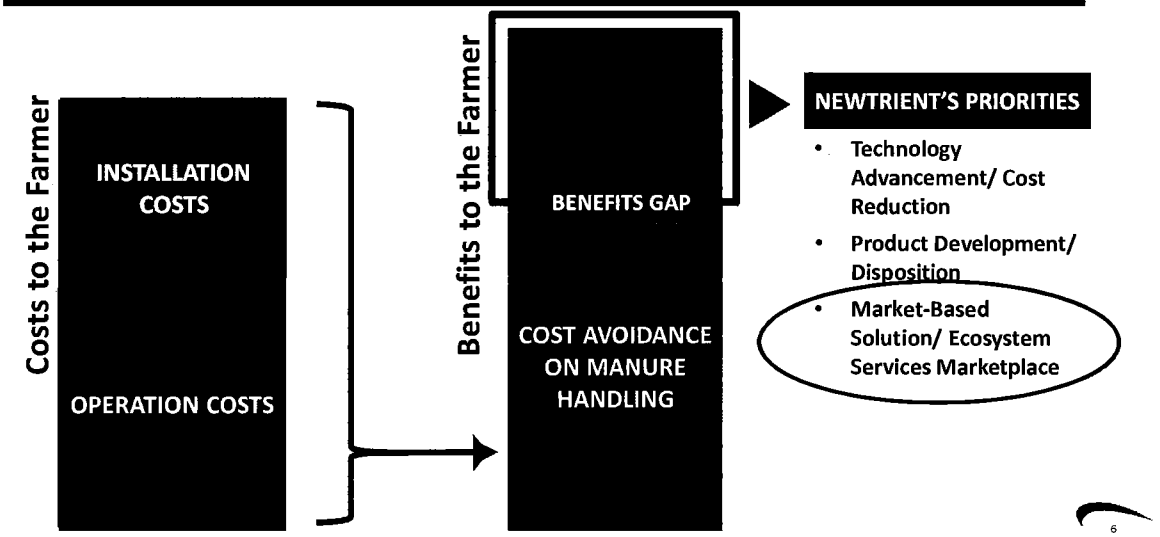
- Coarse solid separation
- Fine solids separation
- Membrane separation
- Energy generation
- Fiber drying
- Bedding recovery
- Other technologies



NEWTRIENT

Our Focus is *Now* on Closing the Benefits Gap

Annual Cost and Benefits Gap of Technology & Practice Adoption



Ecosystem Services Markets Surging Globally

"Global market for ecosystem services surges to $36-42 billion in annual transactions"

"over 550 programs are active worldwide"

"watersheds has the largest volume of global transactions, with $24.7 billion in transactions annually"

UCLA nature sustainability The global status and trends of Payments for Ecosystem Services; James Salzman, Genevieve Bennett, Nathaniel Carroll, Allie Goldstein & Michael Jenkins https://www.nature.com/articles/s41893-018-0033-0

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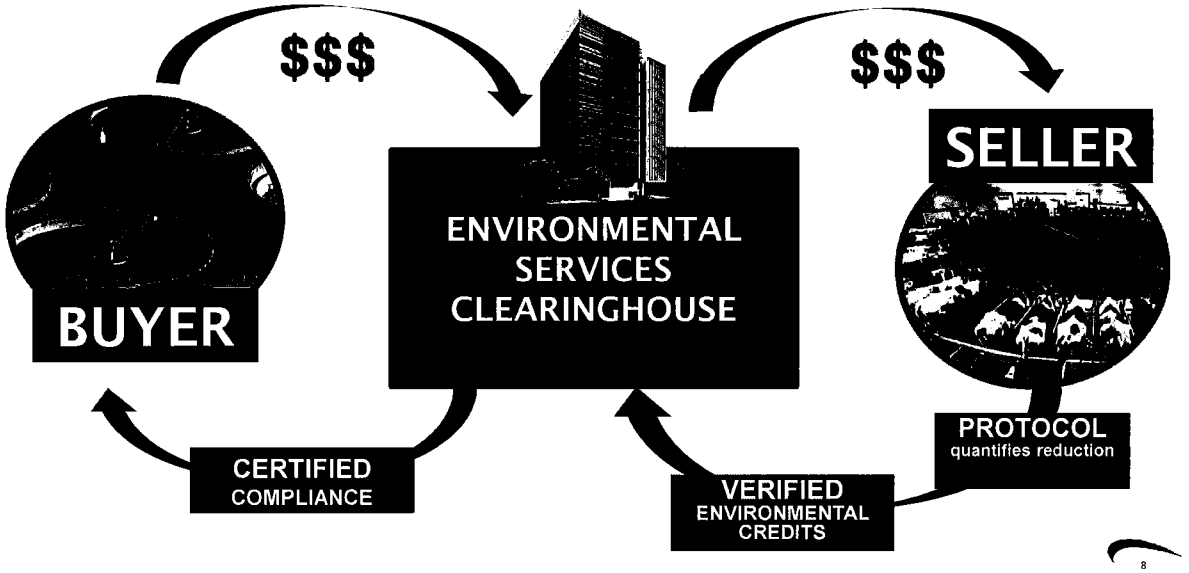
How do Market-based solutions flourish?



8

What types of ESM program opportunities exist?

ECOSYSTEM SERVICES

- SOIL HEALTH
- CARBON SEQUESTRATION
- GHG REDUCTION
- RENEWABLE ENERGY
- WATER QUALITY
- WATER QUANITTY
- AIR QUALITY
- BIODIVERSITY
- WEATHER RESISTANCE
- RECREATION

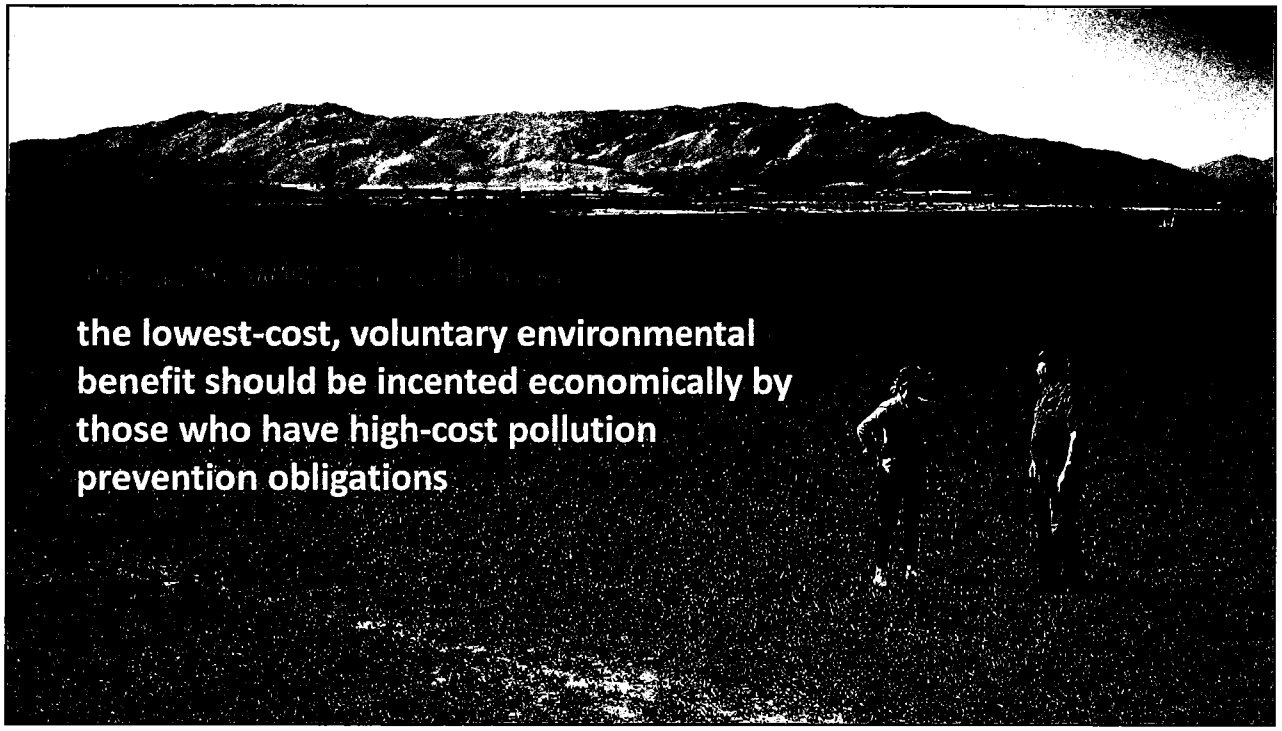
BUYERS (REGULATED)

- MUNICIPALITIES
- PERMIT HOLDERS
- STATES

BUYERS (NON-REGULATED)

- NON GOVERNMENTAL ORGANIZATIONS
- PHILANTHROPISTS
- FOOD AND BEVERAGE COMPANIES
- COMPANIES WITH CORPORATE SOCIAL RESPONSBILITY (CSR) GOALS
- INVESTORS
- ...ANYONE INTERERESTED IN ECONOMICAL & ENVIORNMENTAL SOLUTIONS

9



Current Water Quality Programs in Wisconsin

Wisconsin has built a **strong foundation of water quality programs** to protect and enhance the state's water.

WI WATER QUALITY PROGRAMS

Adaptive Management (AM)	**Phosphorus compliance program**
Water Quality Trading (WQT)	**Market-based option for compliance**
Multi-Discharger Variance (MDV)	**Temporary phosphorus variance program for point source dischargers**

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Building a Successful [illegible]

1) **DEMAND** *Clear demand and participants who are willing to pay*
2) **SUPPLY** *Technologies, practices and economic needs*
3) **PRODUCT** *Desired environmental attributes*
4) **POLICY** *Supporting policy*
5) **TRANSACTIONAL PATH** *Clear, trusted path with approved standards and protocols for quantifying, implementing and verifying credit-generating projects*
6) **CHARACTERISTICS** *Transparent, repeatable and adaptable*

P3: Pollution Prevention Partnership Wisconsin's Trading Marketplace

In Support of testimony on Senate Bill 91 before the Senate Committee on Natural Resources.

Newtrient LLC
Steven P. Rowe, CEO
March 19, 2019
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TROUT UNLIMITED

March 19, 2019
http://wicouncil.tu.org

Contact: Council Chair Mike Kuhr
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Wisconsin TU Supports SB 91

Mr. Chairman and Members of the Senate Committee on Natural Resources and Energy, thank you for taking the time today to hear our comments on SB 91 regarding the establishment of a central clearinghouse to manage water pollution credit trading in Wisconsin.

My name is Mike Kuhr, I'm a small business owner and a stay-at-home father. I live across the lake, in Monona with my family. I do a lot of volunteer work for Trout Unlimited and I currently serve as Chair for the Wisconsin State Council.

Trout Unlimited is the nation's leading coldwater conservation organization, and here in Wisconsin, we have over 5,200 members working to ensure that future generations have access to cold, clean, fishable water. Last year, our members volunteered over 50,000 hours of their time working on 56 conservation projects, 91 education events, and running 3 veterans service programs at the VA hospitals in Milwaukee, Madison, and Green Bay.

We applaud Senator Cowles, Representative Kitchens and all of the other co-sponsors of SB 91 for bringing forward this innovative, market based approach to reducing water pollution in Wisconsin. We've done a pretty good job in recent years of getting point source water pollution under control. Non-point source pollution, due to the many variables on the landscape, has proven much more difficult to address. We're excited to see policy that will give our partners in the agricultural industry more tools to prevent this non-point source pollution. Anyone who knows a farming family realizes these are tough times. We believe this bill will help keep farms economically viable and ecologically responsible.

Our members value the recreational opportunities that the woods and waters of Wisconsin offer. We realize that these opportunities will only be available to us if we as a society are able to keep water pollution at bay. We'd like to bring your attention to the economic impacts that trout fishing in particular, and angling in general, provide to our state. A 2013 study by the American Sportfishing Association (the "ASA") found that Wisconsin was the 3rd highest ranked state in the number of non-resident anglers. We know the fishing's good here, and apparently so does the rest of the country. According to the ASA report, angling results in over $1.4 BILLION of retail sales each year in our state. All told, recreational angling creates over $2.2 BILLION in annual economic impact for Wisconsin's economy.

Wisconsin Trout Unlimited understands that we all live, work, and play downstream. We're also acutely aware of the challenges posed by non-point source pollution to our watersheds and our economies. We look forward to working with the Legislature and State Agencies to develop this new approach to pollution control and reduction, thus ensuring future generations will have access to cold, clean, fishable water in Wisconsin.

Thank you for your time and for your commitment to public service.

Mike Kuhr
Wisconsin Trout Unlimited
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The American Sportfishing Association's report entitled "Sportfishing in America" dated January 2013 can be viewed here:
http://asafishing.org/wp-content/uploads/Sportfishing_in_America_January_2013.pdf
Page 5 of the report shows Wisconsin Ranked 3rd in the number of Non-Resident Anglers, behind only Florida and Michigan.

The Wisconsin Council of Trout Unlimited ("WITU") is a 501(c) 3 non-profit organization which consists of approximately 5,200 volunteer members in 21 chapters in Wisconsin working to ensure that future generations have access to cold, clean, fishable water. Last year, WITU and its Chapters reported over 50,800 volunteer hours, working on 56 conservation projects, 91 youth education events, and operating 3 veterans service programs.

DBA

DAIRY BUSINESS ASSOCIATION | DAIRY FORWARD

Dairy Business Association Testimony in Support of SB91
March 19, 2019

Good afternoon, my name is Shawn Pfaff and I am here testifying on behalf of one of my clients, the Dairy Business Association. I want to start by thanking Chairman Cowles, Ranking Member Miller and the other members of this committee for the opportunity to speak to you regarding SB91 and the positive potential that nutrient trading could have on our state. I also want to thank Chairman Cowles for his continued leadership on this issue.

Wisconsinites from across the political spectrum recognize the importance of water quality to our state's success. This recognition motivated Governor Evers to declare 2019 the "Year of Water" and inspired Assembly Speaker Robin Vos to create a Water Quality Taskforce with members from both the State Assembly and State Senate. Dairy farmers are also concerned about water quality. We need clean water for our families and our cattle. Our state's dairy processors also rely on clean water to make cheese and other products. Therefore, we want to do our part to improve water quality. Our interest in this subject is not new.

This legislation shows that work to address water quality concerns has been going on for some time. Earlier legislation authored by Senator Cowles and supported by the Dairy Business Association opened the door for nutrient trading. Unfortunately, this fantastic idea has not yet reached its full potential because the logistics of making nutrient trades happen have been overly cumbersome. It is our hope that this bill will help to make nutrient trading a more streamlined and predictable process that will result in far more trades occurring.

The numeric phosphorus standards with which point sources must comply are often very aggressive. Compliance could require a cheese plant, wastewater treatment plant or other industrial permittee to invest in expensive new filtration equipment. The small additional reduction in phosphorus or other nutrients that can be achieved by even more filtration at the point source is generally far more expensive than it would be to reduce the same amount of phosphorus through a partnership with local farmers.

For example, a local wastewater treatment plant could spend $10 million for new equipment that results in a nominal reduction in their phosphorus discharge. At the same time, a $1 million investment in on-the-farm practices might be able to yield and even greater reduction in phosphorus in same the watershed. In such circumstances, it makes no sense not to encourage collaborations between points sources and the farming community. SB91 would make it easier for conservation-minded farmers and point sources to find each other and initiate the type of trades that will yield more meaningful and cost-effective improvements in water quality. The clearinghouse approach would let individual farms and farmer-led conservation groups bank credits from water quality improvement that result from practices they implement.

The members of this committee are probably already aware that dairy farmers in Wisconsin are struggling with a prolonged period of low milk prices. SB91 and the nutrient trading it would help to foster would provide a new revenue stream for dairy farmers and famer-led watershed groups.

DBA

DAIRY BUSINESS ASSOCIATION | DAIRY FORWARD

DBA is also excited about this proposed legislation because we believe that farms of various types and sizes could benefit from it. Our association has a diverse membership. While more dairy CAFOs belong to DBA than any other dairy organization in Wisconsin, most of our member farms still have less than 500 cows. Our members include both organic and conventional dairies. In addition to dairy farms, half our membership is made up of allied businesses that help to support dairy farmers' success.

Some individual farms might be able to bank credits under this new system through the adoption of certain management practices or by investing in manure treatment equipment. At the same time, groups of farms could also work together to do the same. Across Wisconsin, farmer-led watershed groups have been encouraged and supported. DBA helps to five of these groups in different parts of the state. These groups, which have members of all sizes, are well positioned to use their existing practices and programs to bank credits under this new clearinghouse system.

Dairy farming is one of the reasons why rural Wisconsin is more economically successful than rural parts of other Midwestern states. Research by Dr. David Swenson at Iowa State University has shown the important role that animal agriculture plays in creating and sustaining vibrant rural economies. Dairy is proud to play this role in much of rural Wisconsin. This underscores the importance of finding a way forward where dairy farms can be successful and water quality can be properly addressed. This bill is one way to advance both goals. This is one way in which it will help rural economies in Wisconsin.

Nutrient trading itself should also help make rural economies stronger. If a rural community's wastewater treatment facility needs to reduce its phosphorus output, it could invest in expensive new filters that are produced far away. To pay for this new equipment, the utility will also have to increase costs for local ratepayers. This pulls money out of the local economy for the benefit of remote business interests. Nutrient trading will help utilities avoid increasing costs for local ratepayers. Also, it will focus on reinvesting in the local community by helping to fund projects on farms, often with the assistance of other local agribusinesses.

DBA is glad that most of the members of this committee have already indicated their support for this bill. SB91 enjoys broad bipartisan support. Agricultural, business and environmental groups are all supportive of this legislation. This speaks to the potential that so many of us see in the future of nutrient trading and similar private-sector solutions to our water quality challenges. Please support advancing this bill. It is a practical part of the overall solution Wisconsinites want to see.

I am happy to try to answer any questions the committee members might have. If there are any questions that I cannot answer now, I will get back to the member with an answer later. DBA staff are in Washington D.C. this week lobbying side-by-side with their farmer members. If this were not the case, they would be here testifying today. I am filling in for them today because of their previously-scheduled travel out of state.

cleanwisconsin

your environmental voice since 1970

Testimony of Amber Meyer Smith, Director of Programs and Government Relations
Scott Laeser, Water Program Director
SB 91
Senate Natural Resources and Energy Committee
March 19, 2019

Clean Wisconsin is a non-profit environmental advocacy group focused on clean water, clean air and clean energy issues. We were founded almost fifty years ago and have 20,000 members and supporters around the state.

We are here today in support of Senate Bill 91 and are glad to continue discussing the problems of nutrient pollution in our waterways. Nutrient pollution, especially from phosphorus and nitrates, continues to plague our waters, contaminating wells and tainting our drinking water and choking our lakes and rivers with algae in the summer.

There is no doubt that phosphorus is a huge problem - in 2018 alone, the EPA added 242 new segments to Wisconsin's list of impaired waters, 75% of which were added due to excess phosphorus. At the same time, only 35 waterbodies were proposed to be delisted. That brings the total impaired listing to over 2000. It only takes one pound of phosphorus to generate 500 pounds of algae, which contributes to the dead zone in Green Bay and clogs our inland lakes in the summer, closing beaches and waterfront resorts, preventing water-based recreation, and presenting a growing health threat in the form of toxic blue-green algae blooms.

The phosphorus rules that Wisconsin enacted in 2010 were a major step toward cleaning up our waters. The rules provide innovative, cost-effective options for point sources to address their phosphorus discharge reduction requirements. We realize that even though there are already five different options a point source can pursue to comply with the rules, additional methods are worth discussing as long as they don't undermine ongoing projects or the original intention of the rule.

We are also mindful that while the phosphorus rules target point source reductions, the majority of nutrient pollution entering our water today is coming from nonpoint sources.

SB 91 continues the laudable goal developed in the adaptive management option of the phosphorus rule – point source dischargers helping nonpoint dischargers to realize the greatest amount of nutrient reductions at the least cost. SB 91 sets up a clearinghouse for nutrient trading credits that could accelerate use of this compliance option by creating a more robust, actively managed credit market, and this could ultimately stimulate more nonpoint pollution reduction efforts. As long as we are adding new compliance options to the table while protecting the integrity of existing options and the ongoing projects using them, and not distracting from the ultimate goal of clean water, we welcome new approaches like this.

We were approached last session about the idea of this legislation. We really appreciated the open discussions, and many of our concerns were taken into account. We truly believe that the authors have the best intentions in bringing real innovative solutions to the table.

While the concepts presented in this legislation will most immediately impact efforts to comply with Wisconsin's phosphorus water quality standards, we also expect that Wisconsin will soon begin to take nitrate pollution more seriously, as new science drives home the scale and scope of drinking water contamination caused by nitrates. There is a possibility that a clearinghouse could someday play a role in trading for nitrate credits if and when standards are established for this pollutant.

While we have some fine details of SB 91 to iron out, I have every expectation we will be able to reach agreement and look forward to working with the authors.

Testimony in Favor of SB91

My name is Chris Lenzendorf and I represent Aqua Innovations a Wisconsin based manufacturer of Nutrient Concentration Systems. Nutrient Concentration systems process raw cow manure into 3 biodegradable products including water that is cleaner then tap water. (System and company information attached)

In the past other emerging technology including biodigesters have relied on government subsidies to prove out economic viability. As a company we have taken the approach that we must provide value without subsidies. We have proven this model to be effective but have had to overcome other factors such as down milk prices and the credit crunch that most dairies have had to endure. These factors have limited the ability of many farms to implement this much needed technology.

Although water credits can be traded now, trying to find the two parties that may have an interest, is a major impediment into more trades taking place. Dairy operators have limited time and resources to meet and evaluate potential point sources to put the trade together. On the other side the point sources have limited time and resources to try to find a non-point source that may be interested in making a trade. Aqua Innovations is currently attempting to assist dairy farms but is very difficult because we as a company are not in the clearinghouse business. The costs associated with putting these contracts and models together is daunting. Having uniformity in this process would save months and possibly years in this development while making the process cost effective.

SB-91 provides a Clearinghouse that will be the bridge between the point and non-point sources. This ease of execution will be the catalyst to the implantation of technologies that will improve water quality on dairy farms without the use of government subsidies.

I look forward to answering any questions.

Chris Lenzendorf
Aqua Innovations
262-736-4211

Nutrient Concentration Process

The AQUA Innovations Nutrient Concentration System targets suspended and dissolved solids in manure via a mechanical separation process. Phase One filters the larger suspended solids. Phase Two filters the smaller dissolved solids. The final product is water that can be discharged.

PHASE ONE

Phase One processes low-solids content manure via a proprietary method of Ultrafiltration. All suspended solids are separated and concentrated into a nutrient-rich effluent with high solids content and 99% of all the phosphorous present in manure.

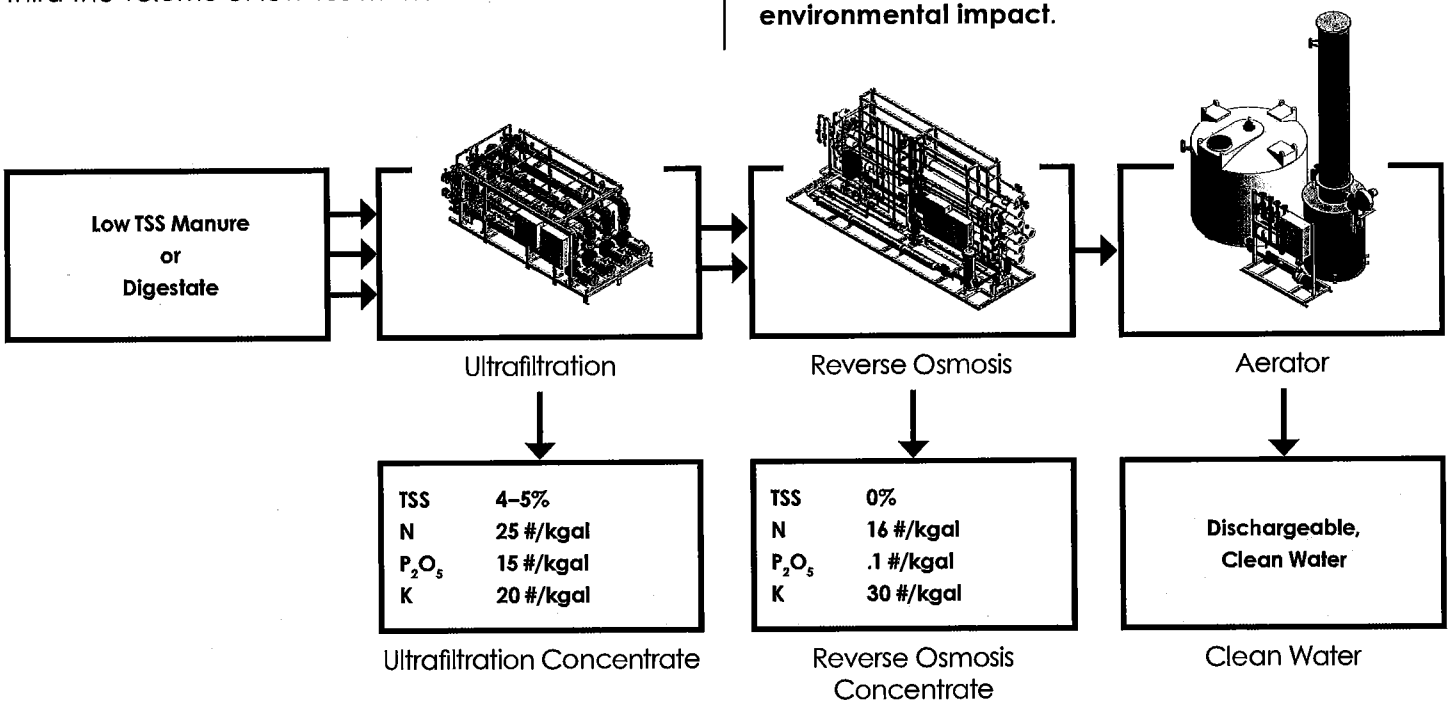
The first product of Phase One is an intermediate Ultrafiltration Permeate that is stored for further processing. The second product is a highly concentrated liquid that partitions approximately **99% of the phosphorous into about one-third of the original volume** called "Ultrafiltration Concentrate." The concentration of phosphorous into significantly less volume prevents it from reaching your fields and local waterways. **Storage costs, hauling costs, lagoon maintenance** and other costs associated with managing phosphorous-based materials can be reduced. The Ultrafiltration Concentrate is one-third the volume of low-TSS manure.

PHASE TWO

The Ultrafiltration Permeate from Phase One is sent to Phase Two. This Phase uses Reverse Osmosis to separate dissolved solids from the Permeate. The dissolved solids are concentrated into a nitrogen and potassium-rich effluent. The final product of this Phase is clean, dischargeable water.

The second end product is Reverse Osmosis Concentrate that contains less than 1% of the phosphorous content of raw manure while retaining the other nutrients (i.e. nitrogen, potassium) to create a liquid fertilizer that is **easy to pump and irrigate**. The volume of the Reverse Osmosis Concentrate is **one-third of the original volume** low-solids manure.

The final end product is Clean Water that is safe to discharge directly to the environment. The Clean Water is approximately one-third of the original volume of low-solids manure and has **zero environmental impact**.



Learn more about the AQUA Innovations Nutrient Concentration System at **aquainnovationsllc.com/agricultural**.

aquainnovationsllc.com | 262.736.4211 | info@lwaqua.com

AQUA INNOVATIONS
HERE. FOR GOOD.

Manage Dairy Manure in a Whole New Way

The AQUA Innovations Nutrient Concentration System eases the pain of managing dairy manure with a liquid/solid partitioning system that reduces overall volume, lowers hauling costs and minimizes odors. The AQUA system is cost-effective, environmentally compliant, customizable to any dairy operation and provides 24/7 monitoring and support from AQUA Innovations.

AQUA Innovations Nutrient Concentration System

- Processes both digested and raw manure.
- Reduces manure volume to be spread by more than 50%.
- Yields clean water that can be discharged back to the environment.
- Less volume means fewer spreading trips and less lagoon maintenance.
- Removal of 100% of suspended solids and 99%+ of phosphorous allows spreading throughout the growing season via irrigation.
- Comprehensive turn-key manure management solution that allows you to focus your time and energy on the business of dairy farming.

Dependability & ROI

- Many companies promise results, but AQUA Innovations offers the only system with a proven track record of scalability and long-term performance.

Ours is the only system:

- that has been **operational day-in and day-out for over seven years.**
- to have **operational costs under half a penny.**

Turn-Key Solution

- AQUA Innovations provides **financing for the entire project,** including ancillary equipment building, etc.
- **Our performance guarantee ensures reliability and accountability** that the system will deliver according to contract agreement.
- **Easy payment options** including lease of overall project.

Learn more about the AQUA Innovations Nutrient Concentration System at **aquainnovationsllc.com/agricultural.**

WISCONSIN'S greenfire
VOICES FOR CONSERVATION

Wisconsin's Green Fire testimony on: 2019 SB 91; relating to buying and selling water pollution credits through a central clearinghouse

March 19, 2019

My name is Jim Baumann and I am here today representing Wisconsin's Green Fire. Wisconsin's Green Fire supports the conservation legacy of Wisconsin by promoting science-based management of its natural resources. Members represent extensive experience in natural resources management, environmental law and policy, scientific research, and education. I am here today to testify for information only on Senate Bill 91.

Personally, after a lengthy career with the Department of Natural Resources, I worked for the Great Lakes Commission on the Fox Phosphorus Trade project, a project to evaluate and further develop procedures for water quality trading in Wisconsin.

Wisconsin's Green Fire has sent you all a written policy analysis of this bill so I will limit my testimony today to three points.

First, our analysis suggests third-party assistance in water pollution credit trading, such as through a central clearinghouse, has value. Presently, neither buyers nor sellers have experience and expertise in the trading process and some form of facilitation can greatly assist in the process.

Second, the economics of trading in Wisconsin may be marginal due to the market value of credits and the transaction costs that will need to be incurred. A clearinghouse, as proposed in the bill, works best where there are many buyers and sellers, where the trade areas are very large and where the supply of relatively inexpensive credits exceeds the demand for credits. In many parts of Wisconsin, however, we see a limited supply of credits and corresponding higher costs of credits. We may also see small trade areas.

The economics seem to be the least favorable in water basins with total maximum daily load allocations approved by the U. S. Environmental Protection Agency and where many of Wisconsin's municipal and industrial dischargers are located. Federal and state requirements limit the agricultural credit supply, in particular, by requiring substantial levels of phosphorus control, such as 60 to 80 percent reductions, before credits may be generated for sale.

Water pollution credit trading for farms, in particular, requires a substantial number of transactions, ranging from assessing a farm to determine credit generation potential, designing and installing management practices, negotiating agreements, conducting annual inspections

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and so on. All of these transactions have a cost. In addition, there are the costs of the clearinghouse operations to compile and report information to the Department of Natural Resources and make portions of it available to the public.

Third, the bill provides limited state oversight for the central clearinghouse operator. The clearinghouse operator may develop a number of policies and procedures without Department of Natural Resources approval. We anticipate this could result in inconsistencies between the clearinghouse operation and federal and state requirements and lead to inadequate performance. For example, the clearinghouse seems to have the authority of set trade ratios different from those specified by the Department of Natural Resources, provided they are at least 1.2:1. Also, the clearinghouse conceivably has the authority to specify any length of contract without the approval of the Department of Natural Resources.

In closing, I thank you for the opportunity to appear today on SB 91 and will gladly answer any questions you may have.

Statement of the
Municipal Environmental Group – Wastewater Division,
Re: Wisconsin's Trading Clearinghouse Legislation

March 19, 2019
Madison, Wisconsin

The Municipal Environmental Group – Wastewater Division, is an organization of approximately 100 municipalities statewide who own and operate wastewater treatment plants. We have a long history of supporting efforts to remove phosphorus from our state's waters.

Because Wisconsin was an early adopter of phosphorus limits, Wisconsin municipalities have already removed approximately 90% of the phosphorus in their discharges, and many have removed upwards of 97%. It is thus not surprising that most of the phosphorus impairments in Wisconsin's waters do not come from municipal treatment plants, but from nonpoint sources. The new phosphorus limits that require municipalities to remove even more phosphorus come at a significant increased cost for relatively little water quality improvement.

Nevertheless, MEG has continued to support measures to further reduce phosphorus from all sources. We were among the organizations who advocated for adaptive management, were a major supporter of the trading legislation 2011 Act 151, and we were a key supporter of the multi-discharger variance in 2013 Act 378. The common theme to our efforts is that we all need to help reduce phosphorus, but we need to find cost effective ways to accomplish the biggest water quality improvement for the cost.

We support the trading clearinghouse concept as another tool in the tool box for point source dischargers such as municipalities to comply with stringent phosphorus limits and to help effectuate water quality improvements. While MEG continues to support the conventional model for trading, there are a number of obstacles that often foreclose trading as a viable compliance option for municipalities. These obstacles include extensive technical and legal expertise necessary to find and develop trades, credit thresholds, trade ratios, and geographic limitations on trading partners. And while the multidischarger variance is an option for some communities, it is not a long term compliance option and many communities are foreclosed from pursuing the MDV due to restrictive economic eligibility requirements.

MEG supports the concept of this clearinghouse legislation to the extent that it could provide another mechanism for permit compliance and reduce some of the obstacles

mentioned above. In particular, MEG supports development of a clearinghouse that could obtain and verify credits in a manner that would eliminate the time and monetary investment municipalities often face in developing trades. MEG also supports the broadening of the geographic range of allowable trades, which would provide the flexibility necessary to make trading a more viable compliance option.

However, there are some refinements and clarifications that need to be made in current draft of this legislation. First, the relative roles of the Department of Natural Resources (DNR) and the clearinghouse must be more clearly defined. The role of the DNR in verifying the number of credits a particular practice generates and the duration of those credits is vital to a permittee's ability to rely on credits for permit compliance. Second, the ability of a permittee to pursue a conventional trading relationship must remain intact. While there are often obstacles to conventional trading, a number of such trades currently exist and quite a few more are under development. Finally, the tracking of trades should be limited to credits sold to the clearinghouse and trades that have been incorporated into discharge permits so as not to discourage participation in the trading program.

MEG appreciates the opportunity to participate in this hearing and looks forward to further collaboration on this legislation.

For more information contact Vanessa Wishart at vwishart@staffordlaw.com or Paul Kent at pkent@staffordlaw.com

Herkert, Toni

Subject: FW: WI Land+Water comments on SB 91
Attachments: WI Land+Water comments SB 91.pdf

From: Matt Krueger <matt@wisconsinlandwater.org>
Sent: Tuesday, March 19, 2019 10:03 AM
To: Sen.Cowles <Sen.Cowles@legis.wisconsin.gov>
Subject: WI Land+Water comments on SB 91

Hello,

Attached are WI Land+Water's comments on SB 91. I unfortunately will not be able to attend today's hearing on the bill.

I spoke on the phone with Toni yesterday, and I know she also took time to speak with a county conservationist who is involved in several phosphorus compliance arrangements, and we are very appreciative of that. Still, we have some questions about specifics of the bill, which I expand upon in my attached comments, and which I hope can be received in time to circulate to the Committee today.

Please let me know if you have any questions of me, and we look forward to continuing to provide constructive feedback on this legislation.

Regards,
Matt Krueger

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Matt Krueger
Executive Director
WI Land+Water
608-441-2677 x4
matt@wisconsinlandwater.org
wisconsinlandwater.org

Advocates for Locally Led Conservation
~~~~~~~~~~~~~~~~

Wisconsin Land+Water Conservation Association

131 W. Wilson Street, Suite #601 · Madison, Wisconsin 53703
(608) 441-2677 · Fax: (608) 441-2676 · www.wisconsinlandwater.org

March 19, 2019

RE: Comments on SB 91

Dear Chairman Cowles and Members of the Senate Committee on Natural Resources and Energy,

I am writing for informational purposes only regarding SB 91, related to the buying and selling of water pollution credits through a central clearinghouse. I am hoping my comments can be considered as part of today's public hearing on SB 91.

Wisconsin Land and Water Conservation Association (WI Land+Water) represents county conservation departments and the county committees that oversee them, across the state. Statewide, we have over 800 members.

Many county conservation departments are already working to facilitate phosphorus trading, adaptive management, or other phosphorus compliance point source-to-nonpoint source arrangements, such as the Multi-Discharger Variance. Counties engaged with these efforts have expressed that there is opportunity and perhaps even a need to make more efficient the process of orchestrating such arrangements. As such, we are supportive, conceptually, of creating opportunities for pollutant credit producers and buyers to more easily connect, via a clearinghouse such as is proposed in SB 91.

Additionally, it appears that SB 91 may provide opportunity for county conservation departments to play a more active role in facilitating phosphorus compliance, of which we are supportive, particularly if counties are compensated for their efforts.

However, our support of SB 91 is contingent on having more information about what the county role would look like, specifically, in facilitating such arrangements. We're appreciative that the bill's authors have taken time to answer some of our initial questions, but some specific questions still remain. It would be helpful to gain a better understanding of what a county's role would be, under SB 91, in a couple possible trading scenarios.

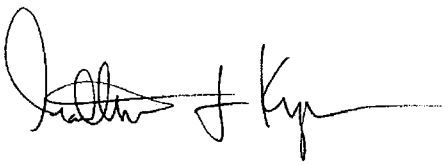
First, for county conservation departments currently engaged in trading or other phosphorus compliance arrangements. If a county, currently working with a point source (e.g. a municipal wastewater treatment facility that has contracted with a consulting firm) to find nonpoint source phosphorus trades is interested in becoming a third-party broker, how would the existing arrangement be affected? How would the process unfold if the county pursued status as an independent third-party broker versus working contractually with the proposed clearinghouse to broker trades?

Second, for county conservation departments not currently engaged in trading or other phosphorus compliance arrangements. Let's also assume this county falls within an approved TMDL area. Again, how would the process unfold if the county pursued status as an independent third-party broker versus working contractually with the proposed clearinghouse to broker trades?

For each of these scenarios, we're interested in finding out more about the specific process for counties to gain approval as a broker, the funding mechanism by which they would be compensated for their services, and with whom the responsibility lies for verifying both installation and maintenance of nonpoint source practices related to trading arrangements.

We look forward to continuing to work with the bill's authors to better clarify our understanding of some of these questions, and appreciate the opportunity to provide input on the bill.

Sincerely,



Matt Krueger
Executive Director

WISCONSIN DAIRY ALLIANCE

TO: Senate Committee on Natural Resources and Energy -Senator Robert Cowles, Chair
FROM: Cindy Leitner, President -Wisconsin Dairy Alliance
DATE: March 19, 2019
RE: Senate Public Hearing: Senate Bill 91

Dear Chairman Cowles and Committee Members,

The newly launched Wisconsin Dairy Alliance (WDA) representing modern permitted dairy operations supports and applauds State Sen. Robert Cowles, Sen. Jerry Petrowski and Rep. Joel Kitchens for their tenacity in developing Senate Bill 91. It is a new, innovative approach that will improve our state's natural resources through the use of a unique economic solution.

WDA believes strongly in water quality trading and market-based programs to maximize pollutant-reduction efforts and improve water quality for all dischargers. The WDA believes in parity for all dischargers and believes a path to a "zero-discharge" standard should be the goal for all dischargers, meeting the same standard modern permitted dairy operations are already held to.

Cow manure is not a waste product. It is a renewable source of energy and an excellent source of fertilizer for food production.

USDA's Economic Research Service (ERS) study on *Manure Use for Fertilizer and Energy* concluded the potential for energy use from animal manure to be the following:

"Manure-to-energy projects may allow farmers to realize benefits from avoided purchases of electricity, from selling electricity, or from selling manure to generating plants, but few realize enough saving to justify the expense. But because such projects use existing resources, they could provide society with benefits if captured."

Senate Bill 91 is a sustainable, nonpoint initiative which provides environmental safeguards while allowing a market to form, which is an economically stable mechanism to implement water-quality improvements on all dairy farms.

Point sources of pollution, — including municipal wastewater treatment plants, manufacturers, food processors, cheesemakers, and others, — are facing additional phosphorus reductions to meet their permit requirements. This bill allows these point-sources to deploy and implement the removal of phosphorous from non-point sources like farms. The point source, in essence, will provide credits through a clearinghouse and offer monetary incentives by giving these credits to farmers who reduce their nutrient loads.

WDA is committed to improving the environmental sustainability of all dairy farms. Farmers will be able to generate water-quality credits by implementing workable practices on land as well as advancing new, innovative manure-treatment technologies. Credits can be verified and sold to the clearinghouse, which then transacts those credits back to industrial and municipal point sources. This new mechanism will allow farms of all sizes to generate an additional revenue stream directed at improving water-quality practices. This is a win-win for both farmers and society.

Sincerely,

Cynthia K Leitner

Cynthia K Leitner, President
Wisconsin Dairy Alliance

LOREN OLDENBURG

STATE REPRESENTATIVE • 96th ASSEMBLY DISTRICT

2019 Senate Bill 91
Relating to: buying and selling water pollution credits through a central clearinghouse.
Senate Committee on Natural Resources and Energy
March 19, 2019

Thank you, Chairman Cowles and committee members, for holding this public hearing.

Senate Bill 91 brings many opportunities to farmers, business owners, and municipalities. I am a farmer, former Westby Cooperative Board member and past Board President as well as former Town Chairman. I understand the importance of being compliant with the DNR, especially regarding their guidelines surrounding phosphorous discharge requirements. Remaining compliant with these requirements has become increasingly costly, the system created in this bill will help to alleviate large capital expenditures relating to these DNR requirements.

Waste water ponds are a fundamental component of dairy processing plants. This water pollution credit system will preserve the land and lower non-point pollution phosphorous discharge.

I have worked to use the farmland preservation tax credit for the last decade. This water pollution credit system will help other farmers in the practice conserving our precious land and water.

Not only will this system help farmers and small business owners, but this will help municipalities reduce large capital expenditures on upgrading phosphorous discharge systems. Allowing it to be faster, and more affordable to comply with the discharge requirement from the DNR.

Thank you for your time, and I encourage members of the committee to support Senate Bill 91.

P.O. Box 8953 • Madison, WI 53708-8953 • (608) 266-3534 • Toll Free: (888) 534-0096
Rep.Oldenburg@legis.wi.gov

The Nature Conservancy
Protecting nature. Preserving life.

The Nature Conservancy in Wisconsin
633 West Main Street
Madison, Wisconsin 53703

tel 608/251-8140
fax 608/251-8535
nature.org/wisconsin

Wed, February 27, 2019
For Immediate Release

Contact:
Cate Harrington, 608-316-6416

Nature Conservancy Applauds Senator Cowles' Leadership on Nutrient Reduction Proposal

The following is a statement from Mary Jean Huston, State Director, The Nature Conservancy in Wisconsin

The Nature Conservancy (TNC) today announced support for Senator Rob Cowles' efforts to create a third-party, nutrient credit trading system. The proposal would potentially create a more streamlined, cost-efficient process that enhances water quality and grows Wisconsin's agriculture economy.

"The Nature Conservancy works daily with landowners looking for science-based solutions to decrease nutrient pollution and improve water quality. We look forward to working with Senator Cowles and all stakeholders on legislation to accelerate conservation-minded nutrient trading," said Mary Jean Huston, who directs The Nature Conservancy's work in Wisconsin.

"A more flexible marketplace for permit holders could be a win-win for landowners, the agriculture economy and land and water conservation," adds Huston.

Under current law, point and non-point sources of pollution are only permitted to directly trade credits with each other and not with third parties. This reduces the ability of a water quality trading market to function effectively in Wisconsin.

For nearly 60 years, TNC has worked with landowners, business and communities to protect more than 233,800 acres of land and water in Wisconsin. Recognizing that best agricultural practices impact nearly every aspect of our conservation work, TNC globally and in Wisconsin is taking an active role in promoting nutrient reduction policy and bipartisan support for improving water quality.

###

The Nature Conservancy *is a leading conservation organization working around the world to protect the land and water on which all life depends. Guided by science, we create innovative, on-the-ground solutions to our world's toughest challenges so that nature and people can thrive together. In Wisconsin, the Conservancy has protected more than 233,800 acres of land and water since 1960.*
nature.org/wisconsin

State of Wisconsin
2019 - 2020 LEGISLATURE

LRB-1244/1
MCP:ahe

2019 SENATE BILL 91

March 13, 2019 - Introduced by Senators COWLES, PETROWSKI, BERNIER, DARLING, FEYEN, JACQUE, JOHNSON, LARSON, MARKLEIN, MILLER, OLSEN, RINGHAND, SCHACHTNER, STROEBEL and TESTIN, cosponsored by Representatives KITCHENS, OLDENBURG, GRUSZYNSKI, TAUCHEN, KRUG, BROOKS, CONSIDINE, DUCHOW, EDMING, EMERSON, FELZKOWSKI, FIELDS, HEBL, KURTZ, LOUDENBECK, MACCO, MURSAU, NYGREN, OTT, PRONSCHINSKE, QUINN, RAMTHUN, ROHRKASTE, SANFELIPPO, SINICKI, SKOWRONSKI, SNYDER, SPREITZER, SPIROS, STEFFEN, STUCK, SUMMERFIELD, TITTL, TUSLER and VRUWINK. Referred to Committee on Natural Resources and Energy.

AN ACT ***to amend*** 283.84 (1m) (d); and ***to create*** 16.9685, 283.84 (1) (f), 283.84 (1) (g), 283.84 (1m) (e) and 283.84 (5) of the statutes; **relating to:** buying and selling water pollution credits through a central clearinghouse.

Analysis by the Legislative Reference Bureau

This bill creates a system for buying and selling water pollution credits through a central clearinghouse.

Under current law, the Department of Natural Resources administers a program for trading water pollution credits between sources of water pollution. Under the program, DNR may authorize a person (permit holder) who holds a water pollution discharge elimination system (WPDES) permit or a storm water discharge permit to discharge a pollutant above the levels authorized in the permit if the permit holder enters into an agreement with another party under which the other party will reduce water pollution. The agreement must result in an improvement in water quality, and the increase and reduction in pollutants under the agreement must involve the same pollutant or the same water quality standard and occur within the same water basin.

Under this bill, DNR may authorize a permit holder to discharge a pollutant above the levels authorized in the permit if the permit holder purchases credits from a clearinghouse that has contracted with the Department of Administration. The purchase of credits must result in an improvement in water quality, and the increase and reduction in pollutants under the agreement must involve the same pollutant or the same water quality standard and occur within the same area, as determined

by DNR. That area must be the largest area possible within this state to facilitate implementation of the water pollution trading program while achieving water quality standards and any federally approved total maximum daily load allocations. The bill also allows DNR to authorize a permit holder to discharge a pollutant above the levels authorized in the permit if the permit holder enters into a contract with a third party that works with other sources of water pollution to reduce the amount of water pollution that those other sources cause.

The bill requires DOA to solicit vendors to operate as the single clearinghouse in this state for the purpose of buying and selling water pollution credits. The department may not contract with a clearinghouse unless the clearinghouse has established certain policies and procedures specified under the bill. Under the bill, the term of a contract between DOA and a clearinghouse is five years.

Under the bill, the clearinghouse that contracts with DOA must generate credits by entering into agreements with parties to reduce pollution; maintain a bank of credits; sell credits to any person; establish and maintain a centralized registry of credits generated and sold in this state; and maintain an Internet-based platform to facilitate the location of potential buyers, available credits, and other information that will facilitate credit transactions. Credits must be generated with the clearinghouse at a ratio of one credit for every 1.2 units, at a minimum, of pollution reduction. When the clearinghouse contracts with a party for pollution reduction activities, the clearinghouse must also seek to minimize transaction costs, maximize the performance of the pollution reduction activities, and reduce the overall amount of pollutants introduced into the applicable area.

The bill also allows DOA to contract with the clearinghouse to further the implementation of any adaptive management, multidischarger variance, water quality trading, or future market-based water quality programs in this state.

For further information see the ***state and local*** fiscal estimate, which will be printed as an appendix to this bill.

The people of the state of Wisconsin, represented in senate and assembly, do enact as follows:

SECTION 1. 16.9685 of the statutes is created to read:

16.9685 Clean water clearinghouse. (1) In this section, "water pollution prevention or environmental enhancement services" means any activity, practice, or project undertaken by any person who certifies that it will result in a quantifiable reduction of a specified pollutant in the overall mass balance of water pollution over a specified period of time.

(2) The department shall solicit services from a single clearinghouse to perform the functions under subs. (3) to (5). The department may not enter into a contract with a clearinghouse under this section unless the department determines that all of the following requirements have been met:

(a) The clearinghouse has established or is capable of establishing the contract terms, conditions, and information required to document and enforce transactions under sub. (3) (a) and (c) in a commercially reasonable manner.

(b) The clearinghouse has established a policy that requires a commercially reasonable amount of financial reserves, insurance, reserve credit pool, or other risk management mechanism for use in the event that a party defaults on an agreement under sub. (3) (a).

(c) The clearinghouse has established a commercially reasonable process for soliciting and entering into transactions under sub. (3) (a) and (c).

(d) The clearinghouse has established a clearly defined fee structure describing the manner in which and the amount that the clearinghouse will be paid for facilitating and executing transactions under sub. (3) (a) and (c).

(e) The clearinghouse has the capability to facilitate and execute transactions under sub. (3) (a) and (c).

(f) The clearinghouse has satisfied all other applicable requirements to transact business in this state.

(g) The clearinghouse and the department have consulted with the department of natural resources about the terms of the contract.

(3) The clearinghouse with which the department enters into a contract under sub. (2) shall be the primary entity responsible for facilitating a financially stable

market for the activities described in this subsection and sub. (4) and shall do all of the following:

(a) Produce credits by entering into contracts with other parties to undertake water pollution prevention or environmental enhancement services. Each credit generated by a contracting party under this paragraph shall require the party to undertake at least 1.2 times that amount in water pollution prevention or environmental enhancement services.

(b) Maintain a bank of credits produced or to be produced under par. (a).

(c) Sell credits produced under par. (a) to any person.

(d) Seek to establish, with the approval of the department of natural resources, methods for determining the amount of credits that may be produced by various water pollution prevention or environmental enhancement services. These methods may include tables and models based on the best available scientific protocols.

(e) When contracting with a party under par. (a), determine the amount of credits that may be produced by the water pollution prevention or environmental enhancement services by using the methods established under par. (d) or, if such methods are not available, by using environmental impact modeling approved by the department of natural resources.

(f) When contracting with a party under par. (a), seek to do all of the following:

1. Minimize transaction costs.

2. Maximize the performance of the water pollution prevention or environmental enhancement services.

3. Reduce the overall amount of pollutants introduced into the applicable hydrologic area, as defined under s. 283.84 (1m) (e) 2., over time.

(g) Establish and maintain a centralized registry of all credits generated and sold in this state and of the verification of all such credits and maintain an Internet-based platform to facilitate the location of potential credit buyers, available credits, and any other information that will facilitate credit transactions. The clearinghouse shall report this and other pertinent trading information annually to the department and to the department of natural resources. The clearinghouse shall enter into a data-sharing agreement with the department of natural resources to facilitate the clearinghouse's ability to collect and make publicly available pertinent information relating to water quality improvement programs administered in this state.

(4) The clearinghouse with which the department enters into a contract under sub. (2) may do any of the following:

(a) Charge fees and use funds received for general program operations of the clearinghouse, including costs associated with facilitating transactions, purchasing water pollution prevention or environmental enhancement services, and repayment of funds granted or loaned to the clearinghouse.

(b) Hold excess funds in trust for the purpose of making grants, in collaboration with county land conservation offices, the department of natural resources, or the department of agriculture, trade and consumer protection, for targeted water pollution prevention, water pollution remediation, and other environmental enhancement projects that improve the water quality of this state.

(c) Establish a reserve pool of credits produced under sub. (3) (a) and maintain the reserve credit pool for the purpose of maintaining a risk management mechanism under sub. (2) (b).

(d) Conduct research on other innovative approaches to environmental improvement.

(5) The department, in consultation with the department of natural resources, may contract with the clearinghouse under sub. (2) to further the implementation of any adaptive management, multidischarger variance, water quality trading, or future market-based water quality programs in effect in this state.

(6) The term of a contract entered into under sub. (2) shall be 5 years. The department may terminate a contract entered into under sub. (2) if the clearinghouse fails to meet any of the requirements under this section or rules promulgated under s. 283.84. The department shall give the clearinghouse at least 120 days' notice of the default and a right to cure before terminating a contract under this subsection.

SECTION 2. 283.84 (1) (f) of the statutes is created to read:

283.84 **(1)** (f) Reaches a binding, written agreement with a clearinghouse that holds a valid contract under s. 16.9685 to purchase credits from the clearinghouse, if the clearinghouse has consulted with the department about the agreement to the extent required under the contract under s. 16.9685.

SECTION 3. 283.84 (1) (g) of the statutes is created to read:

283.84 **(1)** (g) Reaches a binding, written agreement approved by the department with a 3rd party under which the 3rd party agrees to work with one or more persons, other than the permit holder, to reduce the amount of water pollution that those persons cause below the levels of water pollution that those persons cause when the agreement is reached. If an agreement is reached under this paragraph, the person who is required to obtain a permit or the 3rd party shall notify the clearinghouse that holds a valid contract under s. 16.9685, if any, and shall report to the clearinghouse, in the time and manner specified by the department, any

information that the department, in consultation with the department of administration, determines is reasonable and necessary for the operation of the centralized registry under s. 16.9685 (3) (g).

SECTION 4. 283.84 (1m) (d) of the statutes is amended to read:

283.84 **(1m)** (d) ~~The~~ Except as provided under par. (e) 1., the increase in pollutants and the reduction in pollutants occur within the same basin or portion of a basin, as determined by the department.

SECTION 5. 283.84 (1m) (e) of the statutes is created to read:

283.84 **(1m)** (e) 1. If the person has entered into an agreement under sub. (1) (f), the increase in pollutants and the reduction in pollutants occur within the same applicable hydrologic area, as determined by the department.

2. In this paragraph, "applicable hydrologic area" means the largest area possible within this state to facilitate implementation of this section while achieving water quality standards and any applicable federally approved total maximum daily load allocations.

SECTION 6. 283.84 (5) of the statutes is created to read:

283.84 **(5)** The department may enter into a memorandum of understanding with the federal environmental protection agency relating to the administration of this section and s. 16.9685 in relation to the operations of a central clearinghouse.

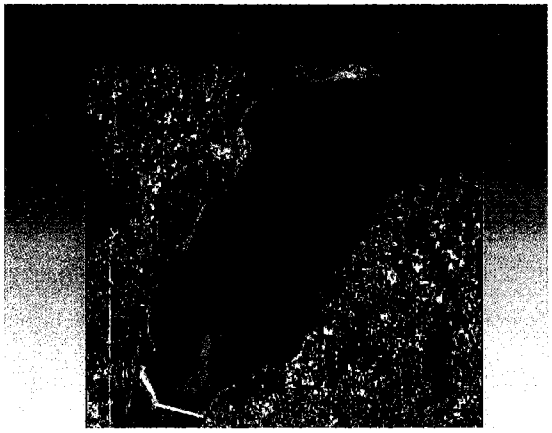
SECTION 7. Nonstatutory provisions.

(1) As soon as possible after the effective date of this act, the department of natural resources shall review any methods established by the clearinghouse under s. 16.9685 (3) (d) and any environmental impact modeling proposed by the clearinghouse under s. 16.9685 (3) (e) and shall approve such methods and models if they have been developed according to any applicable requirements under the

federal Water Pollution Control Act, as amended, 33 USC 1251 et seq., and any regulations or guidance documents adopted consistent with that act.

(END)

Senate Bill 91 -
P3: Wisconsin's Trading Marketplace
Creating a Pollution Prevention Partnership

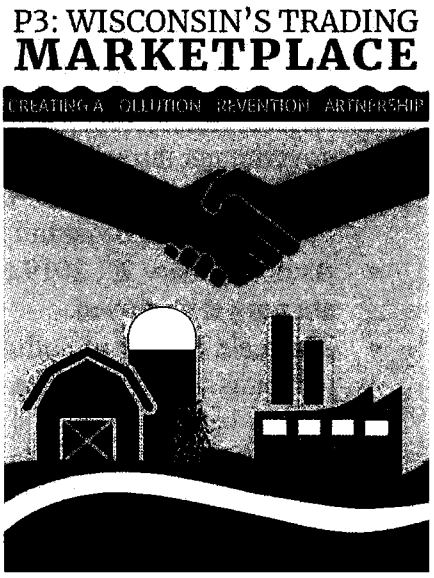


Impact: Phosphorus and Total Suspended Solids

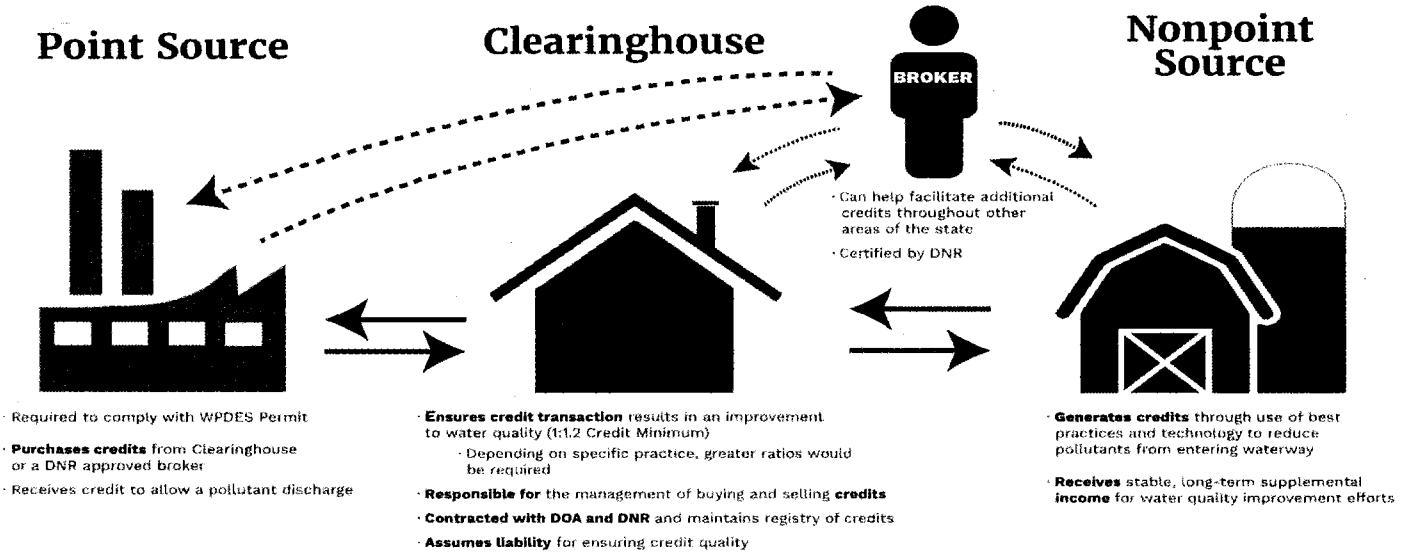
Problem:

- Pollutant trading is underutilized because third-party trading is not currently allowed.
- The economic threats the dairy industry face often make it economically challenging to deploy new manure management technologies or remove land from production to practice better stewardship.
- Nonpoint sources are not required to meet a limit or reduce runoff unless they receive cost-sharing assistance. The cost share program also currently has inadequate funding and can't serve all farmers.
- It's well established that nonpoint sources contribute to phosphorus loading in the state's waters.
- The Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP) estimates that approximately 3.35 million acres in Wisconsin are under nutrient management planning in 2018, reflecting about 37% of Wisconsin's total harvested cropland, of about 9 million acres.
- According to the 2017 State Agricultural Overview, Wisconsin is one of the nation's largest milk producers, with an annual sales volume of nearly $5 billion.
- Working to stabilize markets while reducing water pollution is a win for everyone.
- Food Processors are also regulated with Wisconsin Pollutant Discharge Elimination System (WPDES) permits. Industrial sales from food processing in Wisconsin are $67.8 billion. The food processing industry accounts for 259,600 jobs in the state, spread over more than 2,000 food processing plants.

Bill Overview:



- LRB-1244 authorizes the Department of Natural Resources (DNR) to allow a WPDES permit holder to marginally increase a pollutant discharge in their permit if they purchase credits from a statewide central clearinghouse or other third-party independent brokers.
- The central clearinghouse will be a contracted with the Department of Administration (DOA), in consultation with DNR. Independent third-party brokers will need to have trading contracts approved by DNR and provide necessary information to the Central Clearinghouse.
- The clearinghouse would be the statewide broker responsible for the management of buying and selling credits and maintaining an online registry of credits to facilitate the location of potential buyers, available credits, and other information that will facilitate credit transactions.
- Credits are produced through practices or technologies implemented by nonpoint sources and developed through technology tables and modeling reviewed and approved by DNR.
- The production and purchase of credits will always result in an improvement to water quality. Credits are generated at a ratio of 1 credit of pollution reduction requirement in a point-source permit to a minimum reduction of 1.2 credits of reduced nonpoint-source pollution.
- The pollutants traded must involve the same pollutant or the same water quality standard and occur within the same hydrologic area as established by the DNR, typically for the course of a WPDES permit cycle.



Current Law:

- Under current law the Department of Natural Resources (DNR) administers a program where a permit holder may increase their pollutant discharge if they enter into a contract with another party under which the other party will reduce water pollution.
- The agreement must result in an improvement in water quality, involve the same pollutant, and occur within the same basin, or portion of the basin, as the discharge.
- Pollutant trading provides permittees with the flexibility to acquire pollutant reduction credits from other sources in the watershed to offset their point source pollutant load.
- Pollutant trading is a strategy recognized by the federal Clean Water Act, but has gone largely under-the-radar for decades.
- Current trades are between two point sources, a point and nonpoint source, or point source and local unit of government through a Multi-Discharger Variance (MDV).
- Terms and conditions of trading agreements are reflected in Wastewater Pollution Discharge Elimination System (WPDES) permits (new or re-issued).
- As of February 25, 2019 the DNR has approved only 15 trading plans and 11 more are in development, but are not yet approved.
- The main benefit of pollutant trading is lower compliance costs for permittees while simultaneously reducing nonpoint sources of pollutions, serving both with economic benefit while creating more water quality benefits.

FREQUENTLY ASKED QUESTIONS ON P3: Wisconsin's Trading Marketplace

What is Water Quality Trading?

Water quality trading (WQT) under the federal Clean Water Act (CWA) is an option for compliance with a water quality based effluent limitation (WQBEL) in a National Pollution Discharge Elimination System (NPDES) permit. The federal Environmental Protection Agency's (EPA) 2003 Trading Policy, updated in February of 2019, provides guidance to states, interstate agencies, and tribes on how to facilitate trading consistent with the CWA and its implementing regulations.

Trading is based on the fact that pollutant sources in a watershed may face very different costs to control the same pollutant. Under the flexibility of trading programs, permitted facilities facing higher pollution control costs may be able to meet their regulatory obligations by purchasing environmentally equivalent (or superior) pollution reductions from another source at lower cost.

What are the benefits of trading?

WQT can produce substantial cost savings while meeting or exceeding the same water quality goal. It also offers greater flexibility on the timing and level of technology a facility might install. Trading can provide secondary environmental benefits such as flood retention and riparian improvement.

Who is involved in trading?

A permitted facility or a point source might trade with another point source or with a nonpoint source. These partners may trade directly under current law, but under this bill can also trade through a third party. Third party trading has been approved by EPA as compliant with the Clean Water Act.

Any party might act as champion for a trading program, but in the end it is the Department of Natural Resources that will establish what conditions are sufficient to meet the requirements of the Water Pollution Discharge Elimination System (WPDES) permit.

What is a credit?

A credit is a unit of pollutant reduction usually measured in pounds equivalent. Credits can be generated by a point source minimizing the amount of pollutant in their effluent or by a nonpoint source installing best management practices (BMPs) beyond a baseline.

What pollutants can be traded?

EPA's policy supports trading of nutrients (e.g., total phosphorus, total nitrogen) and sediment load reductions. EPA and state policy does not support any trading activity that would cause a toxic effect, exceed a human health pollutant criterion, or cause an impairment of water quality. In addition, trading of persistent bioaccumulative toxic pollutants is not allowed.

When can trading occur?

EPA and the State of Wisconsin currently support trading in unimpaired waters to maintain water quality as well as in impaired waters to improve water quality. In impaired waters trading occurs within the framework of a state total maximum daily load (TMDL) allocation which is reviewed and approved by EPA.

What are trade ratios?

Trade ratios are used to ensure the amount of reduction resulting from the trade has the same effect as the reduction that would be required without the trade. In the P3 proposal, no ratio can be less than 1.2 to 1. Other safeguards are also built into P3: Wisconsin's Trading Marketplace, including:

- The trade must result in an improvement in water quality;
- The pollutants traded must involve the same pollutant or the same water quality standard, and;
- The trade must occur within the same hydrologic area as established by the DNR.

How can uncertainty for the nonpoint source reduction be addressed?

Current DNR tables outlining management practices with recommended credit generation have already been produced and will be utilized for existing practices. These existing tables have a built in uncertainty factor for each practice. In addition, the minimum trade ratio under this legislation is 1.2 to 1 which results in another measure to account for the uncertainty of land practices.

Modeling will be utilized for all new technologies or practices. In addition, field testing of new BMPs, including any new technology, would be a portion of the clearinghouse contract with DOA in consultation with DNR. Monitoring protocols would also be a part of any credit negotiation between the clearinghouse or a third party broker and the nonpoint source credit generator.

What is EPA's Trading Policy?

In February 2019, EPA Assistant Administrator David Ross sent a memorandum to EPA Regional Administrators that restates the agency's strong support for water quality trading and other market-based programs and expands the scope of opportunities envisioned in EPA's 2003 Trading Policy.

The memorandum aims to accelerate the adoption of these programs and promote increased investment in nonregulatory conservation actions to improve water quality and benefit local communities and stakeholders. P3: Wisconsin's Trading Marketplace incorporates this market-based opportunity in a nation leading third party trading program for Wisconsin.

The Clean Water Act (CWA) requirements that are relevant to water quality trading include:

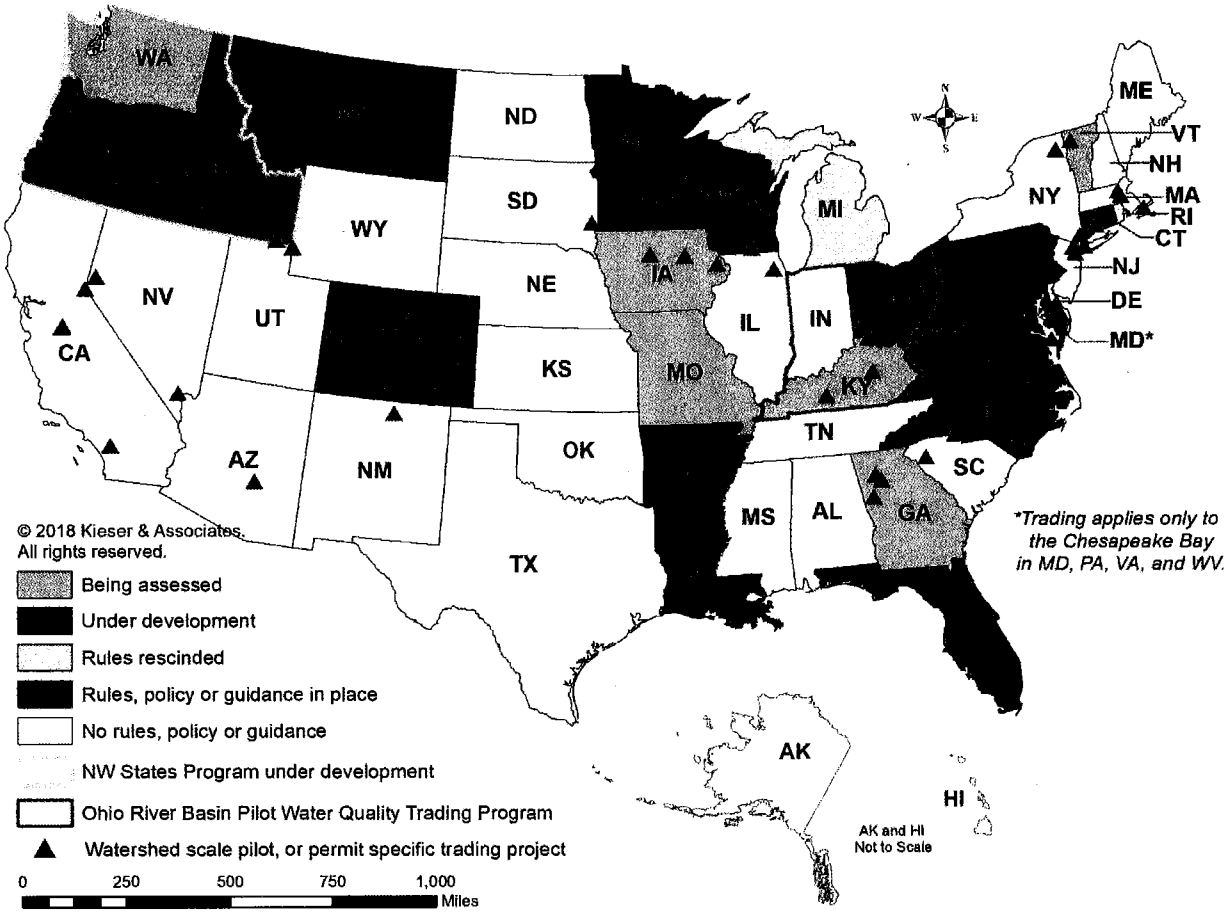
- Requirements to obtain permits;
- Antibacksliding provisions;
- Development of water quality standards;
- Permit standards/regulations;
- Total maximum daily loads (TMDLs), and;
- Water quality management plans.

Who is supporting P3 Wisconsin's Trading Marketplace?

This legislation has gained bipartisan co-sponsorship and earned the support of groups representing agriculture, business, local government, and natural resources.

What are other states doing?

Several states have some form of trading but few have statutory authority. Most programs are implemented as pilots or through guidance. Wisconsin would have the first statewide clearing house for third party trading establishing a marketplace for credit trades.



Map © 2018 The Environmental Trading Network

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Senate Bill 91 Glossary of Terms:

Clearinghouse: A third party that is awarded a contract with DOA, in consultation with DNR, to facility trading in the State of Wisconsin. The clearinghouse is responsible for facilitating a financially stable market for trading, purchasing pollutant credits from generators and selling credits to users.

Credit: The standardized unit of a given pollutant that is available for trading. This amount is usually measured in pounds.

Credit Generator: The person generating pollutant reduction credits. In Senate Bill 91, the most likely credit generators are entities with nonpoint source runoff, like agricultural sources. However, point sources can also enter into contracts to reduce pollutants with another point source.

Credit User: A permittee who wishes to use pollutant reduction credits to allow a discharge of the traded pollutant above levels otherwise authorized by their WPDES permit.

Hydrologic Area: The largest geographic area, as determined by the DNR, possible to achieve water quality standards and any applicable federally approved total maximum daily load (TMDL) reductions.

Mass Balance: A calculation that quantifies total amounts of a specific pollutant within a waterbody.

Methods: DNR approved options including tables and modeling that are used to determine the amount of credits that may be produced by individual practices, technologies or projects.

Nonpoint Source: A source of pollutant loading to surface waters of the State that are widespread in location and are not delivered through a pipe or tunnel. Examples of nonpoint sources include agricultural runoff, urban runoff from roads building rooftops and parking lots (increased by rain or snow melt), and construction site erosion.

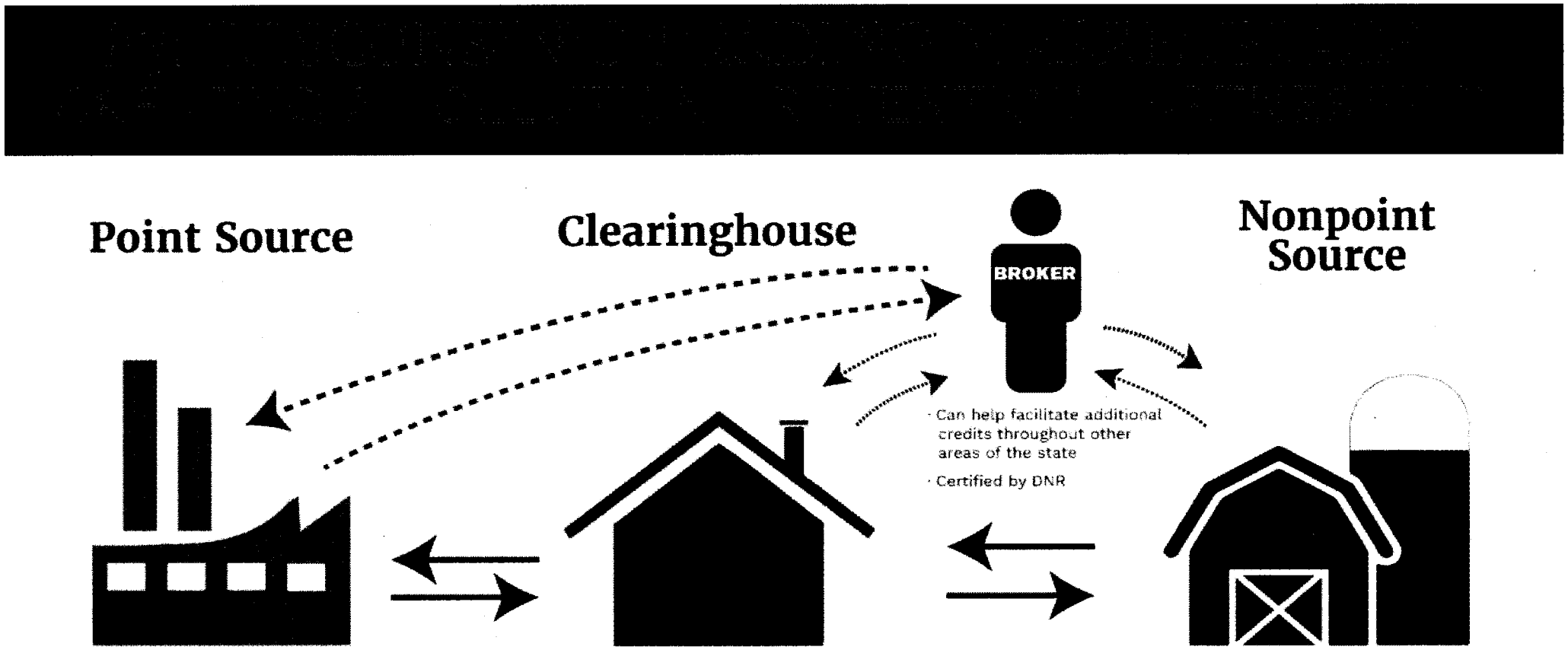
Point Source: A visible, confined, delivery of pollutants into the waters of the State for which a Wisconsin Pollutant Discharge Elimination System permit is required. Examples of point sources include water treatment facilities, food producers, cheesemakers, and paper mills.

Pollutant: The regulated contaminant being traded (ex. Phosphorus, Nitrogen, TSS-Total Suspended Solids).

Third Party: An intermediary which is approved by the DNR to contract and certify credits generated by a nonpoint source and sell credits that have been certified to a point source.

Trade Ratio: Trade ratios are used to ensure the amount of reduction resulting from the trade has the same effect as the reduction that would be required without the trade. Potential components of a trade ratio include delivery, uncertainty and location. Senate Bill 91 requires a trade ratio of at least 1.2:1 but could be greater depending on the variability of the selected practice or technology.

Water Pollution Prevention or Environmental Enhancement Services: Any activity, practice, or project that can be certified to result in a quantifiable reduction of a specified pollutant over a specified period of time.


Point Source
Clearinghouse
Nonpoint Source
BROKER
· Can help facilitate additional credits throughout other areas of the state
· Certified by DNR
· Required to comply with WPDES Permit
· **Purchases credits** from Clearinghouse or a DNR approved broker
· Receives credit to allow a pollutant discharge
· **Ensures credit transaction** results in an improvement to water quality (1:1.2 Credit Minimum)
· Depending on specific practice, greater ratios would be required
· **Responsible for** the management of buying and selling **credits**
· **Contracted with DOA and DNR** and maintains registry of credits
· **Assumes liability** for ensuring credit quality
· **Generates credits** through use of best practices and technology to reduce pollutants from entering waterway
· **Receives** stable, long-term supplemental **income** for water quality improvement efforts