POLICY WORKING GROUP

IMPLEMENTATION KICKOFF MEETING AUGUST 4, 2015



Improving our water resources with collaboration and innovation

Photo by Paul Gierhart, "Water Is..." Photo Contest

Introductions

Point Source

Rick Manner Kay Anderson Nick Menninga Tom Granato Randy Stein David St. Pierre Alec Davis Brenda Carter

Agriculture

Tim Maiers Howard Brown Liz Hobart Jennifer Tirey Lauren Lurkins (Bill Bodine) Jean Payne Rodney Weinzierl Dick Lyons Kelly Thompson

Stormwater

Eric Schoeny Dale Schepers

Drinking Water Supply

Ted Meckes Kevin Culver

University/Technical Assistance Providers

George Czapar Mark David Greg McIsaac Emerson Nafziger Gary Schnitkey Environmental Groups

Albert Ettinger Kim Knowles Brad Klein Cindy Skrukrud

Government

Marcia Willhite Warren Goetsch Kerry Goodrich



Development of NLRS document



non-profits, and technical experts on issues such as water quality monitoring, funding, and outreach.

Current Status (Marcia Willhite)



Summary of Public Comments and Decisions (*Marcia Willhite*)

- Changes made in Strategy in response to comments
- Items requiring PWG consideration and action
- > Observations/Opinions
- Programmatic actions for Illinois EPA



Changes made in NLRS in response to comments



- Groundwater Appendix
- Wetland effectiveness
- Cost for nutrient removal by point sources
- Permit limits for local water quality impact, feasibility study for hypoxia contribution
- Nutrient reduction goals in pounds per year by source
- Clarifications of priority watersheds



Items requiring Policy Working Group consideration and action

- Implementation benchmarks
- Goal date for achieving 45% reduction in N and P
- Exploring the establishment of a watershed protection utility
- Establishing an Agronomic Technical Advisory Team
- Trading/offsets between NPS and PS





Policy Working Group Participation in NLRS Development





Policy Working Group participation for Implementation



NUTRIENT LOSS REDUCTION STRATEGY Collaboration and innovation

IMPLEMENTATION ACTIONS AND INITIATIVES BY SECTOR ENVIRONMENTAL – CINDY SKRUKRUD



IMPLEMENTATION ACTIONS AND INITIATIVES BY SECTOR

POINT SOURCE – THOMAS GRANATO



IMPLEMENTATION ACTIONS AND INITIATIVES BY SECTOR

AGRICULTURE – JENNIFER TIREY



IMPLEMENTATION ACTIONS AND INITIATIVES BY SECTOR

UNIVERSITY – ELIANA BROWN



"Water is..." Photo Contest



40 entries from all over IL



Youth Photo Contest



 Identify the location and date the image was taken (including the name of the waterbody if applicable).

Your entry:

- Should be submitted as high-resolution JPEG (No larger than 8.0 MB). Please resize so that the longest dimension is 1500 pixels.
- Should not be digitally altered. Minor adjustments (such as cropping, color adjustment, etc.) are permitted.
- · Filename must include the full name of the contestant.



5PM, FRIDAY OCTOBER 16

http://ap.illingic.adu/wowthphotocont



"The Science of the Strategy" video series



http://go.illinois.edu/scienceofthestrategy



NLRS Implementation Workgroups, Forums, & Councils

- 1) Nutrient Monitoring Council (May 13 & Sept. 16)
- 2) Ag. Water Qual. Partnership Forum (May 22)
 ➢ AWQPF Tech Committee (Aug. 26)
- 3) Urban Stormwater Working Group (July 20)
- 4) Policy Working Group (Aug. 4)
- 5) Nutrient Science Advisory Committee (select in Aug.)



Status of NLRS Implementation Workgroups, Forums, and Councils

NUTRIENT MONITORING COUNCIL *FIRST MEETING: MAY 13, 2015*

Co-Chairs: Gregg Good, Illinois EPA Mark David, University of Illinois





NMC MEMBERS

Gregg Good, Illinois EPA-Surface Water Mark David, University of Illinois Doug Yeskis, U.S. Geological Survey Ann Holtrop, Illinois DNR Laura Keefer, Illinois State Water Survey Marvin Hubbell, U.S. Army Corp of Engineers-Rock Island Richard Berg, Illinois State Geological Survey Rick Cobb, Illinois EPA-Groundwater Jill Kostel, The Wetlands Initiative Tom Granato, MWRDGC Cindy Skrukrud, Sierra Club Laura Gentry, Illinois Corn Growers Association Andrew Casper, Illinois Natural History Survey Michael Brennan, NGRREC/Illinois-Indiana Sea Grant



NMC Charge

 Develop a *nutrient monitoring program* (e.g., program design, data collection and methods, data analysis and assessment, QA, reporting, evaluation) that, *if implemented:*



- a. Collects the necessary information to generate estimations of *5-yr running avg.* loads of *Nitrate-Nitrogen and Total Phosphorus* leaving the state of IL *and* selected high priority watersheds (e.g., 8-digit HUC basins).
- b. Identifies *trends in loading over time* as compared to 1980-1996 baseline conditions.
- 2. Develop a *prioritized list of nutrient monitoring program activities and associated funding needed* to accomplish the charges/goals listed in a. and b.
- 3. Document *"local water quality outcomes"* (good or bad....hopefully good) on a *smaller priority watershed scale* where future nutrient reduction efforts are being implemented (e.g., bugs and fish got happier now than before; fewer documented WQ standards violations; fewer algal blooms or offensive conditions; decline in nutrient, chloride, or bromide concentrations in groundwater).





8-Super Station Network

(NMC Charges 1a and 1b)

- Illinois Nutrient Loss Reduction Strategy need for "accountability"
- Continuously Recorded Parameters
 - Nitrate, Phosphate, Turbidity, D.O., Temp, pH, Spec. Cond.
- Stations (73% of IL land area)
 - Rock, Green, Illinois,
 Vermillion (Danville),
 Embarras, Kaskaskia, Little
 Wabash, Big Muddy
- Annual Nutrient Load Exports
 Agreement 4/1/15 3/31/21



Nutrient and Sediment Export from Illinois–Quantification through a Continuous Loadings Network to Support the Illinois Statewide Nutrient Loss Reduction Strategy



Prepared for Illinois Environmental Protection Agency

by Kelly Warner, Paul Terrio, Gary Johnson U.S. Geological Survey Illinois Water Science Center 1201 West University Avenue Urbana, Illinois 61801 (217) 328-8747

What about:

- Generating loading estimates for some or all priority watersheds?
- Trying to show
 local water quality
 improvements
 (outcomes)?





NMC Next Steps

Next Meeting September 16, 2015.

- In preparation, we've asked NMC members for information and GIS coverages of the who's, what's, and where's of IL nutrient monitoring:
 - Ongoing/routine sampling
 - Length of record
 - Collection frequency
 - Information on all forms of P and N, chlorophyll a, DO, sediment, fish, bugs, mussels, habitat, chloride, bromide, others
 - Large networks, 8-digit HUC, or smaller NLRS priority watersheds
 - Surface and Ground water
- IWRC is in the process of generating maps and summarizing findings to visualize where monitoring is occurring throughout the state, to identify gaps, and to facilitate data aggregation.
- This will help in the creation of a prioritized list of nutrient monitoring program activities and associated funding needed to accomplish the charges of the NMC (Charge #2).







shutters

2.

3.

Status of NLRS Implementation Workgroups, Forums, and Councils

AGRICULTURE WATER QUALITY PARTNERSHIP FORUM (AWQPF) FIRST MEETING: MAY 22, 2015 AWQPF Technical Subcommittee Meeting: August 26, 2015

Warren Goetsch





AWQPF Committee Charge

- Steer and coordinate outreach and education efforts to help farmers address nutrient loss and select the most appropriate BMPs:
 - Identify needed education initiatives or training requirements for farmer and technical advisors.
 - Strengthen connections between industry initiatives, certified crop advisor continuing education requirements, state initiatives, and other technical services.

Track BMP implementation

Coordinate cost sharing and targeting

Develop other tools as needed

Consider an agriculture water quality certification program.



AWQPF Outreach and Education

Accomplishments and Conclusions

- Outreach and Education efforts currently conducted by the ag communicator group have been successful and will continue independently of the AWQPF.
- Gaps in education efforts include: Youth Audiences, & Female Farmers/Landowners.



AWQPF Outreach and Education

Next steps

- Ag communication partners will include FFA students in some of the planned summer events.
- Future events or initiatives may be held at fairs when possible and will include 4-H members.



AWQPF Track BMP Implementation

Accomplishments and Conclusions

A technical **subgroup** (meets Aug 26) will:

- 1. Determine the best way to share and aggregate BMP implementation data across agencies (*so we can track our progress in accomplishing the NLRS*),
- 2. Determine what BMP implementation parameters will be tracked (e.g. cover crops, wetlands, buffer strips, etc.) and how it will be aggregated (e.g. per watershed, statewide, lump practices into categories like edge of field, etc.). This includes identifying future data parameters required from producer surveys or transect surveys to track progress in accomplishing the NLRS.
- 3. Assess existing BMP implementation data availability over time to advise the Policy Working Group as they select a BMP implementation baseline year.



AWQPF

Coordinate Cost Sharing and Targeting

Accomplishments and Conclusions

The AWQPF felt that the NRCS technical committee is the appropriate venue to address targeting and coordination of cost share considerations.



 ILLINOIS
 Improving our water resources with

 NUTRIENT LOSS
 collaboration and innovation

AWQPF

Coordinate Cost Sharing and Targeting

Next steps

- IEPA will query the appropriate AWQPF agencies on cost share deadlines and decision thresholds that each agency must consider.
- The results of the IEPA query will be presented at the next AWQPF meeting and cost share coordination and targeting will be further discussed.



Status of NLRS Implementation Workgroups, Forums, and Councils

URBAN STORMWATER WORKING GROUP FIRST MEETING: JULY 20, 2015

Amy Walkenbach





Courtesy Daily Illini

Urban Stormwater Working Group Committee Charge

- Explore funding, identify legislative initiatives, and develop plans.
- Coordinate outreach
- Orchestrate statewide efforts related to green infrastructure expansion, MS4 program training, and urban stream, lake, and stormwater monitoring.



Urban Stormwater Working Group: Explore funding, identify legislative initiatives, and develop plans

Accomplishments and Conclusions

- Funding
 - Stormwater Utilities can be an important local source of funding
 - Funding is needed to support appropriate state and municipal staff
- Legislative and regulatory initiatives needed
 - Enabling legislation is needed to allow all counties to establish Stormwater Plans and Ordinances
 - Enabling legislation is needed to allow all counties to establish Stormwater Utility Fees



Urban Stormwater Working Group: Explore funding, identify legislative initiatives, and develop plans

Next steps

Report to Policy Working Group funding and legislative needs for support and action



ILLINOIS NUTRIENT LOSS REDUCTION STRATEGY

Urban Stormwater Working Group Coordinate Outreach

Accomplishments and Conclusions

- Education and Outreach Strategy is needed to educate communities on the need for and value of stormwater utilities to ensure local water quality (flood mgrs. & drinking water utilities are allies)
- Nutrient module needed for city officials and consultants (not just in MS4 communities) to cover topics including: how to calculate nutrient loads and reductions, selecting BMP's, why the community should reduce runoff and nutrient loss
- Recognition program is needed for both MS4 and non regulated cites making progress toward nutrient and stormwater reductions (examples include: Watershed Heroes, Green Luminaries, Blue Star)
- Collective training is needed for municipal public works employees in MS4 communities
- Need a communication logo and tagline (like "what's your strategy?") for urban stormwater mgrs. & homeowners
- > There is a geographic gap in southern IL that should be targeted



Urban Stormwater Working Group Coordinate Outreach

Next steps

- Develop an Education and Outreach Strategy to educate communities on the need for and value of stormwater utilities to ensure local water to support PWG legislative/funding initiative (if approved) [work with St. Louis and Champaign to incorporate lessons learned into strategy]
- Explore need for, then build, coalition and program necessary to deliver nutrient module to city officials and consultants
- Seek PWG approval for and support of a recognition program for both MS4 and non regulated cites making progress toward nutrient and stormwater reductions (Could also do awards for point source and agriculture successes)
- Build coalition and program necessary to deliver collective training for municipal public works employees in MS4 communities (options include statewide training (e.g. Indiana), webinars, appending to existing meetings (i.e. stormwater and floodplain mgrs., or Storm Con).
- Develop a communication logo and tagline (like "whats your strategy") for urban stormwater mgrs. & homeowners
- Include Carbondale Regional Planning Commission as a partner and member of the USWG to address geographic gap in southern IL.



Orchestrate statewide efforts related to green infrastructure expansion, MS4 program training, and urban stream, lake, and stormwater monitoring

Accomplishments and Conclusions

- Tracking BMP practices and ordinances adopted by communities is a good idea and should be incorporated into the statewide Adaptive Management Strategy
- If you know the BMP and size, you can calculate nutrient reduction using existing modeling program



Orchestrate statewide efforts related to green infrastructure expansion, MS4 program training, and urban stream, lake, and stormwater monitoring

Next steps

- Seek PWG guidance on most appropriate vehicle to incorporate urban nonpoint source reductions into overall strategy (options include: AWQPF Tech group, and NMC)
- Determine method to mine needed data. Sources include:
 - a. Resource Management Mapping Service
 - b. MS4 Reporting
 - c. GIS location data



Status of NLRS Implementation Workgroups, Forums, and Councils

NUTRIENT SCIENCE ADVISORY COMMITTEE FIRST MEETING: OCTOBER 2015 Selection Panel Meeting: August 20, 2015

Brian Miller





Nutrient Science Advisory Committee Committee Charge

- Determine the numeric criteria for nutrients most appropriate for Illinois waterbodies based on the best science available.
- Consider whether standard should be statewide or watershed specific.



Timeline for Nutrient Science Advisory Committee

- PWG nominated potential candidates (June 30) 18 nominations received
- A NSAC selection panel was selected- 1 rep. from each sector (Env., Ag., P.S., Gov., Univ.)
- Selection committee meets Aug. 20
- > NSAC hopefully has first meeting in October
- NSAC will meet approx. every 2 months with a mix of public and executive session meetings and conference calls



Nutrient Science Advisory Committee Selection Process

Follows EPA
 Science Advisory
 Board selection
 criteria and
 procedures



Selection panel follows standard conflict of interest and confidentiality guidelines used in scientific proposal review panels



Nutrient Science Advisory Committee Criteria for Selection

> Area(s) and level of expertise:

a. Biological responses to nutrients in a freshwater ecosystem.

b. Factors influencing biological response to nutrients.

 c. Watershed scale differences in nutrient loading/differences in ecosystem response to nutrients.

d. Methodologies for developing nutrient criteria.

e. Spatial and temporal relationship between biotic integrity and chemical responses to nutrient loads.

f. Nutrient and food web dynamics in agriculturally dominated streams.

g. Sediment and the role it plays in nutrient loading and nutrient deposition.



Nutrient Science Advisory Committee Criteria for Selection

- > Area(s) and level of expertise
- Experience with Illinois or similar flowing waters
- Related publication and research activities
- Skills working on advisory panels, committees or workshops
- Lack of conflict of interest
- > Appearance of impartiality



Funding for

Nutrient Science Advisory Committee

- Meeting expenses: transportation, lodging, per diem
- Honorarium (for those who can accept one): \$500 per meeting
- Opportunity for sectors to contribute to fund that offers honorariums for writing assignments and between meeting activities and travel for outside experts



ILLINOIS NUTRIENT LOSS REDUCTION STRATEGY Implementation process after NSAC completes work (*Marcia Willhite*)

- After NSAC makes its determination, Illinois EPA will work with stakeholders to develop an implementation plan
- Intent is to go to rulemaking with a standards proposal and an implementation plan



Point Source Working Group

Discussion

- Background (Marcia)
- Should we establish this group?
- > Who should be on it?



Status of NLRS Implementation Workgroups, Forums, and Councils

POLICY WORKING GROUP *FIRST MEETING: AUG 4, 2015*

Brian Miller





Policy Working Group (PWG) Committee Charge

- Steer implementation of the strategy.
- Consider policy issues emerging from public comments.
- Explore funding opportunities.
- Identify needed legislative initiatives.
- Identify adaptive management adjustments and update the strategy.





Items requiring Policy Working Group consideration and action at future mtgs.

- Implementation benchmarks
- Goal date for achieving 45% reduction in N and P
- Exploring the establishment of a watershed protection utility
- Establishing an Agronomic Technical Advisory Team
- Trading/offsets between NPS and PS



Establishing a baseline year for Adaptive Management

- Introduction (Marcia Willhite)
- Potential options for
 Baseline establishment
 (Brian Miller)
- Facilitated discussion



Potential Baseline Options for Adaptive Management (*Pros and Cons?*)

- > 2001 First Hypoxia Action Plan
- 2011 Science assessment loading calc. completed
- 2015 NLRS finalized
- > 2017 Provides time to get data measures in place
- > Others?



Implementation Benchmarks

- Introduction (Marcia Willhite)
- Facilitated discussion (Brian Miller)
 - 1. Should we establish implementation Benchmarks?



2. What is the nature of the benchmark?

- Benchmark metrics (lbs removed, % reduction)
- BMP implementation targets (% of acreage covered, # of acres covered, point source separate?, Urban stormwater separate?)
- Time Target (% or # by _____ eg.2040)



How Do We Reach A Decision On Implementation Benchmarks?

- 1) Work on as a main agenda item at the next PWG meeting?
- 2) Appoint a subcommittee to explore and report options/findings at the next PWG meeting?



Schedule of future PWG meetings (Eliana Brown)

Nov 17, 2015
Mar 15, 2016
Aug 30, 2016



