

Developing an Illinois Nutrient Reduction Strategy

March 11, 2013

Activities Focused on Non-Point Source

Project

Description

Mississippi River Basin Initiative (MRBI) –
Indian Creek Watershed

Targeting implementation activities on a small watershed. Focused on nitrogen input to PWS river. Weekly sampling during spring and summer, monthly the rest of the year. To supplement continuous staff gage & nutrient monitoring at the “bottom” of the watershed (USGS). Beginning an edge of field monitoring program – CIG

Vermilion Watershed

Using edge of field BMPs to reduce nitrogen inputs

Big Bureau Creek

Recently designated as MRBI. Workgroup in place to facilitate implementation activities

Activities, Cont'd

The Grove at Kickapoo

Stream naturalization, wetland and floodplain restoration, two stage ditch. With control/non-control, upstream/downstream monitoring, includes nitrate probes for continuous monitoring. Part of USEPA national NPS monitoring program

KIC- Keep it for the Crops 2025

Illinois agriculture, in partnership with state agencies and other nutrient stakeholders, is committed to making measurable progress in the adoption of enhanced nutrient stewardship practices

Activities, Cont'd

Lake Bloomington Nitrate Reduction Program

BMP study for nitrate reduction, completion of wetlands, bio-reactor, cover crops. Some monitoring, partnering w/Blm and TNC

Load Reduction Strategy

An implementation strategy for non-TMDL parameters whereby a total load allocation for nutrients (and other pollutants w/out standards) is developed along with an implementation plan. (TP TMDLs still developed for lakes impaired by TP). There are six completed LRSs and 3 on-going.

Illinois EPA Priority Watersheds

Six watersheds w/TMDLs developed for nutrients are prioritized for implementation activities

Activities, Cont'd

CREP and CREP Assistants

Target TMDL watersheds to work with landowners to place critical farmland into CREP designation. Within these basins there are 26 watersheds with completed TMDLs and 10 watersheds with TMDLs being developed

State-wide Phosphorus Bans

Dishwashing detergent, commercial lawncare

**Deep Placement of P Program –
Champaign County**

Makes equipment and information available to local farmers on the deep placement of P . A minimum of 10,000 acres will use the equipment during the two year contract

Activities, Cont'd

319 Competitive Grant Program

Statewide Grant funds to address NPS TMDLs and Watershed Plan implementation.

Illinois Green Infrastructure Grant Program (IGIG)

Competitive grant program for MS4 & CSO communities to improve WQ through stormwater management activities

Activities Focused on Point Sources

- Phosphorus Effluent Standard – 1 mg/L P for new/expanded discharges
- Anti-degradation – required evaluation has resulted in P and/or N limits
- TMDLs for nitrate and P – WLA has resulted in permit limits
- USEPA letter to limit nutrients to address narrative standard – only approach under existing regulations is TMDLs – considering revised narrative
- Considering technology-based requirement triggered by impairments or facility upgrade.
- Volunteers! MWRD, Fox River

“Recommended Elements of a State Framework for Managing Nitrogen & Phosphorus Pollution”

- 2011 USEPA Memo
 1. Prioritize watersheds on a statewide basis for nitrogen and phosphorus loading reductions
 2. Set watershed load reduction goals based upon best available information

3. Ensure Effectiveness of Point Source Permits in Targeted/Priority Watersheds for:

- Muni & industrial facilities with significant contribution
- CAFOs that discharge
- Urban stormwater

4. Agricultural Areas

- Develop watershed-scale plans-target effective practices where most needed

5. Stormwater and Septic Systems

6. Accountability and Verification Measures

- Identify where/how each of the tools in above sections will be used within priority watersheds to assure reductions will occur
- Verify that load reduction practices are in place
- Assess/demonstrate progress in achieving load reduction goals:
 - Establish baseline of existing N & P loads and current BMP implementation in each priority watershed
 - Conduct ongoing monitoring of N & P loads leaving the watershed
 - Provide description/confirmation of additional BMP implementation

7. Annual public reporting of implementation activities and biannual reporting of load reductions and environmental impacts associated with each management activities in targeted watersheds
8. Develop workplan and schedule for numeric criteria development

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Policy/Stakeholder Tasks

- In view of baseline conditions, potential scenarios for reducing nutrient losses and existing tools/programs, how should implementation be organized?
- Approach to point source reductions in watersheds with high contribution of nutrients to the Mississippi River (stakeholder discussion to date has focused on addressing in-state impairments)
- Approach to “accountability and verification”, especially for non-point sources

Illinois State Nutrient Reduction Strategy

- Approach to annual reporting (who, what, where, how)
- Approach to promoting identified BMPs – how to effectively get widespread implementation throughout a priority watershed
- Approach to prioritizing/targeting funding for implementation