

ILLINOIS NUTRIENT LOSS REDUCTION: CURRENT ACTIVITIES, FUTURE DIRECTIONS

Illinois Water 2014
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Current Activities - Agricultural Sources

Many programs available to promote and fund conservation practices that prevent nutrient loss

- ▣ Section 319
- ▣ CREP
- ▣ Partners for Conservation Cost Share
- ▣ Streambank Stabilization and Restoration
- ▣ EQIP
- ▣ CSP
- ▣ Easements
- ▣ MRBI
- ▣ RCPP
- ▣ Driftless Landscape Conservation Initiative
- ▣ Illinois Buffer Partnership
- ▣ Clean Water Initiative
- ▣ National Water Quality Initiative

Current Activities - Agricultural Sources

Illinois Agriculture is leading efforts to fund research, outreach and on-farm demonstration of effective practices.

- ▣ Nutrient Research and Education Council
- ▣ Keep It for the Crop
 - N-Watch
 - Nitrogen management systems
 - On-Farm nitrogen rate trials
 - N-Calc (MRTN calculator)
- ▣ Cover Crop Training Initiative

Future Directions – Agricultural NPS

In order to make progress on nutrient loss reduction, widespread implementation of effective practices needed.

- ▣ Farmers select and apply the most appropriate and beneficial practices from options:
 - Fertilizer application
 - Cover crops
 - Edge-of-field (bioreactors, wetlands, water/sediment control basins, buffers, grassed waterways)

Future Directions – Agricultural NPS

- ▣ Expanded outreach and education on nutrient loss & available tools by public, private sector, academic and non-profits – watershed scale, crop advisors, farm managers
- ▣ Ag Water Quality Partnership Forum
 - Strengthen connections between industry initiatives, continuing education for CCAs, etc. to help producers evaluate/select BMPs
 - Steer education initiatives/assign responsibility
 - Coordinate/align funding
 - Identify future implementation steps

Current Activities – Point Sources

- ▣ Effluent limits in NPDES permits
 - Total P limit of 1 mg/L for new/expanding wastewater treatment plants
 - Total P limit of 1 mg/L for discharges into or upstream of a lake
 - Total P limits and/or total N goals – anti-degradation
 - Voluntary acceptance of permit limits
 - Contribution to violation of narrative standards

Current Activities – Point Sources

- ▣ As a result, 36% of major municipal dischargers have P limits – 70% of regulated discharge from major municipals
- ▣ Permit limits for Metropolitan Water Reclamation District of Greater Chicago will achieve 33% of the point source load reduction goal for phosphorus – Gulf of Mexico hypoxia

Current Activities – Point Sources

- ▣ Watershed planning efforts help with local impairments as well as reduce loads leaving the State.
- ▣ Fox River
 - “placeholder” phosphorus limit
 - Phosphorus removal feasibility report – 1 mg/L and 0.5 mg/L
 - Fox River Implementation Plan
 - Allocation of phosphorus loads will drive future permit limits

Current Activities – Point Sources

- ▣ Watershed Planning
 - Upper DesPlaines
 - ▣ 1 mg/L P permit limit to start
 - ▣ Optimization of current equipment
 - ▣ Develop watershed implementation plan
 - DuPage River/Salt Creek
 - ▣ Focusing on habitat restoration to improve biology
 - ▣ Nutrient-related permit conditions under discussion

Future Directions – Point Sources

- ▣ Nutrient Loss Reduction Feasibility Plan
 - Focus on majors in priority watersheds
 - Favor biological nutrient removal
- ▣ Review data and identify additional strategies
 - Nitrate-nitrogen
 - Industrial discharges
- ▣ Expand reduction planning efforts to additional watersheds to address local water quality problems

Urban Stormwater

- ▣ Current Activities
 - Municipal separate storm sewer systems (MS4) permits
 - Funding of structural/non-structural practices
 - ▣ Section 319
 - ▣ Illinois Green Infrastructure Grants
 - ▣ Clean Water Initiative
- ▣ Future Directions
 - Strengthen IEPA stormwater program/provide more technical and financial assistance from BMPs, green infrastructure, planning
 - Post-development stormwater performance standard
 - Urban Stormwater Working Group

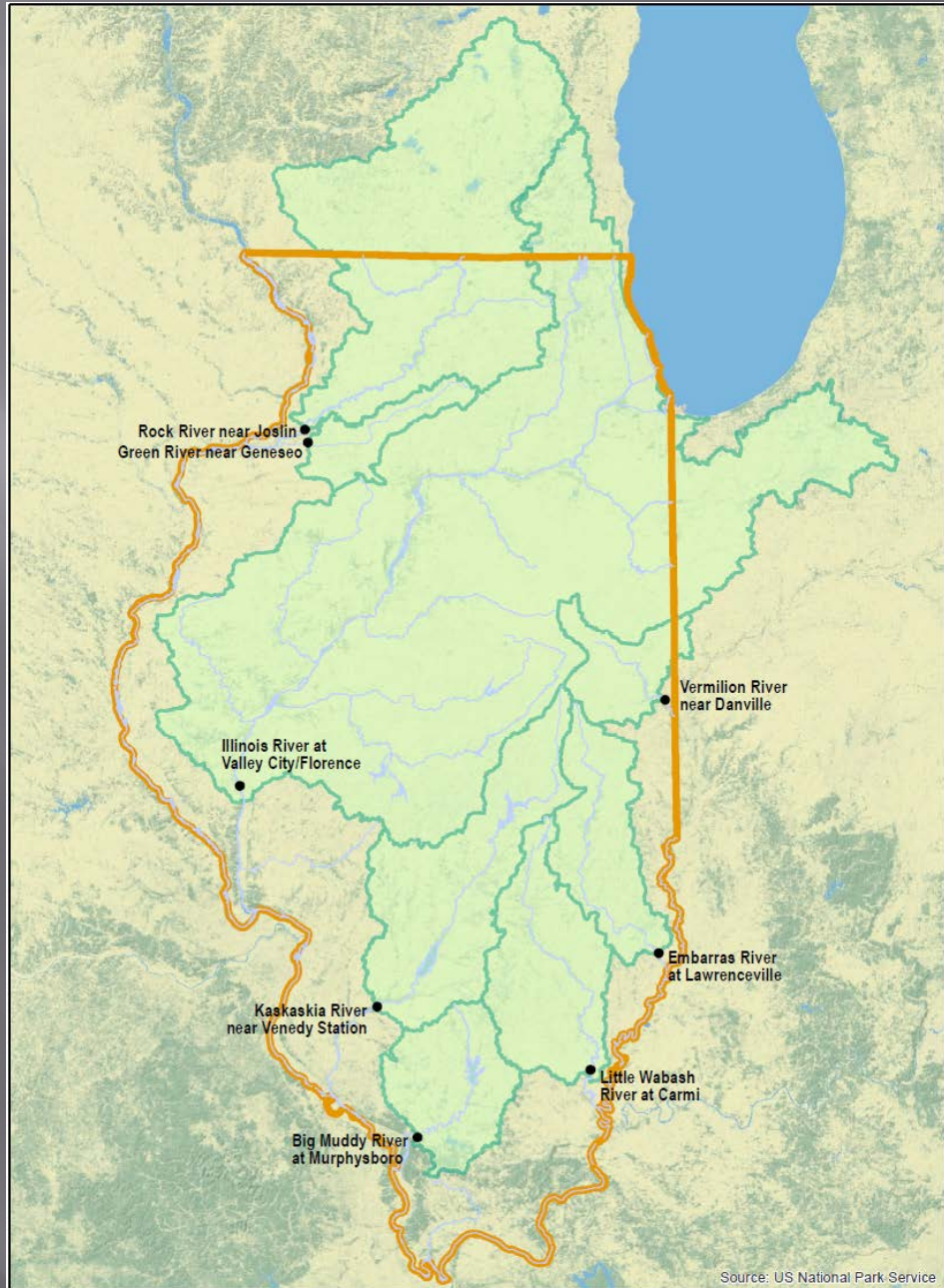
Water Quality Standards for Nutrients

- ▣ Revision of offensive conditions narrative standard
- ▣ Protection for low-phosphorus streams
- ▣ Numeric nutrient criteria
 - Nutrient Science Advisory Committee
 - Guide development of criteria by reviewing all available data, studies, methodologies and existing/proposed state standards

Showing Progress

- ▣ Track environmental outcomes and implementation activities
- ▣ Monitoring programs – local water quality/nutrient loads
 - Statewide Nutrient Export Loadings Network
- ▣ Implementation
 - NPDES
 - 319
 - Soil Conservation Transect Surveys
 - Natural Resources Inventory
 - NRCS Annual Report
 - Ag Industry Voluntary Reporting

Statewide Nutrient Export Loading Network



Public Information on Progress

- ▣ Biennial Condition of Illinois Waters 305(b) Report – Nutrient Section
- ▣ Biennial report on nutrient loss reduction implementation

Nutrient Loss Reduction Strategy

- ▣ Strategy document will be released for 30-day public review and comment
- ▣ Comments received will be incorporated into the document as appropriate
- ▣ Final document will be publicly released and submitted to USEPA