Regional Watershed Planning

Calumet Summit 2010: A Call to Connect
Calumet Conference Center
April 27, 2010
Basins
The Calumet Region
Watershed Communities
Impervious Cover
303d Listed Waterbodies
Total Maximum Daily Load Projects

- Galena River: E. coli –*Draft*
- Kankakee/Iroquois River: E. coli- 2009
- Lake Michigan: E. coli- 2004
- Little Calumet R./Burns Ditch: E. coli- 2004
- Salt Creek: E. coli- 2004
- Trail Creek: E. coli- 2004
Watershed Management Framework Plan

- Framework for water quality improvements and planning.
- Lake, Porter & LaPorte Counties.
- Watershed Advisory Group.
- Problems, causes and sources.
- Critical areas.
- Goals and objectives
Major Categories

- Urban & Rural Areas
- Agricultural Sources
- Hydromodification
Urban & Rural Areas - Critical Areas

- New Development
- Existing Development
- Failing On-site Sewage Systems
- Road, Highways and Bridges
Agricultural Sources - Critical Areas

- Row Cropland >2% Slope
- Confined Animal Facilities
- Nutrient Application to Cropland
- Pesticide Application to Cropland
- Livestock Grazing
Hydromodification - Critical Areas

- Channelization
- Wetland Loss
- Dams - Erosion and Sediment Control
- Streambank and Shoreline Erosion
Watershed Management Plans
Dunes Creek Watershed

- Reduce nutrient and sediment by 20% by 2016.
- Reduce pathogen concentrations to meet the state standard by 2016.
- Improve stakeholder and public involvement.
- Improve biotic communities by 2016 so that they are partially supporting.
- Reduce TDS and chloride concentrations to meet Indiana State Standard.
Salt Creek Watershed

- Reduce nitrate by 65%, phosphorus by 66%, and sediment loading 33% by 2028.
- Reduce pathogen (E. coli) concentrations by 86% by 2028.
- Improve stakeholder and public involvement.
- Improve biotic communities so that the density and diversity of EPT (Ephemeroptera, Plecoptera, Trichoptera) taxa improves by one scoring metric level.
Trail Creek Watershed

- Meet the State Water Quality Standard for *E. coli* of a monthly geometric mean of 125 cfu/100 ml and a maximum daily standard of 235 cfu/100 ml.

- Decrease sedimentation and dredging of the navigable channel. Total Suspended Solid goal of 15 mg/l.

- Decrease nutrient loading in Trail Creek to the target concentrations (0.05 mg/l ortho-phosphorus, 0.05 mg/l total phosphorus, 0.25 to 0.1 mg/l nitrogen ammonia, 1.0 mg/l TKN, and 10 mg/l nitrate-nitrite).

- Maintain a natural stream channel and flow.
Deep River-Turkey Creek Watershed

- Minimize the deposition of new sediments into Lake George.
- Improve water quality in Deep River/Turkey Creek watersheds.
- Improve education about water quality problems/concerns.
- Eliminate illegal discharges.
- Eliminate Failing septic systems.
- Promote consistency among communities developing stormwater management programs.
Reduce *E. coli* levels in the Little Calumet River by reducing loads to the River to meet beneficial uses.

Reduce sediment loads by source reduction strategies and, in priority subwatersheds, through the use of BMP’s.

Reduce nutrient loads by source reduction strategies and, in priority subwatersheds, through the use of BMP’s.

Restore, improve, and/or protect floodplains, wetlands, natural areas, and riparian corridors.

Improve public awareness/knowledge of pollutant loads, sources, and solutions, especially with regard to *E. coli*, and the impacts and risks associated with them.

Create an active watershed alliance or conservancy district that facilitates and implements information sharing including ordinances, projects/experiences, and educational materials in a central location.

Increase river corridor connectivity, river navigability, and public access sites and make the public aware of them.
Hire a dedicated watershed coordinator for LaPorte County.

To protect the rural character and natural resources of the watershed by incorporating ‘Smart Growth’ and low impact development principles into local planning and development.

Reduce *E. coli* loads to meet water quality standard of a monthly geometric mean of 125 cfu/100 ml and a maximum daily standard of 235 cfu/100 ml.

Restore 10% of potential wetland restoration areas to wetland habitat within the next ten years.

Preserve natural areas through government coordination and/or land trusts.

Reduce sediment loads in the Galena River.
Coffee Creek Watershed

- Hire a watershed coordinator.
- Establish/encourage permanently protected, vegetated streamside buffers.
- Encourage the conservation, management, and improvement of existing forested land in the upper portion of the watershed.
- Educate/inform stakeholders of the value of Coffee Creek and ways to protect its water quality and aquatic life.
- Understand the processes involved in identifying the sources of E. coli and to educate watershed stakeholders on management techniques available to reduce pathogenic contamination.
- Document the contribution of sediment, nutrients, and bacteria from the surface and subsurface drains.
- Reduce the amount of sediment from Pope O’Connor Ditch by 65% and nutrients by 40%.
- Reduce the amount of sediment from Shooter Ditch by 65% and nutrients by 40%.
Watershed Planning Accomplishments

- Seven watershed plans completed since 2002.
- Plans exist for approximately 70% of the Little Calumet-Galien drainage.
- Increased stakeholder participation in planning and implementation efforts.
Watershed Management Challenges

- Local capacity.
- Balance between growth and resource protection/restoration.
- Collaboration across political boundaries.
- Conflicting interests.
- Long-term sustainability of watershed groups.
Watershed Management Opportunities

- TMDL recently completed for Kankakee River.
- Incorporation of watershed restoration and protection objectives into other local and regional planning efforts.
- Great Lakes Restoration Initiative.
- Shared outreach and implementation between watershed groups.
- Updating the Watershed Framework Plan.
Opportunities…
Questions?

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