

Introduction to Project Planning Recommendations

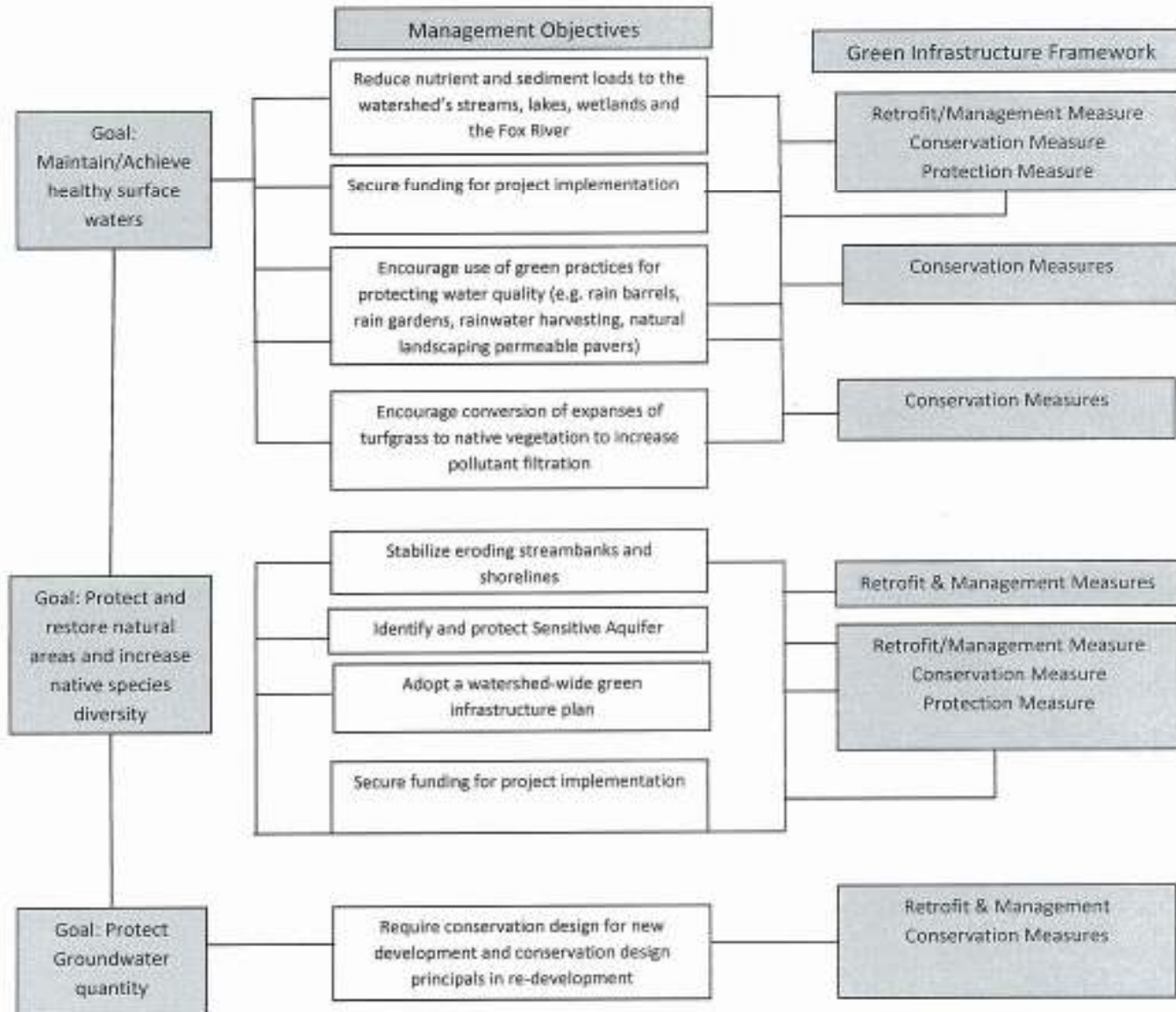
Silver Creek and Sleepy Hollow Creek
Watershed Meeting

May 19, 2011



Presentation Overview

- Link watershed goals to green infrastructure framework objectives.
- Outline methods to achieve green infrastructure network goals.
- Identify a funding source used to implement green infrastructure goals.
 - Clean Water Act Section 319 (h) Nonpoint Source Pollution Control Program.
- Examples of funded projects
- Next Steps



Land Conservation

- Protect the most important & vulnerable parts of the watershed
- Prioritize areas for conservation throughout the watershed based on their ability to protect habitat & water quality



Critical Habitats



Aquatic Corridor



Cultural Areas



Hydrologic Reserves

Water Pollution Hazards

Aquatic Buffers

Transition zone between a developed area and a waterbody



Examples of Buffers

No Buffer Requirements



Residential Buffer Management



Buffer Protected Per Local Regulations



Better Site Design

Design Approach to residential & commercial site design that seeks to:

- Reduce the amount of impervious cover
- Increase the natural lands set aside for conservation
- Use pervious areas for more effective stormwater treatment
- Achieve a marketable, cost-effective product



What Are Stormwater Retrofits?

Stormwater management measures inserted in an altered landscape where little or no prior stormwater controls existed



Erosion & Sediment Control

During construction

- Vegetation is cleared
- Development site is graded
- Soils are particularly susceptible to erosion

Without proper control measures,
sediment from the site can run off into
the storm drain network and nearby
streams



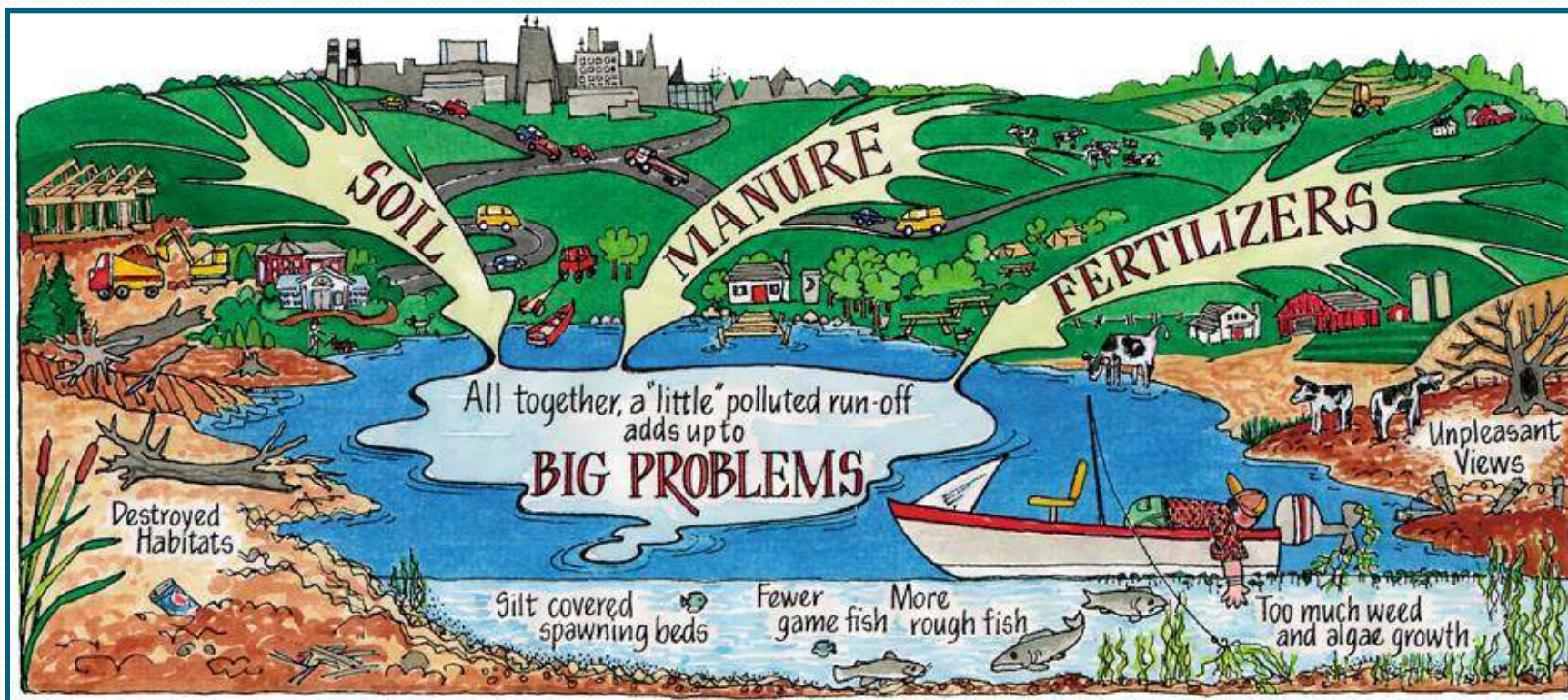


Policy Recommendations

- Agricultural Protection Recommendations
- Stormwater Management
- Zoning and Subdivision Codes
- McHenry County Conservation Design Standards
- NPDES Phase II

Implementing a Green Infrastructure Framework

Nonpoint Source (NPS) Pollution Control Program – a component of Section 319(h) of the Clean Water Act





Who is Eligible?

- State and local governments
- Public and private nonprofit organizations
- Businesses and companies
- Watershed planning groups (incorp.)
- Individuals

Applicant must have legal status to accept funds from the Illinois EPA



What Types of Projects are Eligible?

Higher Priority:

- Watershed projects that address NPS pollution issues
- Watershed-wide information/ education projects
- Watershed plan development

Lower Priority:

- Site-specific, non-watershed wide NPS pollution control projects.
 - NPS pollution control research and monitoring projects
 - Quality Assurance Program Plan (QAPP) required with application
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- *Lowest Priority:*
 - Flow capacity projects, such as dredging
 - Purchase of equipment and vehicles

Shoreline Stabilization – (Local Example)

Long Lake Shoreline Stabilization Project

Who? Lake County Forest Preserve District

Project: 1,400 feet of moderately to severely eroding shoreline on Long Lake.

Benefits?

- Increased Native Plants
- Improved water quality
- Restored landscapes



Streambank Stabilization (Local Example)

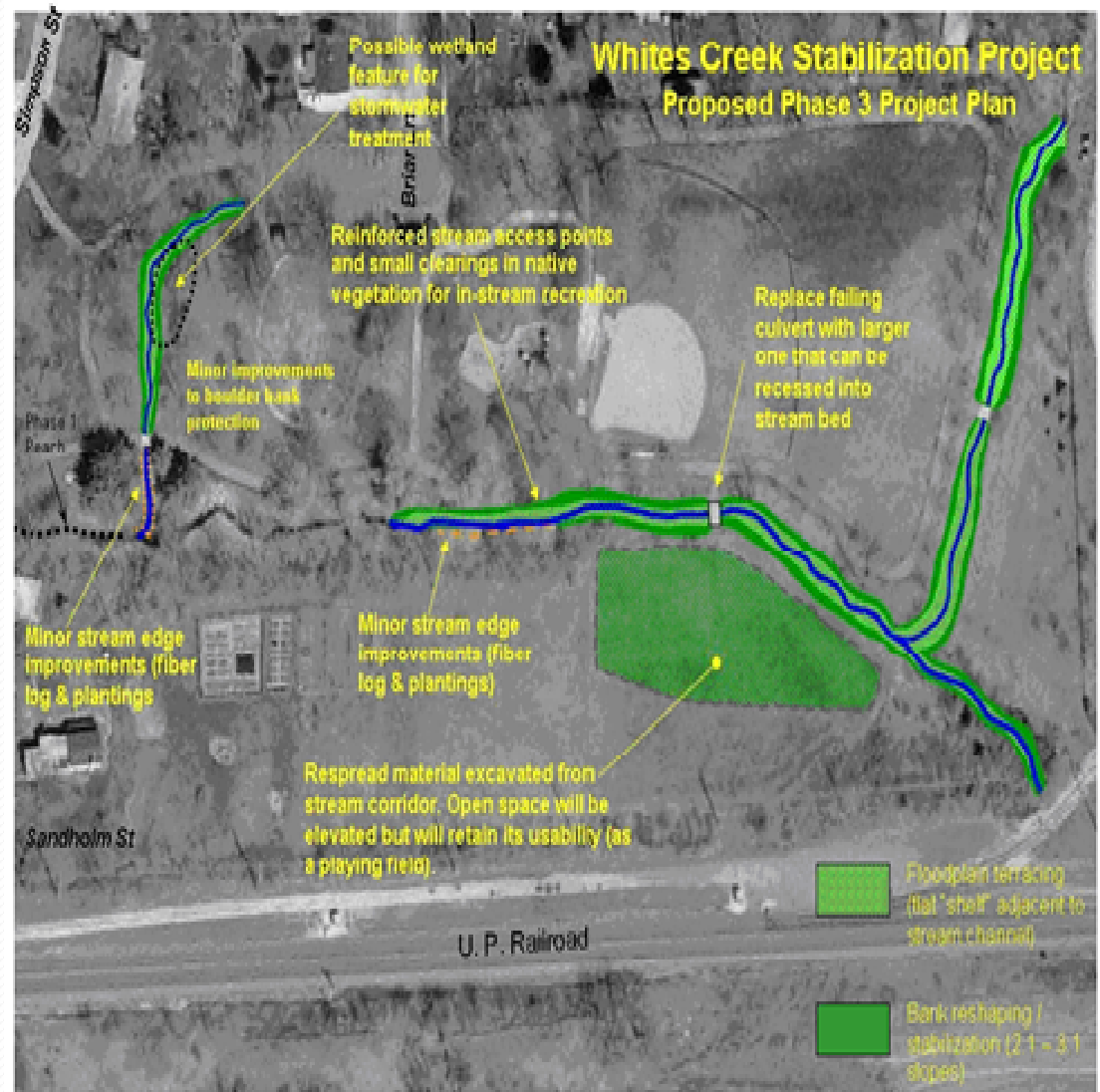
White's Creek Project

Who? Geneva Park District

Project: ½ mile long restoration and stabilization of White's Creek (tributary to the Fox River)

Benefits?

- Wider Stream Buffer
- Reestablished meanders in the low flow channel.
- New floodplain terraces
- Habitat Improvement (due to installation of riffles, pools, and substrate).
- Improved water quality.



White's Creek



White's Creek



Pre-Construction (SW of Site)



Post Construction (SW of Site)

Streambank Stabilization (Local Example)

South Branch Poplar Creek Action Plan
Implementation – Phase I

Who: Village of Streamwood

Project: Protect a 988 linear foot
stream segment suffering from
streambank erosion.

Benefits:

- Erosion Protection from severe streambank erosion.
- Nonpoint source pollution control.
- Improved water quality along both the South Branch of Poplar Creek and the downstream Fox River.



Streambank Stabilization

