

# Open Space Inventory and Green Infrastructure Network

North Mill Creek/Dutch Gap Canal Watershed

Lake County Stormwater  
Management Commission  
August 26, 2010

## Open Space & the Watershed Plan

- Open space ID'd as one of the most important priority topics by watershed stakeholders
- Open space important component for both "quality of life" and natural resources
- Serves important stormwater management & water quality needs

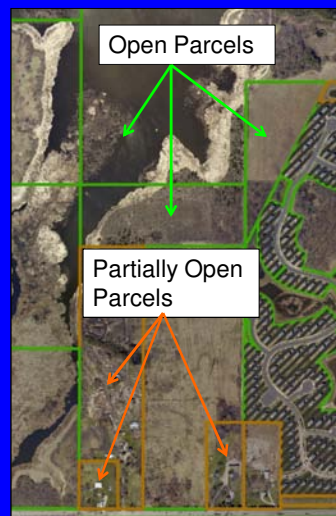
## Open Space

- Any land that does not contain buildings, roads or impervious surfaces
- Natural areas, recreational areas, working lands
- Benefits hydrology, water quality, habitat, & biodiversity



## “Open” & “Partially Open” Space

- Open Space: no built structures or impervious cover
- Partially Open Space: structures or impervious areas cover only a small portion of the total parcel & provides open space benefits



# Types of Open Space



Working Lands



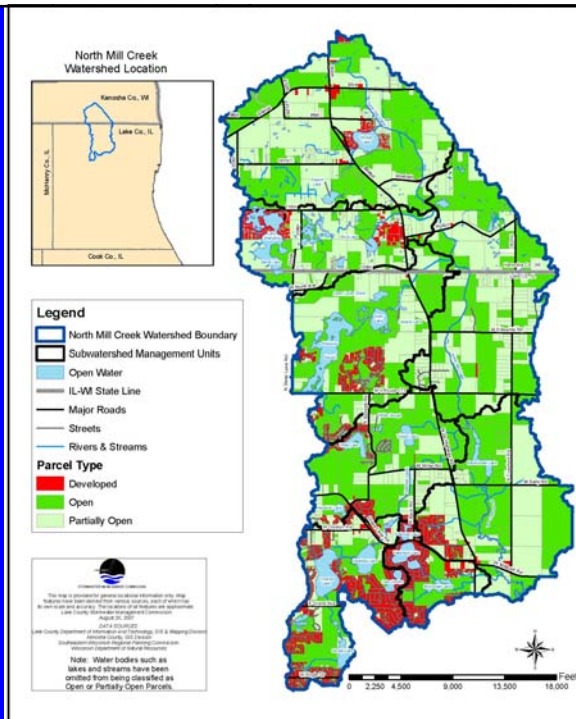
Natural Areas



Neighborhood Open Areas

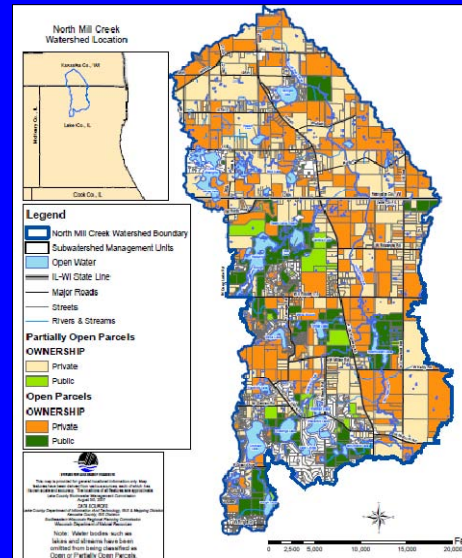
## Open Space Inventory

- Maps the location of **open space** and **partially-open space**
- Open Space: 45% of watershed area
- Partially Open Space: 38% of watershed area



## Open Space Ownership

- Publicly-owned open space: 11% of watershed area
- Publicly-owned partially-open space: 3% of watershed area
- Privately-owned open space: 34% of watershed
- Privately-owned partially-open space: 35% of watershed

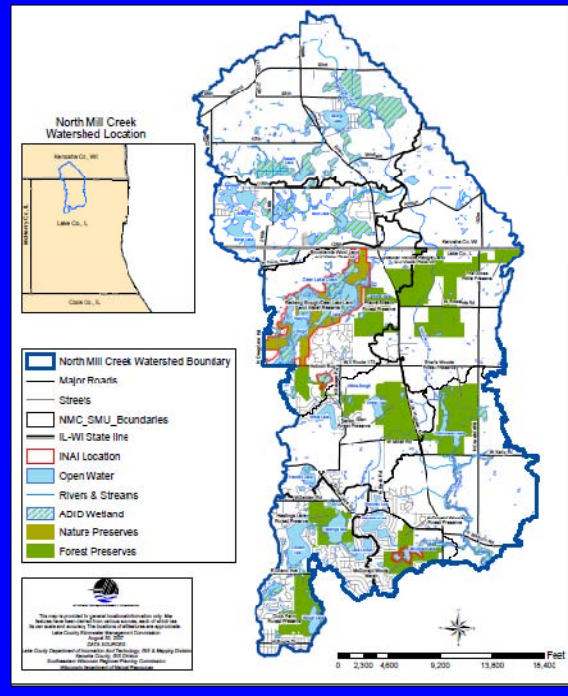


## Natural Resource Inventory

- We also inventory & map “high quality” natural resources in the watershed
- Logical to include these in the “green infrastructure” network
- Includes: wetlands; IL Natural Areas; IL Nature Preserves; Lake Co. Forest Preserves; threatened/endangered species; & high quality ecological communities

## Natural Areas

- 2300 acres ADID wetlands
- 3 INAI sites
- 9 Forest Preserves
- 3 IL Nature Preserves



## Green Infrastructure

- A system of site-level stormwater management practices and larger open spaces that provide watershed hydrology benefits
- Other benefits: habitat, recreation, air quality, etc...
- Open space inventory is the basis for developing a green infrastructure network

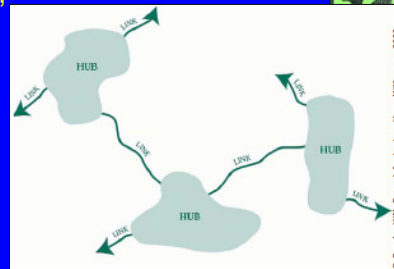
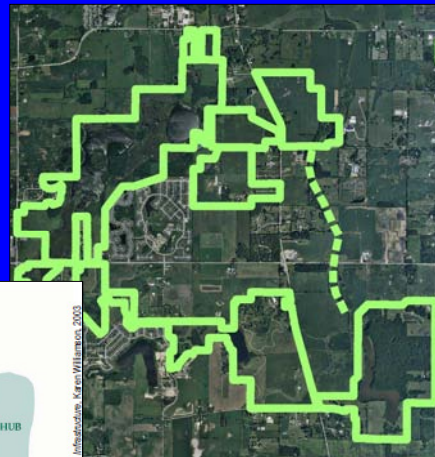
## Site-Scale Green Infrastructure

- Best Management Practices (BMPs) that maintain natural hydrologic functions
  - Rain gardens
  - Bioswales
  - Naturalized detention
  - Porous pavement
  - Green roofs
  - Filter strips & vegetated drainageways



## Watershed-Scale Green Infrastructure

- Network of open spaces & natural areas that mitigate runoff, recharge aquifers, & improve water quality
- Provide recreational opportunities & habitat
- Network of “hubs” and “links”



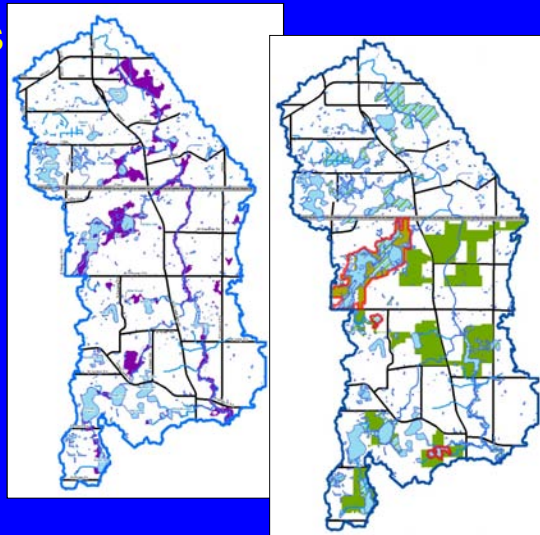
## Green Infrastructure & Watershed Planning

- Stormwater management benefits at “site” & “watershed” scales:
  - Runoff reduction
  - Water quality
  - Flood damage reduction



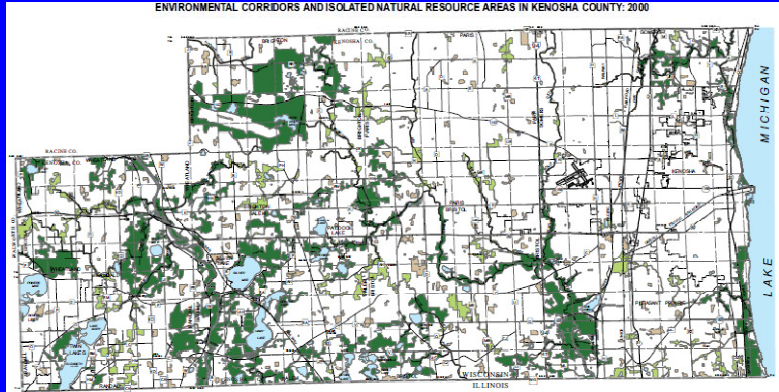
## Components of a Watershed Green Infrastructure Network

- Open space areas
- Riparian corridors
- Wetlands
- Floodplains
- Potential restoration sites
- Site-level BMPs

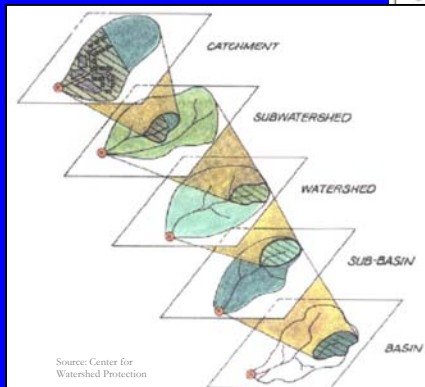


# Mapping Green Infrastructure

- Usually no existing maps of watershed green infrastructure networks
- Created as a planning resource
- Use the Open Space inventory as the “base layer” for mapping watershed Green Infrastructure



- Watershed, subwatershed, and subwatershed management units (SMUs)



Source: Center for Watershed Protection

