

Watersheds and Community Development



Land uses have major impacts on the watersheds which replenish our water. Population growth brings development that affects stormwater runoff, groundwater recharge, waterway functions, flooding, stream flow, water quality, water withdrawals, biodiversity and ecological stability. Effective land management requires a watershed approach to prevent costly problems and to restore damaged ecosystems.

Nearly all land use decisions are made at the local level and tend to be reactive – responding to project designs prepared by developers and their engineers. Complex regulations are considered to determine if a proposed land use meets public health, safety and environmental standards. Information about natural resources is often lacking, so there is minimal analysis of how the proposed land use fits with natural systems. As a result, many opportunities to protect and restore local ecosystems are overlooked.



Proactive development guided by the small watershed approach is a powerful tool to sustain local amenities that are important to people. Land purchases and better site design can be combined to preserve brooks, ponds, farm lands, scenic areas, historic places, and other assets.

From this perspective, careful growth management will protect fragile resources, fix problems and help enhance services for residents (i.e., conservation purchases and low impact designs offer many opportunities to achieve diverse community benefits).

Community Development Framework

Most communities are defined by waterways and roadways. Typically, a town will have 2-3 major streams with tributary brooks, and be located at a crossroads of 2 major roadways with local streets branching from these arteries. Local stream corridors tend to link the most important natural resources in a community. Phil Lewis, who developed Wisconsin's Open Space Plan, refers to a "string of pearls" where waterways are the string that connects wetlands, ponds, rare habitats, and natural areas that are essential to ecosystem health. This same concept can be applied to major roads that link historic sites, town centers, scenic views and other important cultural features. Preserving roadside landscapes will sustain the rural character that people take great pleasure in.



Each stream is replenished by its watershed, so most communities have 2-3 sub-watersheds of a larger river basin, which are usually shared with neighboring towns.

Due to the smaller scale and less data to consider, sub-watersheds are a useful management framework for community decisions. A proactive approach for sustaining environmental quality is made possible if local natural resources and the scenic landscapes along roadways are protected. When land ownership patterns are examined, this framework draws attention to a relatively small number of the largest parcels that will largely determine the future character of a community.

While natural and cultural resources are well-defined, this proactive approach is rarely considered in land use decisions. There are many opportunities to combine sub-watersheds, stream corridors and roadways as part of the preparation of municipal open space plans, water supply protection plans, and community development plans.



Community Participation

MWC community surveys show there is strong support for preserving natural resources and improving development patterns. These surveys also find that many residents, community groups and landowners will help to protect and restore community resources. But concerned individuals, organizations and businesses need information about better site design and local watersheds to improve land use decisions.

The Coalition helps to bring together town officials, local residents, and watershed advocates with the expertise and assistance available from state and federal agencies. A sub-watershed approach that addresses neighborhood issues will spur participation by local residents and groups.

This approach also builds a constituency of diverse interests who better understand natural systems and land use decisions. Involving legislators in these efforts will increase their understanding and help advance legislation and programs to assist communities with growth management.