

# What we do on land trickles down to our water

*“How we use our land is the foundation of environmental quality because nearly every environmental problem has a land use origin.”*

— Filling the Gaps: Environmental Protection for Local Government, MDEQ, Coastal Management Program, 2003

Land use is one of the largest factors impacting the environmental health of the Grand Traverse Bay Watershed. Many of the threats to water quality identified in the Watershed Protection Plan stem either wholly or in part from land use issues.

Increased nutrients have been identified as the single biggest threat to Grand Traverse Bay. Increased residential development, increased impervious surfaces (which lead to increased

stormwater flows), the loss of riparian buffers and other causes of increased nutrients are all related to land use and burgeoning growth.

Sedimentation, which is the biggest threat to the outlying areas of the watershed, is also a direct result of land use impacts.

As our area continues to grow, these impacts will only become more pronounced in the absence of land use planning that embraces practices needed to protect water quality.

## WATERSHED ACCOMPLISHMENTS

■ New Designs for Growth, a subsidiary of the Traverse City Area Chamber of Commerce, has developed an innovative guidebook for managing and planning development. Many of its principles have since been adopted into local ordinances.

■ Grand Traverse County adopted its Soil Erosion and Stormwater Runoff Control Ordinance in 1992 to protect against nonpoint source pollution. Updated in 2003, the ordinance requires developers, builders and homeowners to follow procedures that reduce soil erosion and stormwater runoff both during and after construction. Permits are required for many land surface changes and disturbances resulting from construction and development.

■ Through the use of planned unit developments, Garfield Township has preserved 483 acres of open space and wetlands that might otherwise have been lost through traditional zoning implementation.

■ In 1994, Peninsula Township in Grand Traverse County passed a Purchase of Development rights millage which has since funded the protection of more than 2000 acres of farmland and orchards on the scenic Old Mission Peninsula. Leelanau County is currently pursuing a similar program for farmland protection.

■ Through its Wild Link program, the Conservation Resource Alliance is working with landowners in Antrim and Charlevoix Counties to manage their land in order to maintain wildlife corridors and minimize the impact of sprawl and fragmentation on wildlife habitat and movement through preferred habitats. To date six landowners with properties totaling over 1,000 acres are involved in Wild Link management plan development.



Forest and agriculture cover nearly 70 percent of the watershed, but this percentage is dropping as demand for residential development increases.

Over the years, the shift in land use in Michigan from primarily forested to rural and, ultimately, to urban and suburban, has also led to increasing land fragmentation.

Fragmentation or the tendency to divide land parcels into smaller and smaller pieces impacts wetlands, forests and wildlife habitat; the ability of the public to access recreation areas; air and water quality; and, also impacts our quality of life. This problem is not unique to suburban areas in southern Michigan — we are seeing the effects of fragmentation “up north,” too.

This past spring Governor Granholm established the Michigan Land Use Leadership Council to address the trends, causes and consequences of unmanaged growth and development in Michigan. A set of recommendations

were developed with the ultimate goal of minimizing the impact of current land use trends on Michigan’s environment and economy. One of the guiding principles of the council’s efforts was that the preservation of Michigan’s environment — its farmland, forests, wildlife habitat, its waters, and scenic resources — was a vital component of any sound land use policy.

Addressing land use issues within a watershed as large as ours can be challenging. There are 54 units of government within the Grand Traverse Bay Watershed. Differences in public opinions and concerns amongst the residents of different counties and villages, zoning and other ordinances that vary greatly from one jurisdiction to the other and many other factors add up to a land use planning chal-

lenge that will require a lot of cooperation and vision from our leaders.

## WATERSHED FACTS

■ From 1980 to 2000, the residential population of the Grand Traverse Bay Watershed increased by 37 percent, making it one of the fastest growing coastal basins in the Great Lakes Region.

■ On average, the state of Michigan develops its land eight times faster than its population grows.

## WAYS YOU CAN HELP

Urge your local officials to adopt ordinances that protect water quality and limit sprawl. Get involved in local land use decisions to promote environmentally sensitive development. Encourage new development near existing development.