MICHIGAN'S NATURAL HERITAGE AT RISK

Preserving Open Spaces and Special Places from Uncontrolled Development

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PIRGIM Education Fund

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EXECUTIVE SUMMARY

his report highlights eight natural heritage areas in Michigan that could soon be irrevocably lost. These open spaces and special places are just a small sampling of Michigan's natural heritage that is increasingly threatened by uncontrolled development. Michigan has lost more than one million acres of farmland since 1982. If current trends continue, the state will lose two million acres of open space by 2040, including one quarter of the state's orchards and one quarter of South Michigan's forests.

The destruction of Michigan's natural heritage areas is a consequence of poor land use planning and regulations that encourage developers to sprawl into the countryside, abandoning the state's urban centers.

These current development trends are not inevitable. Specifically, well-designed growth management policies could:

 Prevent the degradation of important water resources like the Thornapple River from stormwater runoff; maintain the marshes and fens in Oakland

- County, which serve as the headwaters of five major rivers, from ecologically damaging development; and safeguard the world-class fisheries of the Boardman River Valley from an expensive and damaging transportation project that will not solve Traverse City's traffic problems.
- Preserve the ecological integrity of pristine coastal treasures like Saugatuck Dunes State Park, maintain undeveloped urban oases like Humbug Marsh, and help prevent beach contamination from runoff and bacterial pollution at Metro Beach on Lake St. Clair.
- Rescue uniquely fertile and scenic agricultural lands, such as the blueberry farms of Ottawa County, threatened by an unnecessary highway project that would cut through the heart of the most productive agricultural region in the state; and the picturesque cherry orchards near Traverse City, facing intense development pressure that is transforming orchards into housing developments.



Cherry blossoms on the Seibold Farm outside of Traverse City.

To protect our natural heritage areas, as well as enhance our quality of life and create a prosperous future for our children and grandchildren, Michigan must make a new commitment to effective growth management. This commitment should include:

1. Development of a Comprehensive Land Use Planning Law

The state should replace current land use planning legislation with a comprehensive regional land use planning enabling act. This law should:

- Focus state resources in Priority Funding Areas.
- Create effective processes to encourage local coordination of land use plans, and explicitly authorize joint or sub-regional planning committees.
- Give local communities the tools they need so that the —not developers can determine future growth and land use.
- Encourage long term planning (20 years) and 6-year capital improvement planning.

2. A Commitment to Sustainable Transportation

Transportation funding should be shifted away from roads towards rail, bus, bicycle, and pedestrian options.

- The state should only engage in highway expansion projects that facilitate well-planned growth within priority development areas.
- Highway funding should be focused on maintaining and repairing existing roads.
- Compact, transit-friendly development should be promoted.

3. Tools To Promote Open Space Preservation

Our most valuable farms, forests, open space, and wetlands should be permanently off limits to development.

- Provide state funding for open space acquisition.
- Set high taxes for conversion of open space, low taxes for working farms.
- Provide protected status to ecologically and culturally important areas.

- Allow transfers of development rights.
- Do not sell state-owned open space to developers.
- Allocate money for urban parks.

4. Policies To Ensure Developers, Not the Public, Foot the Bill

Taxpayer subsidies for sprawl should be terminated, and developers should be required to pay for new roads, water and sewer infrastructure, and public services.

- Authorize counties to assess impact fees.
- Exempt compact, targeted development from impact fees.
- Require infrastructure to precede development.

5. Decisionmaking Based On Citizen Participation

Citizens should be provided with opportunities for meaningful input and involvement in all land use decisions.

For all of these policies to work well, there must be statewide goals and an overarching plan to guide decisions and measure success. The Land Use Leadership Council, launched this March by Governor Granholm, offers an historic opportunity to develop a growth management strategy that can preserve the natural treasures that make Michigan great, while creating livable communities where people can thrive. Governor Granholm should create an Office of Smart Growth to establish land use protection goals, coordinate state investments in open space and infrastructure, seek federal funding for Smart Growth projects, and provide local governments with the resources they need to reclaim growth decisions from large developers.

INTRODUCTION: MICHIGAN'S NEW COMMITMENT TO RESPONSIBLE GROWTH

ichigan is full of special places. Many people choose to visit and reside in Michigan because of its open prairies, pristine waterways, beautiful coastlines, majestic sand dunes, colorful forests, and rich farmland. Anglers and canoeists flock to Michigan's cool trout streams. Families visit coastal dune areas and cherry orchards. In autumn, drivers travel scenic byways to see the forests turn red and gold as their leaves begin to fall. Children swim in the Great Lakes. Tourists and city dwellers visit farms to pick blueberries. People all over the world eat

"Our land resources are why we are here and they are who we are. Our forests, fauna, and farmland have defined our way of life for hundreds of years ... they have defined our identity as a state."

- Governor Granholm, during her charge to the Land Use Leadership Council, March 24, 2003.

Michigan produce. These ecological and cultural assets are our natural heritage, helping

to define what it means to be from Michigan.

Michigan's two peninsulas are surrounded by the Great Lakes, the world's largest concentration of freshwater. The state is blessed with 51,438 miles of rivers and streams, 1,390 square miles of inland lakes, 6.2 million acres of wetlands, and more shoreline than any state except Alaska. More than half of the state is still covered by forest land, providing year-round recreational opportunities, wildlife habitat, clean air and water, and natural beauty.2 Working farms outside of Grand Rapids provide food for people across the country and represent one of Michigan's most valuable industries.

However, unmanaged growth is rapidly changing this great state. As more and more Michiganders move further out from decaying urban centers, valuable forests and farmland face the prospect of transformation into lakes of pavement, rows of strip malls, and fields of tract housing. Michigan has lost more than 1,000,000 acres of farmland since 1982, and from 2002 through 2020 is expected to lose two million more if current development trends continue.³ By 2040, the state could lose 25% of its orchard land.4 Southern Michigan may lose up to 25% of its forest land by 2040.5 New development in southeast Michigan could claim 272,000 acres of land by 2030, an area the size of Lake St. Clair.⁶ By 2040, built land could increase by 4.1 million acres across the state, more than tripling the amount of urban area in the state and spreading out across an area of land equal to all of the development that has happened in Michigan since 1800.7

This destructive loss of open space is not inevitable, even given projected population growth in the region. For example, from 1982 to 1997, land loss outpaced population growth in Michigan by more than 4 to 1.8 This loss of open space and rural land was largely fueled by a jump toward low-density residential and commercial development sprawling into formerly rural areas.

Now is a unique time in the history of the state. Governor Jennifer Granholm, noting that "the unplanned uncontrolled consumption of open space not only impairs the quality of Michigan's land, water, and ecosystems, but will also threaten Michigan's social and economic well-being if not met with strong leadership and vision," sissued an executive order in February 2003 creating the Land Use

Leadership Council. This body of respected civic leaders from across the state has been charged with providing recommendations to the governor and the Legislature to mitigate the economic, environmental, and social impacts of Michigan's sprawling land use trends while protecting Michigan's natural resources.

The decisions that will be made in the coming months represent more than just simple policy changes. They represent hope for Michigan's future. The way we use the land we have available will shape the Michigan our grandchildren will know, as well as shape who they will become. Land use policy in Michigan is the brush used to paint the living landscape. It can be used to preserve aesthetic beauty, enhance quality of life, create livable spaces where people can thrive, and ensure the sustainable use of resources: or it can be used to produce short-term financial gain and waves of people fleeing decaying urban centers and crumbling suburbs ever deeper into the last untouched corners of the state.

Michiganders need to unite behind a shared vision for the future of the state. A vision in which government at all levels cooperates on regionally coherent growth plans based on the natural features of the land. A vision in which infrastructure is built and maintained in ways that enhance growth plans and do not push into areas set aside for preservation. A vision in which government proactively preserves valuable land for future generations. A vision in which developers pay their own way and do not put communities into debt. A vision in which our leaders set concrete, achievable goals about how the state should look in 40 years to which we can hold them accountable.

This shared vision holds the promise to preserve the assets that make Michigan a place that people gladly call home.



A glimpse of Lake Michigan from Saugatuck Dunes State Park.









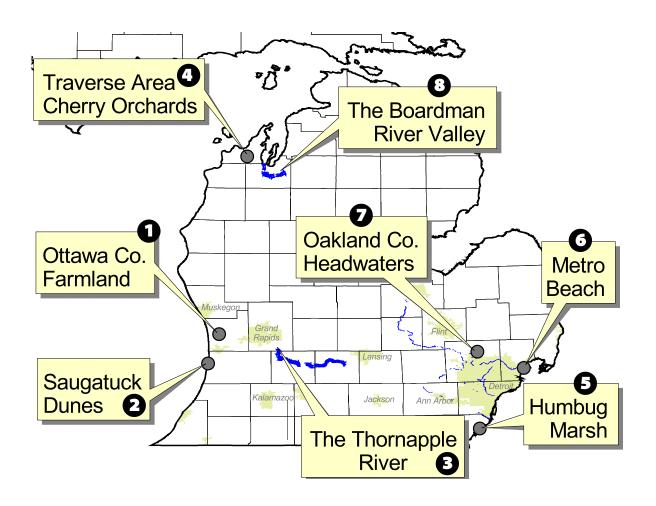








OPEN SPACES AND SPECIAL PLACES AT RISK



MICHIGAN'S NATURAL HERITAGE AT RISK

- 1. A blueberry farm outside of Grand Rapids in Ottawa County.
- 2. The beach at Saugatuck Dunes State Park.
- 3. The Thornapple River near Caledonia.
- 4. The Ocanas Family Orchard near Traverse City.
- 5. Looking down on Humbug Marsh from the air.
- 6. Playing volleyball and swimming at Metro Beach.
- 7. A marsh along Stony Creek in Oakland County.
- 8. The Boardman River Valley.

Blueberry Fields in Ottawa County



Ottawa County soils support the most productive and diverse agriculture in all of Michigan. Each year, farmers in the county produce roughly \$300 million worth of blueberries, soybeans, apples, peaches, pears, celery, pep-

pers, and other products. 10

Blueberries are Ottawa County's main fruit crop, grown on 5,000 acres of blueberry fields.¹¹ In addition to providing nearly ten percent of the nation's annual blueberry harvest, these fields are popular with Michigan families, who come from around the region to pick the succulent berries directly from the bush.¹²

The rare sandy, acidic soil and the high water table along Lake Michigan combine with an ideal climate to produce great conditions for growing blueberries, cranberries, and ornamental plants. Some of the family farms in the center of the county have been cultivating these fields for more than 100 years.

Ottawa County sits at the junction of three major population centers: Grand Rapids, Holland, and Muskegon/Grand Haven. The expansion of these nearby metropolitan areas is placing development pressure on this special resource. The Grand Rapids metropolitan area as

a whole was the fastest growing region in the Upper Midwest over the past 30 years.¹³

Ottawa County's population has grown rapidly over the past decade, with some parts experiencing residential growth levels as high as 58% during the 1990s. 14 This residential growth is driving up the price

of agricultural land and putting pressure on farmers to sell their land. According to Ottawa County's 2003 property assessment report, agricultural land is growing in value at double-digit rates. 15 In just two years, the value of land zoned for agriculture has jumped to \$6,000-\$8,000 an acre from about \$3,500 an acre, driven in part by speculation over future development. Although the blueberry business is booming and Ottawa County is one of the most profitable agricultural areas in the state, under the current regulatory framework blueberry fields and other croplands command a higher value as sites for development than for farming. Land zoned for residential development can sell for \$16,000 more per acre than agriculturally zoned land.16

Steady pressure for development pushing into the agricultural heart of Ottawa county will be aggravated if a proposed freeway bypass is built around Holland and Grand Haven, ten miles east of the existing transportation corridor, U.S. 31.

The Michigan Department of Transportation (MDOT) has been searching for ways to relieve traffic congestion and improve the safety of the U.S. 31 corridor since 1993. In 1999, former Governor Engler and MDOT formally endorsed the bypass option.¹⁷ However, the bypass is likely to exacerbate congestion more than relieve it, and will have disastrous consequences for farmland preservation.

The bypass would harm farmland in several ways. It will directly replace 800 acres of fields and encourage the development of surrounding lands. A coalition of townships and farmers opposed to the project estimated it would facilitate the loss of 13,000 acres of farmland in the county over 20 years.

Wayne Keel is a second-generation blueberry farmer who farms over 360 acres of blueberries and 20 acres of cran-

The proposed U.S. 31 bypass route cuts through productive farmland 10 miles east of the current transportation corridor. (MDOT)



berries in Ottawa County. The bypass would cut through a 20-acre block of his blueberry fields, among the most fertile in the nation.

"That field is one of the best blueberry fields in the state, averaging 8 tons of blueberries per acre," more than four times greater than the state average of 3,500 pounds. "God blessed that piece of ground and now it's going to be pavement," Mr. Keel explains.²⁰

Furthermore, Keel, like many farmers, is worried that the fields surrounding the bypass will be further harmed by salt regularly applied to the roads in the winter time. "Salt on the roads is killing the farms—it'll kill everything along the first couple hundred feet," he explained.

"In my opinion the U.S. 31 bypass is not necessary. It's not going to alleviate the [traffic] problem," Keel concluded.

Increased traffic generated by the bypass and associated development would also negate any temporary congestion relief. The stated goal of the bypass project is to improve the traffic flow and the safety of U.S. 31. However, MDOT research projects a 19% increase in traffic on the existing corridor in the longterm due to induced development encouraged by the rural bypass.²¹ This conclusion is consistent with other studies that have shown increased traffic volumes and densities caused by road-building.22 The bypass proposal also goes against a 1992 Ottawa County plan designating areas affected by the by-

"Sprawl is triggered by the road system. The U.S. 31 bypass will be a catalyst for sprawl, and it will take away rare, irreplaceable soil types needed to grow blueberries. Whole communities can be destroyed by poorly-managed roadbuilding."

- Fred Wolcott, Ottawa County Farm Bureau



Ottawa county has 5,000 acres of family blueberry farms.

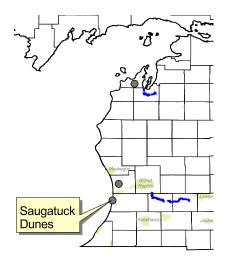
pass for cultural and agricultural preservation. 23

Although this project has been delayed, Ottawa County farms are not safe yet. While the fiscal crisis faced by the state government led Governor Granholm to recently freeze funding for work on the project, the project is only deferred until more funding becomes available. The Federal Highway Administration will review a final Environmental Impact Statement submitted by MDOT, and will decide whether to fund the bulk of the project's costs.

If the project moves forward, it will encourage further sprawling development and inefficient land use. Between 1960 and 1990, developed land increased 12 times faster than population growth in Muskegon. In Grand Rapids, developed land increased three times

faster than population growth.²⁴ If this trend continues, Michigan's most prosperous and diverse agricultural county could be producing a bumper to bumper crop of tract housing and strip malls, instead of bushels of the world's finest blueberries.

Saugatuck Dunes State Park



The sand dunes along the eastern coast of Lake Michigan are the largest stretch of freshwater dunes anywhere in the world. People have access to these amazing formations at Saugatuck Dunes State Park, a unique 900-acre oasis of wilderness in Allegan County.

Local residents and travelers from around the region value Saugatuck Dunes as one of the last undeveloped stretches of coastline within several hours drive of Chi-

cago, Detroit, and Indianapolis.²⁵ Throughout the year, the park draws naturalists, birdwatchers, day hikers, cross-country skiers, artists, researchers, educators, families, swimmers, picnickers, and visitors from throughout the region. With 13 miles of trails covering 2.5 miles of undeveloped coastline, open and forested dunes towering 200 feet above the lake, and interdunal wetlands, the park offers many varied opportuni-

Alison and David Swan/Concerned Citizens for Saugatuck Dunes



Bluebirds, deer, and wild turkey frequent this open meadow, which may soon be displaced by a water treatment plant that the neighboring towns of Holland and Laketown are vying to build.

ties for recreation and solitude.26

The park is also home to a variety of rare wildlife. The forest canopy supports the hooded warbler and the cerulean warbler, state-listed species of concern, as well as the wood thrush, scarlet tanager, and barred owl.²⁷ The park's stretch of undeveloped coastline serves as a stopover for migrating birds like the dunlin and the willet, and hosts three endangered plant species.²⁸ Efforts to purchase a nearby private piece of land hold the potential to add another 1.5 miles of shoreline to the park, connecting it to Oval Beach to the south and making the area an even more valuable destination.

Yet this pristine coastline is teetering at the brink of development. Recently, 420 acres of land between Saugatuck Dunes State Park and Oval Beach came on to the market. Owned by the estates of the late Frank and Gertrude Denison, the property encompasses wild coastal dunes around the mouth of the Kalamazoo River. The state would like to purchase at least a portion of the land to add to the state park system, and has raised \$6 million out of a projected \$18 million to do so.²⁹ However, private developers are also showing great interest in the property.³⁰

Perhaps an even more pressing threat is a proposal from neighboring towns to develop water supply facilities for Allegan County within the Saugatuck Dunes State Park boundaries. The project would include a water supply intake on Lake Michigan, a pumping station near the beach, a road and pipeline on the most popular trail to the beach, and a water treatment facility on land at the entrance to the park.

To date, the state Department of Natural Resources has forestalled development of the park's water supplies, rejecting separate proposals by Holland Township and nearby Laketown which could compromise the pristine nature of

the dunes. However, the park's readily available water supply is attractive to both industrial and residential developers. The City of Holland is particularly keen on developing additional water supplies because it recently agreed to devote nearly 20% of the township's existing supply capacity (up to 5 million gallons of potable water per day) to a new 750 MW natural gas-fired power plant built by Southern Energy, Inc. in Zeeland.³¹ The power plant was sited there specifically to take advantage of "the availability of water in Ottawa County." 32 (Furthermore, by

restricting the water withdrawal to 5 million gallons per day or less, the plant escaped permit requirements that might have stopped construction due to its environmental impact.)

The Department of Natural Resources has stated that it will only consider a joint proposal supported by both towns, and it would not accept any proposal that would be environmentally destructive. Yet any major project within the park would be likely to fragment the wildlife habitat, cause erosion of critical dune areas, damage the forested area, and disrupt the pristine surroundings that park visitors cherish.

To help stop this destruction, area residents founded the Concerned Citizens for Saugatuck Dunes State Park, an affiliate of the West Michigan Environmental Action Council, in November 2001.

"We both dearly love the park—it's one of the main reasons we live here in Saugatuck," explains David Swan, who helped found the organization with his wife, Alison.³³

They are not alone. Within months of the group's creation, hundreds of West



Looking north along the beach and forested dunes at the proposed site for a water intake and pumping station.

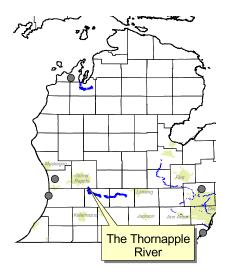
Michiganders as well as people from across the nation and overseas had joined Concerned Citizens for Saugatuck Dunes State Park.

However, if plans for a water supply facility move forward, the blow to our natural heritage may be two-fold: Michiganders will lose one of the best and most prized stretches of pristine coastal dunes in southwest Michigan, and the new water supply will enable further sprawling development in the Holland region by providing easy access to a resource that attracts new growth.

"Saugatuck Dunes State Park is the only protected public lakeshore parkland in our region that offers hikers, skiers, naturalists, educators and children a quiet wilderness experience — a non-motorized, non-urban, undeveloped retreat."

– David Swan, Co-Chair Concerned Citizens for Saugatuck Dunes

The Thornapple River



The Thornapple River is a haven for wildlife, a stretch of concentrated rural scenery, and a recreational treasure. all within a short drive from booming Grand Rapids. The river begins just west of Lansing in Eaton County, flowing toward a confluence with the Grand River only a few

miles east of Grand Rapids. Over 45 species of fish can be found in the river.³⁴ More than 38,000 people rely on surface water from the Thornapple River for their drinking water, and more than 12,000 take their water from the underground aquifer.³⁵

Patricia Pennell of Caledonia, a board member of the Thornapple River Watershed Council who lives along the river, has been working to protect it for the past 25 years. "From my backyard, I can see osprey, bald eagles, and herons," she says. "The river is filled with pike, bass, trout – and every weekend dozens of paddlers float by." ³⁶

Pennell is a water quality specialist and program director with the West Michi-



Stormwater runoff floods Emmons Creek.

gan Environmental Action Council. The Thornapple, she points out, has historically been one of the healthiest and most beautiful rivers in Lower Michigan, valued as a clean, scenic, fish-filled waterway that people use as a source of drinking water, a place for recreation, and a place to see wildlife.

Some of the tributaries of the Thornapple are special resources in themselves, including the Coldwater River and McCords Creek. The U.S. Department of Agriculture designated the Coldwater River a Conservation Priority Area under the Environmental Quality Incentive Program in the 1990s.

However, unplanned development in the greater Grand Rapids area is compromising the health of the Thornapple. From 1978 to 1993, urban area in Kent County increased from 15% to 27%, mainly replacing agricultural areas. That represents about 93,000 acres of new development around Grand Rapids and across the county.

"Development-caused flooding, erosion, and sedimentation become more visible the further downstream one goes," Pennell explains.

Development pressure in the area continues to grow. In 2002, land values in Kent County were nearly four times the state average, and increasing rapidly.³⁸ Between 1991 and 2002, land values more than doubled, from \$15,500 to \$34,000 per acre.

Development affects the Thornapple River in four main ways:

- 1) Runoff from paved or disturbed land delivers fertilizers, sediment, oil, grit, salt, and other pollutants to the river and nearby lakes.
- 2) Runoff increases the temperature of the water in the river, destabi-

lizes the flow of the river, and creates bank erosion.

- Treated sewage and sewage overflows from municipal and private sewage treatment plants contaminates waterways with nutrients, bacteria, and other chemical pollutants.
- 4) Runoff and wastewater effluent can reduce groundwater recharge and contaminate the underground aquifer.

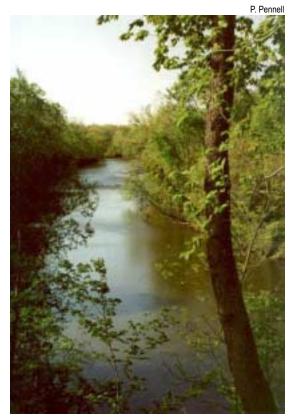
At least 12 public and private wastewater treatment facilities serve the growth that has occurred along the Thornapple River. Combined, they directly discharge more than 3,000,000 gallons of wastewater into the river or its tributaries every day.³⁹ However, stormwater impacts are probably the largest source of uncontrolled pollution in the watershed.

One example of the impact of stormwater runoff can be seen in this photo of Emmons Creek, where new developments and strip malls are legally draining their stormwater, degrading the river.

In 2000, three tributaries in the Thornapple Watershed were listed as impaired by the Michigan Department of Environmental Quality, requiring

"It is still a beautiful river, but it's not going to stay that way unless we actively protect it."

 Patricia Pennell, West Michigan Environmental Action Council
 Program Director and Thornapple River resident.

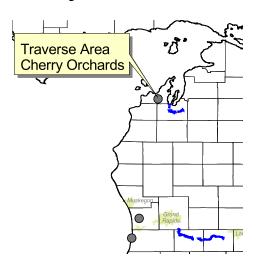


The Thornapple River near Patricia Pennell's home in Caledonia.

cleanup plans. However, the Thornapple and its tributaries are not doomed yet. The nearby Rogue River provides an example of how growth management policies can preserve a valuable resource. Protected under the Natural Rivers Act, the Rogue has a buffer zone of at least 50 feet of natural vegetation on its banks, and a buffer of at least 150 feet between structures or septic tanks and the stream. Although the Natural Rivers Act is not a cure-all for the adverse effects of development, it has preserved renowned steelhead trout habitat that attracts fishermen from around the region every spring.

Looking at the Thornapple, Pennell says, "It is still a beautiful river, but it's not going to stay that way unless we actively protect it."

Cherry Orchards around Traverse City



Every spring, the hills surround in g Traverse City turn pink from the color of cherry blossoms. The tart cherries produced in the northwestern portion of the lower peninsula, first

planted in Michigan by a Presbyterian missionary on Old Mission Peninsula in the 1850s, are an integral part of Michigan's cultural heritage.⁴⁰

Benzie, Leelanau, Grand Traverse, and Antrim counties form the heart of cherry farming in the United States. During good weather years, the area's three million cherry trees produce three quarters of all the cherries grown in America. The orchards are also a major tourist attraction. Visitors flock to Traverse City to enjoy the orchards from the time the cherry trees first bloom in May through the moment they yield their fruit during



The Island View Farm on Old Mission Penninsula

the National Cherry Festival held in July.

People are attracted to the area by the quality of life it offers. With friendly people, hillsides covered with fragrant orchards, and wide views of Lake Michigan and Grand Traverse Bay, the Traverse City area is one of the most loved parts of the state. The area is ideal for growing cherries. Warm air rises up the high hillsides to protect springtime buds from late frosts. The sandy soils allow water to quickly drain away from root systems. Many farms sit on scenic rises along the coast, overlooking the wide expanse of Lake Michigan.

The beauty of these orchards make them prized by developers. In 1998, 30,000 cherry trees were uprooted to make way for vacation cottages and retirement homes. That trend has continued, and a population boom is transforming the orchard-lined Lake Michigan coast. If this pattern does not change, People and Land predicts that Michigan will lose 25% of its orchard land in the next 40 years.

In Empire Township, the gateway to Sleeping Bear Dunes National Lakeshore, farmer Bill Cashier just

watched his neighbor sell 354 acres of orchard land for 154 home sites. The development is ironically called "Leelanau Orchards." The first home has been built, and is listed on the market for a substantial \$650,000.44

Taking this trend to its farthest extreme could leave the region in the situation of Leominster Township, New Jersey. Every year, Leominster celebrates its status as the historical birthplace of Johnny Appleseed with a parade and festival. However, sprawl has transformed the area, devouring open space and the cultural and historical heritage of the fading rural lifestyle which first at-

tracted people to the area. Several years ago, the last 50 acres of apple orchards in Leominster were proposed for a housing development. 45

Economic pressures on farmland in the Traverse City region are leading many farmers to sell their land for development. Farmers have been having a tough time getting a price for cherries that allows them to stay in business. 46 To make matters more challenging, fruit orchards have been historically left out of price insurance provisions in federal farm legislation. At the same time, real estate values of farms increased 65% more than

annual net farm income in the 1990s.⁴⁷ Since property taxes are calculated based on the "best use" of land, farms end up paying higher taxes on their property, despite the fact that they require far less infrastructure and services than new housing.⁴⁸ In this context, the money offered by developers can be hard to refuse.

Farmland preservation activists, including John Wunsch of Old Mission Peninsula, have been advancing one of the nation's first taxpayer-funded pro-

"People come here for the hillsides, views of Lake Michigan, and the blooming orchards. When's the last time you went up north to look at subdivisions?"

– Bill Cashier, Empire Township Resident and Leelanau County Farmer



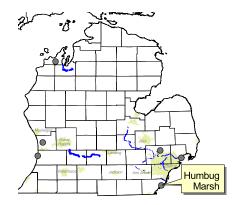
Picking fruit at the Ocanas Farm.

grams to buy the development rights of cherry orchards overlooking the Grand Traverse Bay. After Mr. Wunsch went door to door to build support, Peninsula Township residents voted in 1994 to fund the program with a 1.25 mill property tax levy. Voters just approved an increase in the tax to 2 mills through 2021.

Yet this ambitious program alone cannot keep up with the backlog of requests from farmers to include their lands in the program. Despite the desire of many local residents to maintain the rural character of the area that drew them north in the first place, many cherry orchards are doomed to be bulldozed unless other programs and policies are developed to help protect them.⁴⁹

"People come here for the hillsides, views of Lake Michigan, and the blooming orchards," said Bill Cashier when asked about what attracts visitors to Leelanau County. "Tourism and agriculture are tied hand to hand. When's the last time you went up north to look at subdivisions?" ⁵⁰

Humbug Marsh



Humbug Marsh is the last remaining mile of coastal marsh on the American side of the Detroit River. Visitors regularly see osprey and eagles soaring above 400 acres of wetlands and

woods where the birds feed and nest. Humbug Island, just offshore, is surrounded by rich underwater plant communities, and together the marsh and island are the most important fish nursery habitat in the entire Detroit River and much of western Lake Erie. 51 Fishermen from across the country recognize the Lower Detroit River area as a national treasure for walleye fishing. 52

Recent efforts to reclaim nearby shoreline from past industrial development are drawing more visitors to enjoy the area. The marsh is adjacent to a new National Wildlife Refuge created through the efforts of Congressman John Dingell.⁵³ The refuge will be owned by the County of Wayne but run by the US Fish and Wildlife Service. A wildlife refuge in an urban center is unusual. It is on land which will require significant environmental remediation, including the importing of native plants and the construction of an interpretive center. The refuge will host a canoe livery, providing easy recreational access at the northern boundary of Humbug Marsh, where the deep and swift waters of the wide Detroit River become shallow and slow moving.

The marsh has a more practical value as well. Ecologists studying the marsh have found plants that have evolved to resist the heavy metals and organic contaminants dumped into the Great Lakes over the years. They could provide ecologically sound and efficient methods to clean up toxic materials from polluted areas.⁵⁴

The riverfront location of the marsh has made it attractive to developers. Blair McGowan of Grosse Ile, a long-time Humbug canoe and fishing enthusiast, has been working with the Friends of the Detroit River to protect the marsh from the latest proposal, a plan to build luxury condominiums and a golf course across the marsh and the nearby island. He calls the marsh "Detroit's Everglades." ⁵⁵

The developer, Made in Detroit, Inc., has been working to build on the marsh since 1997. The original plan was to erect 350 luxury homes, a golf course, a marina, an equestrian complex, and a riverfront theater. ⁵⁶ The company worked on a similar plan for Belle Isle that met staunch citizen opposition.

To date, Made in Detroit's plan to develop the marsh has been held at bay by concerned citizens and environmental protections. The Army Corps of Engineers denied the company permits to fill wetlands or build on Humbug Island in 1999. The company responded by reducing the scale of the project to 296 con-

"At Humbug you can still see why the Wyandot Indians considered this the most beautiful place in North America."

Blair McGowan
 Friends of the Detroit River

dos and a nine-hole golf course. The first phase of the project would happen on the coastline, followed by the construction of a bridge to Humbug Island, where more residences and the marina would be located. The condos will sell for \$350,000 to \$500,000.⁵⁷ It is unclear how the new plans address the Army Corps' concerns over building on Humbug Island, however.

Made in Detroit has kept its development proposal alive, despite financial difficulties. The company fell behind on loan payments in 2002, prompting its bank to begin foreclosure hearings. McGowan and other preservation advocates were hoping that the Trust for Public Land would be able to purchase the land at a bank auction, and then transfer it to the U.S. Fish and Wildlife service for inclusion in the neighboring National Wildlife Refuge. By declaring bankruptcy the day before the auction, Made in Detroit put the foreclosure sale on hold indefinitely.⁵⁸ A company spokesperson claimed that construction would begin as soon as this summer.⁵⁹

McGowan is optimistic, however. He feels that the transformation of a former Chrysler paint plant into the Wildlife

John Hartig/Detroit American Heritage River

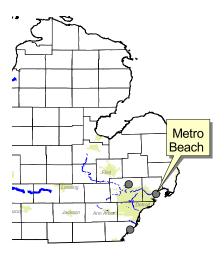
An aerial view of Humbug Marsh and Humbug Island, with the Detroit River flowing past.

Refuge signals an irreversible change in how people are thinking about the river and land use around Detroit. Reclamation and mixed-use redevelopment of decaying areas along the river can provide livable places for people to enjoy, while preserving natural treasures that are becoming more and more rare, especially so close to an urban center like Detroit.

"We are reimagining the river," he says.

"The preservation of the last undeveloped mile of the Detroit River will mark a turning point in the use of the greatest natural resource in southwest Michigan."

Metropolitan Beach on Lake St. Clair



The shores of Lake St. Clair in Macomb County boast some of the most scenic beaches in southeast Michigan. Many residents of the Detroit metro area go to Metro Beach in Harrison Township when they want to cool off in Lake St. Clair on a hot summer day. Part of the im-

mensely popular Metroparks system, Metro Beach offers 700 acres of land with one mile of shoreline. With such easy access to the water, the park is a mecca for swimmers, boaters, and anglers.

People love to hike on the trails in the park. The South Marsh area is a favorite for wildlife enthusiasts, where migratory birds flock every year. The Marsh is

one of the top ten sites for bird watching in the state. 60 Families go to the park to have picnics on the beach. Anglers drop their lines off the marina into the deep waters of Lake St. Clair. And in the winter, when the snows chase the less hardy away, cross-country skiers descend on the quiet paths to enjoy the cold air and views across the water.

The 1000-foot-long sandy beach and swimming area is the centerpiece of the park. A trip to swim in the cool waters of Lake St. Clair almost defines summer in Southeast Michigan.

Unfortunately, beaches on Lake St. Clair and across the state are not immune to the impacts of sprawling development. Visitors to Metro Beach run into the problem firsthand when they discover that the Macomb County Health Department has issued a beach closing or advisory due to excessive amounts of bacteria in the water, bacteria that can make people sick if they go swimming. Lakeshore businesses feel the impact of

Detroit Metroparks

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Visitors to Metro Beach can enjoy a warm summer day with a game of volleyball or a dip in Lake St. Clair.

sprawl as well, when business drops after the first beach closing is announced.⁶¹ The problem

The problem stems from runoff and the pollution it carries through waterways and into the lake. As development has pushed into the watersheds of rivers that feed Lake St. Clair, the steady

paving over of wetlands and fields with parking lots, roads, malls, and subdivisions has guaranteed higher volumes of runoff reaching the lake. Replacing a meadow with a parking lot increases the amount of runoff by about 16 times. Euroff carries sediment, fertilizer, septic tank leachate, and other pollutants into rivers and down to the lake. Large volumes of runoff also create flooding problems, which can overwhelm sewage pipes and treatment lagoons, eventually contaminating the water with raw sewage and the bacteria it contains.

Thanks to the efforts of people like Doug Martz, the chairman of the Macomb County Water Quality Board, the number of closures at Metro Beach has declined in the last decade. In 1994, heavy rains running off of roads and parking lots caused a billion-gallon sewage spill, closing many of the beaches on Lake St. Clair for much of the summer. Nutrients in the runoff led to eutrophication and excessive plant growth up to several hundred feet offshore.63 In the summer of 1996, beach closings at Metro Beach and three others on Lake St. Clair totaled 160 days. Macomb County had to issue advisories or close its public beaches 98 times for elevated bacteria levels in the water during 2000 and 53 times in 2001.64

A 31-member commission convened by Macomb County in 1997 concluded that unmanaged, sprawling development was the primary cause of sewage overflows and lake contamination in the area. ⁶⁵ Rapidly increasing development in the watershed will put more pressure on Southeast Michigan's water resources. Especially during years with high rainfall, contamination of lake water with fecal bacteria may keep many would-be beachgoers at home.

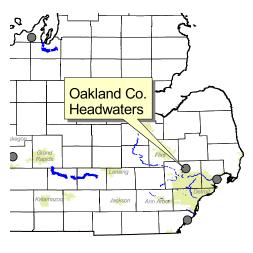
Year	Beach Days affected
b	y closing or advisory
2001	119
2000	276
1999	100
1998	227
1997	236

A family swimming in Lake St. Clair.

The Clinton River watershed is experiencing a lot of growth. The Southeast Michigan Council of Governments predicts that the Clinton River watershed, which feeds into Lake St. Clair near Metro Beach, will see 111,000 new households by 2030, a 20% increase. 66 The watershed is already the most populous in metro Detroit, with over 1.4 million residents. 67

In order to protect the water resources that attract people to live in this region, anticipated growth must happen with watershed protection in mind. That means protecting forests and wetlands, maintaining buffer zones and riparian corridors, minimizing pavement and other impervious surfaces, and preventing runoff. These steps can keep Metro Beach clean and attractive for summer visitors, instead of choking the water with bacterial contamination and nutrient pollution.

Oakland County: The Headwaters of Five Major Rivers



Five major rivers emerge from northern Oakland County: Clinton the River, the Shiawassee River, the Huron River, the Rouge River, and the Flint River. These rivers are the lifeblood Detroit. They all

eventually feed the Detroit River and supply 4.5 million people with drinking water. Decades of development around the headwaters threaten this valuable ecosystem.

Jessica Pitelka Opfer has spent three years roaming the Clinton River water-



Stony Creek.

shed working bring to people together behind efforts to protect it. She is the director of the Clinton River Watershed Council. Recently, she has been working to create a management plan for the Stony Creek watershed, a tributary of the

Clinton River that exemplifies the extraordinary value of headwater areas in Oakland County, as well as the steady pressures they face from expanding development.

Stony Creek is a relatively undeveloped area that flows through parts of Addison, Bruce, Oxford, Oakland, and Washington townships, as well as the City of Rochester Hills, before entering the Clinton River in the City of Rochester. It is filled with bogs, fens, and high quality riparian areas along the stream corridor. In a recent inventory, Opfer and the watershed council found 350 different wetlands in the Stony Creek Watershed.⁶⁹ The wetlands provide wildlife habitat, floodwater storage, runoff attenuation, water quality protection, recreation opportunities, and natural beauty.

"Having special natural features close to home, providing recreation, open space, and beautiful vistas – these assets make a place desirable to live in," Opfer says. To Such resources draw people to the Stony Creek region and other less-developed areas toward the headwaters of Oakland County's rivers.

Oakland County Planning and Economic Development Services has estimated that 6% of the Stony Creek watershed has been paved over. Studies by groups like the Center for Watershed Protection have shown that serious water quality problems start as that number approaches 10%.

Stony Creek could rapidly reach the point of no return. The Southeast Michi-Council of Governments (SEMCOG) lists Addison, Oakland, and Washington townships among the fastest growing areas in Oakland and Macomb counties. SEMCOG predicts that Addison will have 1,288 new people coming to work in the area by 2003, an increase of 104%. Oakland will have 5,082 more households by 2003, an increase of 117%. Washington will have 7,917 more households by 2003, an increase of 129%.73

In Stony Creek Opfer says that, "you can already see obvious impacts from development: damage to riparian areas, poorly maintained road crossings, and stormwater impacts."

Most of the area in the Stony Creek watershed is on private land, and the public is not generally aware of the extent of the beauty beyond Stony Creek Lake in Washington Township's Stony Creek Metropark. Opfer works to show people the rest of the story.

"Once they know about the natural resources here, people are just amazed," she says. "When you walk along the river you see beautiful vistas, wetlands teeming with wildlife, and you feel like you are up north."

She and the other members of the watershed council are urging planners to

"When you walk along the river you see beautiful vistas, wetlands teeming with wild-life, and you feel like you are up north."

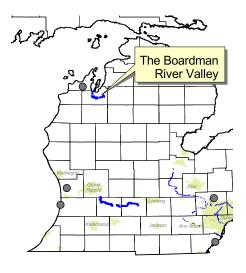
Jessica Opfer
 Executive Director, Clinton River
 Watershed Council

prioritize natural features in their growth plans, in order to maintain the water quality benefits, natural value, and quality of life values of the water resources protected by Oakland County's extraordinary bogs and fens.



Stony Creek, one of the headwaters of the Clinton River.

The Boardman River Valley near Traverse City



The Boardman River Valley is one of metropoli-Grand tan Traverse's most beloved recreation and natural areas. Anglers, paddlers, and thousands of residents and visitors who hike and ski along its banks year-round prize the river for its scenic natural

beauty and peaceful ambiance. The river curls around Traverse City from the west, cutting through the metropolitan area, and finally reaching the west arm of Grand Traverse Bay. Along the way, it passes rare cedar and black ash swamps, hillsides covered in tag alder, willows, dogwood, aspen and white birch, quiet residential communities, and finally downtown Traverse City. Fishermen consider it one of the top ten trout streams in the state.⁷⁴ Visitors to the area might see muskrats, mink, raccoons, beavers, otters, coyotes, bobcats and maybe even a black bear.

Recognizing the river's value, the state designated 132 miles of the upper Boardman and its tributaries as a Natural River in 1976. The plan requires a 50-foot buffer of natural riparian vegetation on private property bordering the river, and a 200-foot setback for all buildings. The intent of the plan was to protect the river from anticipated development of vacation and retirement homes throughout the area, noticeable even back in the mid-1970s, and to preserve the river for future generations to enjoy.

Today, the river faces a new threat tied to the rapid growth the Traverse City region is experiencing. The Grand



The Boardman River attracts anglers and canoeists from around Michigan.

Traverse County Road Commission is seeking to build a 200-foot-long, fourlane bridge and a 60-foot-high earthen causeway across an unspoiled stretch of the Boardman River Valley. This bridge, as well as a proposal for a four- and fivelane road around Traverse City, first surfaced in 1987 as part of a Michigan Department of Transportation bypass plan for Traverse City. The bypass plan was cancelled in 2001 after years of citizen opposition, including a vote against purchasing a bond to finance the road, but the County Road Commission is pushing forward with the bridge concept.

Hundreds of community members in the region collaborated on a Traverse City Commission report outlining alternatives for alleviating traffic in the rapidly growing region, called "Smart Roads: Grand Traverse Region." The Traverse City Commission opposes the \$30 million bridge project because it would bring 27,000 cars into the river valley, overwhelm nearby roads with traffic, and create one of the region's busiest corridors outside of the city limits.⁷⁷

"We have little or nothing to gain from the construction of the proposed bridge, but we certainly have a lot to lose," explained Susan Boyd, Board President of All the Way to the Bay, a local canoeing group.⁷⁸

Local activists concurred, noting that the project will do little to alleviate traffic, but will destroy wetlands and create a new urbanized corridor that will draw development further up the river valley.

According to Jerry Dennis, in a letter written on behalf of Anglers of the Boardman, "the valley of woods, wetlands and meadows that bounds [the proposed bridge location] is one of Grand Traverse County's natural treasures and should be preserved for future generations to enjoy." ⁷⁹

"The Boardman is a beautiful, diverse, and highly entertaining river, and there's no justification for destroying something that adds so much to the uniqueness of the Traverse City area."

Susan BoydPresident, All the Way to the Bay

The Anglers of the Boardman support a lawsuit to halt the bridge construction launched by the Michigan Land Use Institute, Sierra Club, the Coalition for Sensible Growth, All the Way to the Bay, and others, against the Grand Traverse County Road Commission.

The lawsuit asserted that the commission is violating the Michigan Environmental Protection Act by not considering all available, reasonable alternatives to its bridge plan. A judge ruled that the initial lawsuit was premature and that the commission must obtain permits to fill wetlands from the state before the lawsuit can move forward. The commission plans to finish the final plans for the bridge and apply for state wetlands permits within the next several months. ⁸⁰

With continuing expansion of the population in the Grand Traverse Bay area, traffic will continue to emerge as a significant regional problem. This problem is unlikely to be solved, and special places like the Boardman River Valley are unlikely to remain intact, if high-cost, damaging, construction-intensive highway plans succeed. Better regional planning, supported by state growth-management policies, can bolster low-cost, environmentally sensitive, and community-supported traffic solutions that protect the last remaining unspoiled and beautiful places in Grand Traverse County.

RECOMMENDATIONS

he eight natural heritage areas highlighted in this report are rep resentative of hundreds of special places across Michigan that are threatened by unplanned, uncontrolled development. However, the opportunity remains for the State of Michigan to ensure economic development while preserving the open space and farmland that are the state's natural heritage, preventing urban decay and encouraging livable communities. The state should be guided by five growth management principles:

- Planning: New growth should be directed into existing communities and made transit-friendly through a combination of stronger land use planning requirements and reinvestment in cities.
- Transportation: Transportation options should be expanded by shifting funding to rail, bus, bicycle, and pedestrian options. Highway projects that encourage sprawl should be discouraged.
- 3. Open Space Preservation: Our most valuable farms, forests, open space, and wetlands should be permanently off limits to development.
- 4. Developers Pay: Taxpayer subsidies for sprawl should be terminated, and developers should be required to pay for the new roads, water and sewer infrastructure, and public services needed to service their developments.
- Citizen Participation: Citizens should be provided with opportunities for meaningful input and involvement in all land use decisions.

A New Office of Smart Growth

For this to work, Michigan should set statewide land use goals and establish an Office of Smart Growth. The Office of Smart Growth should use these goals to coordinate state investments (for example, infrastructure spending and community health programs), seek federal funding support for Smart Growth projects and programs, and assist local governments with the necessary tools and resources to empower local communities—not developers—to determine the course of their future growth.

1. Pass a Comprehensive Land Use Planning Law

Land use planning should direct growth away from greenfields and into areas with existing development. It should also make sure that all new development is centered around transit hubs so that driving is not the only option for getting around. One of the best ways to achieve these and other growth management objectives is to encourage regional planning.

Michigan's four planning enabling acts were passed at different times and under varying circumstances. Those laws should be replaced by a single law with clear expectations that communities cooperate with one another in their planning. This would prevent conflicts in the planning process and improve cooperative approaches to regional issues.

A regional planning law should:

Focus state resources in Priority Funding Areas.

- Local communities should identify Priority Funding Areas targeted for growth in their Master Plans, and set goals for land preservation.
- Capital improvement plans should reflect these priorities. Infrastructure such as sewers, highways and utilities often dictate the direction of growth in an area. Linking the development

of this infrastructure to long-range plans through capital improvement plans provides local government with a powerful tool for planning the direction growth will take.

• Public funds should not subsidize development in non-priority areas.

Create effective processes to encourage coordination.

- Encourage greater coordination of plans made by various bodies within a municipality – such as planning commissions, historic district commissions, and sewer and water boards.
- Require greater coordination of plans made by all levels of government. County plans should be consistent with local plans, regional plans with county plans, and state policies with regional plans.
- Explicitly authorize communities to form joint or sub-regional planning commissions, and encourage participation in county and regional planning efforts. Municipalities that share economic, environmental, or cultural characteristics should have the flexibility to plan together as a group.

Enhance home rule.

- Protect communities from legal liability when they go through a proper process of master planning and zoning ordinance adoption and enforcement. Currently, the lack of coordination between master plans and zoning ordinances opens municipalities to potential lawsuits. That fear of litigation, in turn, frightens some communities away from taking actions against sprawl that enjoy broad popular support.
- Require zoning ordinances and other local policies to be consistent with the master plan, and clarify the role and

- powers of local planning commissions to make land-use decisions. This would go a long way toward easing the legal fears of local governments.
- Give local governments the flexibility to adopt the type of plans and participate in the coordinated planning endeavors that best meet their needs.
- Provide a source of funding that would enable even small communities to prepare and implement effective plans.

Take the long view.

- Require plans to have a 20-year focus and be updated regularly to keep up with changing conditions.
- Encourage municipal planners to adopt six-year capital improvement plans to ensure that local spending priorities move communities toward realization of their master plans.

2. Sustainable Transportation

Michigan can no longer afford a transportation strategy that gives priority to costly highway expansion projects with dubious long-term benefits. Instead, the state should embark on policies that aim to stabilize – or even reduce – the growth in vehicle-miles traveled on the state's highways, while giving Michigan residents more transportation options and encouraging more sustainable land-use patterns across the state.

Specifically, Michigan should:

Stop wasteful highway projects.

Many wasteful highway projects remain in the long-term plans of regional and state transportation agencies.
 Given that increasing highway capacity increases dispersed land development that leads to yet more traffic, this is a poor overall transportation strat-

- egy. Highway widening and extension projects should be held to an extremely high level of scrutiny and not be relied on as the default response to local congestion problems.
- That is not to say that all highway projects are without merit. Projects that remove existing highway bottlenecks and improve driver and pedestrian safety can be beneficial and should continue to be supported- provided they are cost-effective, environmentally benign, and in keeping with local residents' desires and growth management policies.
- To the extent that highway expansion is undertaken in Michigan, it should occur exclusively to facilitate wellplanned growth within priority development areas. Any highway expansion project should be rigorously evaluated to ensure that it supports, rather than detracts from, the state's growth management goals.

Invest in public transit.

- State investment in public transportation reduces congestion and curbs sprawl by encouraging new development in already developed areas. Currently, state investment in public transit is severely limited by a clause of the state constitution (section IX) stipulating that a minimum of 90% of transportation dollars be dedicated to roads. As a result, the state public transit budget currently is inadequate for effectively maintaining existing services, much less improving these services. With adequate funding, the state and local agencies could improve service on existing transit systems, expand those systems, and, where appropriate, build new ones.
- In metropolitan areas like Detroit, any effective transportation system will

cross many municipal borders. Metro Detroit in particular should have a regional public transportation program to promote, build, and operate the region's transit system. The state should provide resources to help fund this program.

Get the most out of existing highways.

- Protecting and maximizing Michigan's multi-billion dollar investment in its highway system should be a top priority for state officials. With transportation funding promising to be tight for years to come, Michigan should continue to take a "fix it first" approach to its highway system.
- There are also ways that Michigan can use intelligent transportation systems to improve the safety and efficiency of the state's highways, including traffic monitoring, incident management, traffic management, and traveler information components.

Promote compact, transit-friendly development via community design.

Good community design promotes greater transportation choice, enabling walking, biking and telecommuting as alternatives to intensive automobile use and should be encouraged by state investment in projects that diversify Michigan's transportation system and beautify our communities.

3. Open Space and Farmland Preservation

As this report shows, Michigan is full of unique places. Residents and tourists flock to see historic sites, explore natural areas, visit state parks, and enjoy our magnificent coastline. Also, undeveloped land filters our water and provides habitat for wildlife. Our most important

natural areas should be permanently off limits to development.

The state can achieve open space and farmland preservation in several ways:

Provide funding for open space acquisition.

Provide funding to support state purchase of priority natural heritage areas or purchase development rights to land so that it is permanently conserved in its current state. This funding should start at a minimum of \$25 million annually, and preferably be set at more than \$80 million each year.

Set high taxes for conversion of open space, low taxes for working farms.

- Assess property taxes for farms based only on their current agricultural or conservation use, not based on their potential value for development.
- To discourage land speculation, usevalue taxation must be accompanied by a land conversion fee or a significant recapture fee. A reasonable conversion fee would be set at least 10%, if not 20%, of the fair market residential value of the land. This income can be expected to generate between \$40 and \$80 million annually, and should be allocated to fund the state open space acquisition program described above.

Provide protected status to ecologically and culturally important areas.

- Give protected status to valuable open space areas. Designate important farmland as protected agricultural districts.
- Allow transfers of development rights.
 This market mechanism will enable towns and counties to transfer growth from places targeted for protection to places appropriate for extra develop

- ment because they are close to jobs, shopping, schools, transportation and other urban services.
- Do not sell state-owned open space to developers.
- Adopt restrictions on selling publiclyowned open space to developers. If state-held land cannot be administered by the state, the state should give land conservancies the option to purchase the land.
- Allocate money for urban parks. Funding should be dedicated for the acquisition and development of urban recreation areas.

4. Developers Pay

Developers, not the public, should pay the costs of sprawling development.

In conjunction with other land use policies, development fees can help control sprawl.

- Authorize counties to assess impact fees: The State of Michigan should authorize every county to pass comprehensive impact fees or development excise taxes. Impact fees make new development help pay for itself and ensure that local governments do not enable sprawl by subsidizing roads, schools, and other facilities. Since services and infrastructure cost more for sprawling development than for compact development, impact fees and excise taxes can help reduce the financial burden that sprawling subdivisions place on the public.
- Exempt compact, targeted development from impact fees: Local governments can further encourage compact, transit-oriented development in target areas by exempting such projects from paying impact fees.

5. Ensure Citizens Have Meaningful Opportunity for Public Participation

Give citizens the tools they need to control their destiny.

- Ensure that local communities establish planning priorities and provide ample opportunities for public participation throughout the planning process.
- Any future planning law should maintain current policy guaranteeing that communities are notified of zoning or master plan decisions in neighboring communities that could affect their future.
- Communities should retain the right to comment on neighboring communities' planning proposals and to have those comments included in the public record.

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