Protecting Michigan's Agricultural Future

Making the Case and a Call to Action for
Strategically Saving Farmland as a Critical State Asset

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Executive Summary

Background

Michigan's rich land and water resource base is vitally important to the state's economy, to our quality of life, and to the character of our environmental resources. Michigan's working lands, comprised of 19.3 million acres of forest and over 10 million acres of farmland, provide food, fiber and wood sources, recreational opportunities, and jobs for citizens to support the state's thriving land based enterprises (agriculture, tourism, hunting, fishing, and forestry). The Great Lakes surrounding Michigan are the largest source of fresh water on the planet. The state's 38,000 miles of rivers and streams sustain a world-renown, high-quality fishery and feed into our Great Lakes. The wetland systems that flow into these waterways help filter out sediment and pollutants, purifying our fresh water resources. This abundance of water is especially important to Michigan farmers who grow over 120 commodity crops in the state's varied soils and growing climates.

Heart of the Lakes, serving as the policy voice and convener of Michigan's land conservancies, developed this report to understand how conservancies may be more effectively involved in increasing the pace of Michigan farmland preservation. Michigan agriculture is a $73 billion industry, employing over 1 million citizens. Michigan, with the second-most diverse crop production in the country (2nd only to California), is well positioned to keep the state's agricultural production healthy, successful, and stable if we can ensure protection of the valuable land and water that sustains it.

Heart of the Lakes' goal in writing this report was not only to synthesize existing written reports and make the case for farmland preservation in Michigan, but also to assess what still needs to be understood and recommend the most effective next steps in research and land conservation policy that will support Michigan farmland preservation.

Through summarizing the state's assets and farmland protection challenges, evaluating the existing farmland protection programs available to landowners, and assessing why and where local farmland protection efforts have been successful, we have gained insight into the important role that land conservancies are playing in farmland preservation.

Focus and Findings

This report documents the environmental, economic and social value of agriculture to Michigan and was intended to be a "one-stop-shop" resource for land conservancies and their/our partners, compiling summarized information about a variety of farmland preservation issues and opportunities into one place. The goals of the project and major findings are summarized here:

- **Making the case for the value of farmland preservation to impact policy, preserve ecological function on the landscape, and enhance practitioners' on-the-ground efforts.**
  One goal of this report was to make the case for farmland preservation and provide this resource to Michigan land conservancies and other agricultural stakeholders. It addresses

the assets of Michigan's agricultural landscape and industry in terms of the natural resource base, agricultural revenues, and quality of life afforded to Michigan citizens through the state's diverse agricultural landscape, abundant food supply, and resource base.

While Michigan's rich and diverse agricultural industry contributes significantly to the state's economy and its residents' quality of life, the preservation of the land base critical to its sustainability faces challenges. This report discusses the threats of land use conversion and fragmentation, citing past studies and reports to support these threats as well as addressing the question of where best to protect farmland.

- **Mapping areas in Michigan that have prime or unique agricultural soils that are threatened with conversion to non-agricultural uses, as well as those farmlands already protected with conservation easements and/or enrolled in P.A. 116**.
  Heart of the Lakes Center for Land Conservation Policy conducted a survey of the 17 Michigan land conservancies whose service areas lie within the most productive farmland in Michigan (i.e., the west Michigan fruit ridge and southern lower Michigan). Many land conservancies expressed the need to better identify and determine the most important areas in which to preserve farmland. Responding to this need, Heart of the Lakes contracted a farmland mapping GIS tool, through Michigan State University's Land Policy Institute, that contains the following data layers which are displayed down to parcel-level resolution and viewable for the entire state: roads, projected land use change by 2020 and 2040, farmland type, P.A. 116 agreements, soil classes, and already protected lands.

  The goal of the mapping tool was to allow conservancies to assess:
  - Where prime and unique soils for farmland exist,
  - Where other farmland or natural areas are already protected,
  - What crops are being produced in a given area,
  - Development threat based on land cover change projection models, and
  - The best areas to target farmland for protection based on the data provided in the mapping tool.

- **Identifying and evaluating publicly- and privately-funded farmland preservation efforts, their status, capacity, and successes as well as opportunities for partnerships with other farming advocates**.
  An extensive summary of state, federal, and local farmland preservation methods and primary challenges associated with each were covered in the report including the following programs:
  - The Michigan Farmland and Open Space Preservation Program, administered by the Michigan Department of Agriculture, includes:
    - Agricultural Preservation Fund (administers purchase of development rights (PDR) programs,
    - Farmland Development Rights Agreement (commonly known as P.A. 116), and
    - Conservation easements.

- Federal Farm and Ranch Lands Protection Program (FRPP)
- Federal Conservation Reserve Enhancement Program (CREP)
- Local PDR programs and millages as local fund raising mechanisms

- **Conducting case studies on farmland preservation programs throughout Michigan to inform future farmland preservation efforts**.
  Five case studies were conducted in areas throughout the state where successful, local farmland preservation initiatives have taken place and are included in the report. The goal was to understand different methodologies used for successful local farmland preservation efforts, key partnerships that made success possible, the role of land conservancies (if any) in these efforts, and challenges associated with successes and failures of agriculture preservation efforts. The most extensive case study was written for Peninsula Township in Leelanau County, Michigan's first local PDR program. Dr. Tom Daniels from University of Pennsylvania, a national expert on farmland preservation, was contracted to write this case study. The full 78-page report is available upon request. Four less extensive case studies were conducted by Heart of the Lakes on Leelanau, Kent, Ingham, and Washtenaw Counties.

  To summarize the findings, the Michigan Fruit Belt and much of the southern Lower Peninsula make up a diverse and agriculturally bountiful part of the state. Methods for protecting agriculture vary across the state. Influential partners, circumstances under which PDR ordinances were passed, drivers for land protection, and the type of farmland most critical to protect vary from region to region across the state. However, successful agriculture preservation efforts have several things in common across the state:
  - Clear communication with landowners and voters and understanding their needs
  - Communications with other local farmland and open space protection efforts
  - Adaptation to local need and circumstances
  - Inclusion of land conservancies in farmland protection efforts

- **Determining a plan of action to implement a focused and coordinated statewide farmland protection strategy including land conservancy involvement**.
  The concluding pages of the report issue a call to action to agriculture stakeholders. After summarizing findings from the report, several policy recommendations are listed to advance farmland preservation in Michigan:
  - Route Natural Resource Conservation Service (NRCS) Farm and Ranch Lands Protection Program (FRPP) dollars through Michigan's Farmland Protection Program to streamline farmland preservation efforts
  - Introduce P.A. 116 lien recapture legislation
  - Introduce Enabling legislation for local real estate transfer tax
  - Adopt a land use-based tax structure

Next Steps

The first phase of Heart of the Lakes' Farmland Preservation Initiative, results of which are provided in following pages, had objectives focused around researching the state of farmland

preservation in Michigan. The ultimate goal of Phase I was to lead to a Phase II effort centered around taking action.

Phase II of the Farmland Protection Initiative will focus on building off the strong foundation that Michigan land conservancies and their partnerships have built. It will concentrate on increasing planning, training, and conservancy capacity to expand farmland preservation efforts. In addition, Phase II should strengthen the case for farmland preservation and drive policy change. A "call to action" and proposed first look at an outline of items that could be included in a Phase II proposal conclude this report.

Introduction

Heart of the Lakes Center for Land Conservation Policy developed this report, on behalf of our member land conservancies, to understand how we may be more effectively involved in increasing the pace of Michigan farmland preservation. Heart of the Lakes is a nonprofit organization serving as the policy voice and convener of Michigan land conservancies. Our member organizations have helped to protect nearly 500,000 acres of Michigan forests, farmland, coastline, and other extraordinary places (Table 1). Heart of the Lakes is also a source of independent research, analysis, new ideas, and communications on Michigan's biggest conservation successes and challenges.

Michigan land conservancy participation has been critical to many Michigan farmland preservation efforts and land conservancies are looking to become increasingly engaged in farmland protection and help make the land protection process more efficient for all involved.

The goal of this paper was not only to synthesize existing written reports and make the case for farmland preservation in Michigan, but also to assess what still needs to be understood and recommend the most effective next steps in research and land conservation policy that will support Michigan farmland preservation. This report is expected to be of interest to conservation organizations, state and federal conservation and agricultural programs, land conservancies and their partners, and policy makers. This report expanded upon the following guiding objectives:

1. Make the case for the value of farmland preservation to impact policy, preserve ecological function on the landscape, and enhance practitioners' on-the-ground efforts.

2. Map the areas in Michigan that have prime or unique agricultural soils that are threatened with conversion to non-agricultural uses, as well as those farmlands already protected with conservation easements and/or enrolled in P.A. 116.

3. Identify and evaluate publicly- and privately-funded farmland preservation efforts, their status, capacity, and successes as well as opportunities for partnerships with other farming advocates.

4. Conduct case studies on farmland preservation programs in Peninsula Township, Washtenaw County, and other areas to inform future farmland preservation programs.

5. Determine whether there are prime soils not serviced by an existing conservancy. Ascertain conservancy interest in farmland preservation, staffing needs, and other capacity issues or information gaps through interviews with staff and board members.

6. Determine a plan of action to implement a focused and coordinated statewide farmland protection strategy including land conservancy involvement.

Making the Case for Farmland Preservation

Assets: Why should we Value Michigan's Farmland?

Michigan's Resource Base

Michigan's rich land and water resource base is vitally important to the state's economy, to our quality of life, and to the character of our environmental resources. Over 38,000 miles of rivers and streams (including 868 miles of which are classified as Blue Ribbon Trout Streams due to their high water quality)(*1*), 19.3 million acres of forest (*2*), and over 10 million acres of farmland (*3*) provide scenic vistas; recreational opportunities; food, fiber and wood product sources; and jobs for citizens to support our thriving land based enterprises (hunting and fishing, forestry, agriculture, and tourism).

Michigan is uniquely positioned with vast quantities of fresh water to sustain its diverse ecosystems. The Great Lakes surrounding Michigan are the largest source of fresh water in the world. This is especially important to Michigan farmers who grow over 120 commodity crops in the state's varied soils and growing climates. As climate change forces landscapes to adapt to warming temperatures, fluctuating precipitation, and variable seasonal patterns, water availability will be a determining factor in whether farms are able to succeed or fail. Michigan is well positioned to keep the state's nationally-ranked #2 position in agricultural production healthy, successful, and stable.

Agriculture Revenues

Increasingly, Michigan's agricultural land, agricultural products, and innovative industry potential are becoming an invaluable focus on which to base Michigan's future. Annually, the agri-food business contributes **$73 billion** to the state's economy and **employs over 1 million residents** (farming, agri-business, food processing, wholesale and retail stores); this comprises nearly 25% of the people working in Michigan (*4*, *5*).

Michigan's agricultural economy expanded at a rate of 5.9% - a full percentage point above the state's general economy - between 2004 and 2006 and continues to expand (*5*). Producing over **120 commodities on 10 million acres of farmland**, **Michigan prides itself as the second-most agriculturally diverse state in the nation**, leading United States production of 19 commodities (*5*).

The dairy industry is the leading segment of Michigan's agriculture industry, providing a $5.1 billion impact on the economy (*5*). Michigan's floriculture industry ranks third nationwide, behind California and Florida, in total value and production. The state's 720 commercial floriculture growers report an estimated wholesale value of $393.5 million for all surveyed floriculture crops, down 3% from the 2007 figure (*6*). Michigan's nursery industry ranks ninth nationally with production sales of $148.5 million (*7*).

Further, Michigan's wine industry now includes more than 60 wineries, which are growing at a rate of 15% annually (*5*). Michigan's wine, grapes, grape juice products, and related industries contribute $790 million in total economic value to the State (*8*). These industries have contributed over $42 million in state and local taxes and an additional $42 million in federal taxes. Michigan's wine and grape industry employs over 5,000 people across the state and has a payroll of more than $190 million.

Quality of Life

Beyond the economic incentives of securing strong agricultural production in Michigan, sustaining and increasing the availability of fresh, local food for Michigan's residents is an invaluable asset (*9*, *10*, *11*). Nutritional value of fruits and vegetables is highest when produce can be picked ripe. Having abundant, fresh, local food available in Michigan reduces transport time and ultimately lowers fuel expenditures resulting in cleaner air. **The purchase and consumption of local foods keeps Michigan citizens and its farming economy healthy**.

Michigan's 10 million acres of agriculture land filter rain and snow, allowing **groundwater recharge** over large, pervious surfaces. This also allows **filtration** of sediment (sand, gravel, soil) and pollution through wetlands, which act as the "kidneys" of the landscape. Farming practices that adhere to conservation planning guidelines reduce sediment infilling of waterways and nutrient runoff, which can reduce water quality and harm aquatic plants, animals, and Michigan's world-class fishery if unchecked. The **large, contiguous areas of agricultural land, especially fallow fields, forest, and grazing lands provide food, shelter, and breeding habitat for many wildlife species**.

Michigan's availability of abundant, fresh water resources and prime and unique soils position the state to continue its legacy of sustainable agriculture production. Beyond commodity crop and livestock production, agriculture lands should also be valued as a **scenic and vital piece of Michigan's cultural heritage, a land resource base for local fruit and vegetable production, an opportunity for carbon offsets, and a land base for alternative energy production**. We must imagine Michigan's future and the vast, potential opportunities that could exist. Now is the time to take aggressive and thoughtful steps to protect Michigan's agricultural resource base.

Opportunities for Agri-Business

Over 45 agri-businesses (businesses engaged in agriculture) are currently operating in Michigan, from internationally-based companies like Kellogg Company to local, corner stores such as Lansing-based Quality Dairy. Michigan agri-businesses export nearly one-third of the state's 200+ agricultural products, such as canned fruits and vegetables and nursery stock. Agricultural exports generate over $1.24 billion and employ more than 13,800 residents.

Tax-Free Agricultural Processing Renaissance Zones

Agri-business is expanding in several directions. Michigan's tax-free Agricultural Processing Renaissance Zones (APRZ) were established in 1997 as the first of their kind in the nation (*5*). To date, APRZs are credited with luring 128 companies to Michigan, creating over 3,660 new jobs, and over $330 million in new investment. These companies are exempt from state and

local taxes for up to 15 years in return for local job creation and in some cases new or expanded crop or biofuel production.

To help Michigan's agri-food sector, the State Legislature and Governor expanded the number of zones in 2003 from the original 10 to 20. These zones are company-specific with developmental agreements. These new APRZs are exempt from all state and local taxes just like the original Renaissance Zones for "qualified agriculture processors" who want to expand or begin processing operations in Michigan. They are designed to help utilize and transform Michigan's raw commodities in the state into processed and value-added agriculture products and improve markets and profitability for Michigan growers. The Michigan Department of Agriculture works closely with the Michigan Economic Development Corporation and other partnering local agencies to promote, implement, and administer APRZs. Overall, the food and agricultural processing companies have committed to creating 1,166 new jobs and $548 million in private investment within the 20 designated APRZs. (See a list of APRZ companies in Appendix A.)

Agricultural Innovation Grant Program

Michigan Department of Agriculture's Agricultural Innovation Grant Program, funded through the state's 21st Century Jobs Fund, was purposed to accelerate the growth of Michigan's $73 billion food and agriculture industry. To date, the program has funded 40 companies, with 39 having completed their projects. The program has provided $4,412,321 in grant reimbursements with private capital investment of $36,041,848. Leveraged state funds to private industry investments have been at an 8:1 ratio and nearly 120 new jobs have been created with these projects.

Michigan State University Product Center for Agriculture and Natural Resources

Established in 2003, with funds from the Michigan Agricultural Experiment Station (www.maes.msu.edu) and Michigan State University Extension (www.msue.msu.edu), the Product Center was founded to improve economic opportunities in the Michigan agriculture, food, and natural resources sectors. The Product Center assists farmers, and other entrepreneurial individuals and businesses in agriculture and natural resource fields, to develop and commercialize high value, consumer-responsive products and businesses. An array of services from business planning to marketing analysis and from scientific support to technical services, are sourced from their statewide network of university, business and governmental partners.

Michigan State University Extension

Michigan State University (MSU) Extension (www.msue.msu.edu) focuses on bringing knowledge-based educational programs to Michigan's citizens to improve their lives and communities. County-based staff members, along with on-campus faculty members, serve every county with programming focused on three areas: agriculture and natural resources; children, youth and families; and community and economic development. Under the agriculture and natural resources umbrella, MSU Extension provides research-based educational programs to Michigan's agricultural industry, from farmers to commodity groups, agribusiness, food processors and retailers. Programs are delivered through client-directed, specialized Area of Expertise teams and via county-based agriculture and natural resource agents.

Challenges

While Michigan's rich and diverse agricultural resource base contributes significantly to the state's economy and its residents' quality of life, the preservation of the land base critical to its sustainability faces challenges. American Farmland Trust published their study, "Farming on the Edge", in 2002 (*12*). The national study identified the west Michigan Fruit Belt, extending from the northwest Lower Peninsula of Michigan to the Indiana border, as one of the top-10 most unique and most threatened agricultural regions in the United States (Figure 1). Many areas across the southern half of the Lower Peninsula were also designated as high quality farmland under high development pressure. **If our prime agriculture regions continue to lose their land base, Michigan's agricultural future, and associated social and economic benefits, will be severely compromised.**

Land Use Conversion and Fragmentation

As large, contiguous areas of individual land use types (e.g., forest, farmland, wetland, urban) become fragmented into smaller parcels and a greater mix of multiple land use types, the shape and size of migration corridors and available habitat for wildlife populations changes. As the shape and size of land use types change, these negative fragmentation effects alter ecological processes like groundwater recharge, pollination of crops and plants, and genetic variation of plants and animals.

Fragmentation of land use types is critical to the farming community for several reasons. When rural landscapes are kept in tact and farmland acreage is available in large, contiguous areas, farming can be easier and more efficient for farmers. When those farming parcels are mixed with other land use types (residential, industry, or even forestry) for example, it becomes harder for farmers to have access to land they need and to move irrigation water, farm implements, manure, and livestock, not to mention being able to acquire enough land for their farming operation to be viable. However, to make farming practical for farmers, the business infrastructure they need (i.e., processing plants, farm implement and feed dealers, grain elevators) must be in close proximity.

The average age of a Michigan farmer is 56 years old (*6*). As those farmers retire they can choose to sell their land to another farmer or developer or hand it down to another generation. Keeping farmers and farming in Michigan – and making sure that farming is a viable industry for future generations of farmers – is the only way to ensure that Michigan's $73 billion agricultural industry will continue to succeed and grow. Structuring land acquisition and financing mechanisms for young and older farmers alike is one way for Michigan to keep farming viable and keep contiguous areas of farmland in tact.

Michigan's population is decreasing (*19*). People are moving away from cities and into once-rural subdivisions and other large-lot residences. The number of households is increasing, while at the same time, the average size of a household is decreasing (*19*, *20*). Michigan has a high number of second homes and summer rental properties. **These trends all coincide with land use fragmentation, meaning loss of large contiguous areas of distinctive land use/land cover types (forest, agriculture, wetland, grassland, urban) and increased homogenization of the**

landscape. This homogenization is sometimes referred to as creating "anywhere U.S.A.", meaning that the rural land often purchased for a mix of suburban, urban and commercial development, frequently abutting agricultural land, looks a lot like any other development across the nation, with no "local signature" to the land use. Michigan's competitive advantage in agriculture will erode if ongoing conversion of farmland to non-agricultural uses in unplanned patterns continues.

The **average Michigan farm size is decreasing**; 179 acres in 2007, compared to 214 acres in 1997, but the **number of farms is increasing**; 56,004 farms in 2007 compared to 46,027 in 1997 (*21*, *20*). This current data suggests that **farmland is becoming more fragmented** throughout the landscape. Implications of farmland fragmentation all point toward a less sustainable agricultural industry (unless we diversify crops as is recommended for consideration in the *Michigan Land Resource Project* summary below). Additionally, **increased farmland fragmentation implies loss of large, contiguous areas of arable land, which could mean reduced pervious surfaces for groundwater recharge and loss of wildlife habitat and wildlife corridors**. This has potential negative impacts on Michigan's biodiversity as well as its hunting heritage.

Michigan Land Resource Project: need for an updated Land Transformation Model

The *Michigan Land Resource Project* (*13*) analyzed the implications of current and future land use trends on land based industries. Michigan State University and partners compared land use from 1980 to 1995 (*14*) and used a Land Transformation Model (*15*, *16*, *17*, *18*) to project land use change for years 2020 and 2040. The projection simulated future changes in land use and land cover based on the input of recent, historical land use and land cover change data (change between 1980 and 1995). **The model projected an estimated eight-fold increase in conversion to urban land use in relation to the population increase between 1980 and 1995** (25% increase in built area compared to only 3% increase in population). This was **interpreted as urban sprawl and most often projected conversion of land from agriculture and forest to urban use**. The model predicted that by 2040, the built area in Michigan is expected to increase by 178% (Table 1).

The *Michigan Land Resource Project* goes on to note that the amount of built land cover will increase over time while the average (patch) size of developed areas will decrease, implying that more land in smaller pieces will be available. **Agriculture** and **forest** land cover types show a similar pattern of land use change; the number of patches increases and the average patch size decreases, meaning that these **land cover types are becoming increasingly fragmented and increasingly smaller in size**.

This begs the economic question: "what is the minimum amount of agriculture (and commercial forest) production needed for the industry to be viable?". The study concludes that Michigan should consider the effects of land cover transition on commodity crop production and examine what will be economically viable in the future. **It further concludes that it is possible that a transition from an emphasis on corn to other, more diverse and valuable crops to maintain a viable agriculture infrastructure will be necessary**.

Land use patterns are affected by any number of variables (e.g., economic outlook, transportation infrastructure, gas prices, policy changes). **An update to the Land Transformation Model study referenced above including current economic, development, and land use trends would be very useful to Michigan planners, conservation professionals, and policy makers**.

Where Should We Protect Farmland?

Although agriculture is the Michigan's second highest revenue source, urgency to strategically protect the land that farmers farm and raise livestock on does not appear to be a priority for all. This is due in part to the **need for improved communications on the value of Michigan agriculture** and need for a **unified, statewide strategy** for preservation. Conservation organizations and agricultural interest groups must work together and clearly communicate the economic, social and environmental values of Michigan's agriculture industry.
We must **strategically assess where prime and unique soils are most threatened** with conversion to other land use types and understand **what factors most influence conversion** (e.g., urbanization and land prices, distance to needed agricultural infrastructure). We must also understand the concerns and **needs of the farming community** and the role that each stakeholder is playing – what is working, in what locations, what isn't working, and why.

<u>Farmland Mapping Tool</u>

Many Michigan land conservancies have considered the question of how best to determine the most important areas in which to preserve farmland. Responding to this need, Heart of the Lakes Center for Land Conservation Policy contracted a farmland mapping GIS tool, through Michigan State University's Land Policy Institute, that contains the following data layers which are displayed down to parcel-level resolution and viewable for the entire state:

- **Freeways** (major interstates)
- **Minor roads**
- **Minor civil division boundaries**
- **County boundaries**
- **Newly Built by 2020** – land use change projected between 1980 and 2020 (*15, 16, 17, 18 22*)
- **Newly Built by 2040** – land use change projected between 1980 and 2040 (*15, 16, 17, 18 22*)
- **Farmland Type** - Cropland Data Layer developed by USDA's National Agricultural Statistics Service (*23*)
- **P.A. 116 Agreement** lands - Public Act 116: Farmland and Open Space Preservation program (*24*)
- **Protectable Soil Classes Under the Farm Bill** – Soil data from the Soil Survey Geographic (SSURGO) database including only the soil classes qualifying for Farm Bill program funding (*25*)
- **Conservation Reserve Enhancement Program (CREP) easements** –lands enrolled by Michigan Department of Agriculture, in partnership with the federal government, to address soil erosion, water quality, and wildlife habitat issues. (*26*)
- **Conservation And Recreational Lands** (CARL) - database jointly administered by The Nature Conservancy and Ducks Unlimited showing all protected lands in

Michigan (*27*). Permission was gained from 13 land conservancies who have sensitive land records, principally private conservation easement data. This sensitive data (*not for public distribution*) is included along with the public CARL data in this data layer containing local, state and federal protected lands.

The goal of this mapping tool was to allow conservancies to assess:

- Where prime and unique soils for farmland exist,
- Where other farmland or natural areas are already protected,
- What crops are being produced in a given area,
- Development threat based on land cover change projection models, and
- The best areas to target farmland for protection based on the data provided in the mapping tool.

Additional GIS data layers can be used along with the layers provided in the mapping tool so that individual conservancies or conservation organizations can customize farmland preservation assessments/queries to their individual regions and strategic conservation planning agendas. This map is seen as a "first draft" in targeting farmland in greatest need of protection. Conservancies and partner organizations are currently assessing the utility of the mapping tool.

Two known limitations of the mapping tool thus far are:

1. Inability to identify many types of specialty crops (i.e., hand-picked fruits and vegetables) or small parcels of cropland due to the spatial resolution of the aerial imagery used and classified by USDA National Agricultural Statistical Service and partners.
    a. One solution could be to classify the state's 2005 1-meter resolution aerial imagery (*28*) for the diversity of Michigan crop types.

2. Inability to pinpoint parcels with P.A. 116 agreements when landowners own multiple properties in a section and inability to see actual property boundaries.
    a. One solution could be for Michigan Department of Agriculture to require that the property owner disclose their parcel ID on their P.A. 116 enrollment form from this time forward, thus providing a common identifier that would enable eventual creation of a parcel-specific P.A. 116 layer.

Current Agriculture Preservation Options in Michigan

A summary of state, federal, and local farmland preservation methods and primary challenges associated with each are presented in Table 2.

State Programs

Michigan's **Farmland and Open Space Preservation Program** is administered by the Michigan Department of Agriculture under Part 361 of the Natural Resources and Environmental Protection Act (*29*). The program has three main avenues through which to assist Michigan farmland preservation efforts:

- Agricultural Preservation Fund, which assists local purchase of development rights (PDR) programs;

- Farmland Development Rights Agreement (commonly known as P.A. 116); and
- Conservation easements.

Michigan passed a provision for funding farmland preservation through P.A. 116 of 1974, however the PDR program was not created until 1990, when sufficient funds had accumulated to complete purchases.

The **Agricultural Preservation Fund** Board was established to assist local units of government in implementing a local PDR program. A PDR program is voluntary and compensates a property owner for permanently preserving their farmland with an agriculture conservation easement. This legal change is recorded on the deed and transferred to all future property owners. The easements are monitored annually. Local governments pass PDR ordinances to protect farmland within the designated Agricultural Preservation Zone outlined in their County/Township comprehensive plan, creating long-term agri-business opportunities and helping to maintain local quality of life.

When local governments pass PDR ordinances and update their comprehensive land use plan to include farmland preservation components, they then qualify to apply for state Agricultural Preservation Fund and federal Farm and Ranchlands Protection Program dollars. The local unit of government is responsible for raising match dollars to qualify for state and federal programs (25% minimum in the case of the state Agriculture Preservation Fund and 50% in the case of the FRPP). Funding for local PDR programs varies between jurisdictions, with many communities using bonding or tax millages to raise money for PDR.

The state Agricultural Preservation Fund assists local units of government to assist in the purchase of agricultural conservation easements through PDR programs (application and scoring system can be found at www.michigan.gov/farmland). Local, qualifying entities with PDR programs are the counties of Berrien, St. Joseph, Van Buren, Calhoun, Washtenaw, Allegan, Barry, Eaton, Ingham, Kent, Clinton, Shiawassee, Lapeer, Isabella, Grand Traverse, and Tuscola, with St. Clair pending approval (*31*) (Figure 2). Several township PDR program exist in Grand Traverse, Macomb and Washtenaw Counties.

Applicants are scored and awarded when available funding reaches $500,000. Funding will be unlikely through the Agriculture Preservation Fund in 2009 due to lack of funding availability. Funding for this program is acquired primarily through payback of expired P.A. 116 agreements. Proceeds from the Agricultural Recapture Act (P.A. 261 of 2000) are also a funding source. The state treasurer may accept money or other assets from any source for deposit into the fund, including federal funds, other state revenues, gifts, bequests, and other donations. Some argue that funding PDR through payback of expired P.A. 116 agreements could be a poorly interpreted funding mechanism (i.e., funding new farmland preservation through funds acquired by another landowner getting out of farming).

A **Farmland Development Rights Agreement** (commonly known as P.A. 116) (*24*) is a voluntary and temporary restriction on the land brokered between the State and a landowner. The landowner preserves their land for agriculture in exchange for property tax credits (for a period of 10 - 90 years) and exemptions from special assessments. At least 51% of the land must be in agricultural use to qualify for P.A. 116. At the end of the contract period, the farmer must

pay back an amount equivalent to the credits claimed during the last seven years. This payback of credit is invested in the state's permanent farmland protection program – the Agricultural Preservation Fund. The tax credit is equivalent to that amount of the property tax that exceeds 3.5% of the adjusted household income. Payback can be avoided by failing to claim tax credits for the last seven years of the contract period. There are currently (4/20/2009) over 41,000 P.A. 116 agreements being administered by the state with a 94% annual renewal rate.

While the state has also purchased conservation easements in the past, due to lack of funding availability, they are only accepting **donated agricultural conservation easements** at this time. These voluntary agreements, entered into by a landowner, permanently remove the development rights from the property and preserve the land for either open space or agriculture. The state currently holds 93 easements (67 purchased, 26 donated) totaling 19,391.15 acres of permanently protected land (15,884.54 purchased, 3,506.61 donated). Approximately $31,044,212.60 has been invested to date on purchases at an average price of $1,957.69 per acre. As of April, 2009, The state has also assisted 11 local grant conservation easements totaling 936.15 acres. (personal communication Rich Harlow, Michigan Department of Agriculture).

Federal Programs

The **Farm and Ranch Lands Protection Program (FRPP)** (*30*) allocates matching funds to help purchase development rights and keep productive farmland in agricultural use. Funds are administered through rules set forth in the Farm Bill (Food, Conservation and Energy Act of 2008) to qualifying entities (i.e., State, Tribal or local government, non-governmental organizations) by the United States Department of Agriculture's Natural Resources Conservation Service (NRCS). State P.A. 116 recapture funds can be leveraged by local government and non-governmental organizations with federal funds available for reimbursement up to 50% under FRPP.

The Interim Rule for administering 2008 Farm Bill funds was released on January 16, 2009 for comment until March 17, 2009. The Interim Rule will govern the FRPP until final rules are approved (time frame coordinated by NRCS at the national level). This poses several challenges for those applying for FRPP dollars. The application period for the $2.2 million available in Michigan in 2009 is between April 10 and June 1. At present (5/28/2009) the NRCS has not clarified whether conservation agreements entered into under the Interim Rule will be subject to those potentially limiting guidelines or the new final rule guidelines. This is a looming challenge for entities (e.g., Townships and Counties) that are depending on these funds and the governance structure under which they agree to administer their local farmland protection programs.

The **Conservation Reserve Enhancement Program (CREP)** was created to address the environmental issues of soil erosion, water quality, and wildlife habitat. Michigan partners work with the federal government to preserve vulnerable land areas as part of a comprehensive effort to protect Michigan's land, water and wildlife. Farmers and landowners who participate in this program receive reimbursement for establishing best practices, incentive payments for sign up, and rental payments for the length of the contract. The program's payments to landowners are based on the soil rental rate (SRR) in the farmer's area. The rate is determined by the U.S. Department of Agriculture's Farm Service Agency.

Eligible lands include cropland planted with commodity crops for at least four out of six years (1996-2001). At this time, Michigan's CREP program concentrates on the watershed areas of the River Raisin in southeast Michigan, Lake Macatawa in southwest Michigan, and Saginaw Bay in central-eastern Michigan.

Local Farmland Preservation Options

Local Purchase of Development Rights Programs

Advantages to the landowner who sells their development rights:

- Receive cash payment for the development rights
- Retain the ownership of the land and can continue to farm the land
- Potential income, estate, and property tax benefits for the property owner
- Public access is not granted to the property
- Farmland is preserved for future generations

Advantages to the public for preserving farmland, which can include PDR as a tool:

- Productive farmland is not lost and helps to maintain the local farming economy
- Open space is preserved permanently through a more affordable method than purchasing the property outright
- Prevents the cost of public services provided within a local community from rising
- Helps support other land preservation efforts, such as open space preservation, and protects land from fragmentation, which can impact wildlife habitat and water quality

Local Tax Millage

Tax millages are often passed at the local level to raise money for PDR programs. Some feel that public funding is the best way to raise local match for state PDR funds administered through the Michigan Agricultural Preservation Board; that this is the only way to have a successful farmland preservation program. Others feel that this is a short-term, monetarily insufficient solution; that something more permanent is needed. Ingham County and several townships in Michigan have been successful at passing local millages to support farmland and open space preservation (e.g., Acme and Peninsula Townships in Grand Traverse County, Ada and Cascade Townships in Kent County).

Examples of Successful, Local Farmland Preservation Programs

Peninsula Township: Michigan's First Local PDR Program

Peninsula Township residents formally adopted their PDR program in 1994 by voting in a tax millage to support the program. Peninsula Township holds the distinction of being the first township in Michigan to pass a millage for a PDR program in the state. The Peninsula Township PDR program has been further supported by grants from the State of Michigan, United States Department of Agriculture, Michigan Department of Transportation, American Farmland Trust, and Grand Traverse Regional Land Conservancy. By the end of 2001, the PDR program and other programs had preserved 4,000 acres of agricultural land. Township residents approved

another millage increase in 2002, which generated additional monies. These additional funds enabled the Township to increase the coverage of the program to purchase the Development Rights on an additional 3,000 to 4,000 acres.

The Grand Traverse Regional Land Conservancy has worked with Peninsula Township to complete 86 farmland preservation projects, resulting in over 5,000 acres of permanently protected farmland in Peninsula Township. This represents more than half of the land identified for permanent protection in the Township's Agricultural Preserve Zone.

The Township's farmland preservation program has been carefully documented in a case study, commissioned by Heart of the Lakes Center for Land Conservation Policy and Grand Traverse Regional Land Conservancy (*32*) (see executive summary in Appendix B; full report available at www.heartofthelakes.org). It outlines the history of the program, the administration and accomplishments of the PDR program, future potential of the Township's PDR program, and recommendations for how best to grow and sustain the Township's program in the future by working with Grand Traverse Regional Land Conservancy.

Leelanau County

Farmland is a major driver for Leelanau County's economy, which is primarily based on tourism and farm production. The average age of farmers there is 60 years old and many are contemplating retirement. Between 1990 and 2000, more than 20% of Leelanau County's farmland was converted to non-agricultural uses (primarily second home development). Today, 40,000 acres remain in active production. High farmland development value and the lack of funding (public and private) for farmland preservation are a continual threat to the county's agricultural land resources.

Leelanau Conservancy has been the consistent and prevalent voice for farmland preservation in the County over the past decade. It helped establish a countywide ordinance and a farmland preservation board. However, the ordinance was repealed in 2006 and the county board of commissioners dissolved the board after a failed millage initiative (0.5 mil for 15 years) (60-40 vote).

Since that time, the Conservancy has worked with Michigan State University and the Leelanau Conservation District to develop an innovative "bridge" program for permanent farmland protection, which is the Conservancy's primary goal. Leelanau Conservancy's new FarmAbility program currently has over 5,000 acres in applications for 10-year Farm Conservation Agreements under the program. Each Farm Conservation Agreement runs with the land and is enforceable during the term. The program was designed as an outreach strategy to build support and open doors in the farming community. It also provides an opportunity to "buy time" and includes a right of first refusal should a farm be placed on the open market during the 10-year term. If the would-be purchaser's intent were to convert the farm to non-agricultural uses, the Conservancy would make every effort to permanently preserve the farm for ongoing agriculture and resell it for that purpose.
Farmers can qualify for the program under several scenarios:

1. A farm of 40 or more acres in one ownership, with 51% or more of the land area devoted to an agricultural use. For purposes of the 51% calculation, woodlot acreage in a verifiable sustainable management plan will be counted as an agricultural use as long as no less than 35% of the total acreage is in active agricultural use with annually harvested crop.

2. A farm of 5 acres or more in one ownership, but less than 40 acres, with 51% or more of the land area in agricultural use, and which produces a gross annual income from agriculture of $200.00 per year or more per acre of active farm land. Farm acreage enrolled in a federal conservation reserve program is considered to have met this income requirement.

3. A specialty farm under single ownership that has produced a gross annual income from agricultural use of $2,000 or more. Specialty farms may include community-supported agriculture; greenhouses; the breeding and grazing of livestock, pheasants and other game birds; bees and bee products; mushrooms; and other similar uses and activities. Horse farms and concentrated animal feeding operations (CAFOs) are not considered eligible farms for this program.

4. Farms which have already received value through purchase of development rights programs and/or federal income tax incentives are not eligible for this program.

Leelanau Conservancy has permanently protected approximately 2,500 acres of farmland to date. Funding for farmland preservation in Leelanau County has come from a mixture of private sources (individual donors, foundations, corporate sponsorships) and federal FRPP grants. Leelanau Conservancy is actively pursuing innovative funding mechanisms within the burgeoning field of conservation finance. Their approach has been a creative alternative in light of the absence of a PDR ordinance or millage as a funding source.

Kent County

Moving south, down the west coast of Michigan and through the "Fruit Belt" region of the state, the Kent County Farmland Preservation Program faces a different reality in some respects. Kent County is among the largest agricultural producers in Michigan, but it is also among the state's fastest growing counties and historically considered to be politically conservative. Urban sprawl became a top land use issue in 2000, when USA Today cited Grand Rapids as the sixth most sprawling area in the United States. Farmland preservation became a tool the county felt it could use to stop urban sprawl. A county PDR ordinance was passed in 2002, ultimately through careful negotiation between County Board and Administrative Office leaders and the Homebuilders and Realtors Associations. The Farmland Preservation Program was officially launched in 2003. Central west Michigan is also fortunate in their high per capita giving rates. In 2003, farmland preservation efforts were catalyzed by local, private funders and foundations who provided the local match needed to access FRPP funding. While these funds have sustained the program, they are not a long term solution for farmland preservation efforts.

Kent County's most notable success has stemmed in the Parrnell Avenue corridor, located in Vergennes Township. The Farmland Preservation Program has protected four farms in the corridor. Additionally, through collaboration with the Land Conservancy of West Michigan, one

landowner donated nine conservation easements in the Parnell Avenue corridor in 2007. This brings the total amount of preserved land in the Parnell Avenue Corridor to over 1,200 acres.

Overall, nearly 760 acres of farmland have been protected in Kent County through the county's PDR program. In addition to the four farms in the corridor, two farms have been protected in Sparta Township and one farm in Lowell Township. The landowners provided large contributions to match federal grant funds in the case of the Sparta and Lowell Township farms.

Ingham County: Michigan's First Countywide PDR Program

The Southern Lower Peninsula, from the western Lake Michigan lakeshore east to Lake Huron, is home to a large percentage of the state's arable soil. Ingham County, home to the state's capitol city of Lansing, became the first Michigan county to pass a farmland preservation millage in August 2008. Countywide farmland protection proposals have been defeated in Washtenaw, Lapeer, Clare, Leelanau, and Barry Counties. Ingham County's grassroots efforts, largely fueled by a few key players, focused on repeatedly sharing information with County Commissioners, both at official meetings and in individual meetings. The support of several politically influential individuals was also important in helping to shape public thought around the millage proposal and was critical to its passage.

The Ingham County process was driven by local interest to protect farmland and open space. A desire on the part of Michigan State University (MSU) faculty to understand local willingness to pay for open space and the associated ecological services provided, as well as how messaging can drive individual voter action, were also drivers in the millage development process.

Millage proponents discussed the benefits of putting the millage on the ballot with commissioners. At the same time, survey questions were being developed, vetted with community members, MSU faculty, and conservation organizations through phone interviews. This was key in understanding how Ingham County residents were going to view the millage option and in driving their messaging/campaign strategy. The millage passed by 50.2% (137 votes) with 15.71% of registered voters voting. Ingham County's millage (0.14 mills) will generate over $1 million for farmland preservation per year for 10 years.

Take away messages from Ingham County:

- Communication: Because every township in Ingham County administers their own zoning, County Commissioners don't often have land use issues brought to the table the way Townships do. Explaining the value of farmland and open space preservation, in terms of economic and ecological value, to the County was an important step in the process (i.e., agriculture contribution to Ingham County agribusiness from gate to plate).
- Make the issue relevant to every voter: It was critical to show voters the value of agricultural preservation to urban residents. Voter turnout results showed that urban voters ultimately carried the passage of the millage.
- Gain political will: Voter lists targeted and directed extensive door-to-door canvassing.

Washtenaw County

Washtenaw County's farmland preservation success stemmed from the important, early role of donated conservation easements to land conservancies in Southeast Michigan (Legacy Land Conservancy, Southeast Michigan Land Conservancy, Raisin Valley Land Trust). This helped set the stage and spur development for PDR programs, as many landowners wishing to preserve their farmland are not in a position to outright donate easements. Conservancies also assisted landowners and communities in applying for state PDR funds and purchasing easements with FRPP grants. The first purchased agricultural easement by a land conservancy in Michigan was completed by Legacy Land Conservancy (then Potawatomi Land Trust) in 2001.

Development pressure and soaring farm acreage prices are drivers to farmland preservation in Washtenaw County. Due to increased development pressure in the late 1990's and early 2000's, many farmers felt donated easements were one of the only ways to keep their land in its present state. Many already held conservation-minded land management styles, and the economic incentives of removing development rights to avoid inheritance tax so that future generations could afford to continue farming the land (without having to sell a proportion of the land to pay the inheritance tax) was a desirable option. Many farmers with wetland and woodlots also chose to sell development rights to offset other income they may have been experiencing through, for example, increased crop revenues or ethanol investments.

The first countywide farmland protection proposal was placed on the ballot in 1998. It had four components: farmland, natural area, urban redevelopment, and assistance for township planners. This ballot initiative was strongly opposed by the Homebuilders Association and realtors and the measure lost 58%-42%.

Over the next six years, however, several townships began to introduce local millages and were successful. A County natural areas millage in 2000 passed with 64% approval. The City of Ann Arbor's Greenbelt Program (Open Space and Parkland Preservation Millage) passed in 2003 by 67% and involved multiple townships in Washtenaw County (all of Ann Arbor Township and portions of Lodi, Scio, Webster, Northfield, Salem, Superior, and Pittsfield Townships). The City of Ann Arbor Greenbelt Program millage passed because Ann Arbor city residents voted to tax themselves one-half mill (30-year millage) to protect working farmland and rural areas outside the city. This is another example of an urban population carrying a millage with farmland protection interests. Ann Arbor Township also passed a farmland preservation millage (77% approval) in 2003. Scio Township passed a farmland and open space millage (77% approval) in 2004 and Webster Township passed a farmland and open space millage (over 70% approval) in 2005.

The Washtenaw County PDR Program is a cooperative effort between Washtenaw county and participating Townships in the county (Bridgewater, Freedom, Lima, Lodi, Manchester, Northfield, Superior, and York Townships). The County PDR program has successfully completed one easement using state PDR funds. Over 5,500 acres of agricultural land has been protected in Washtenaw County to date, including those lands protected by land conservancies. Millages have been an important source of local funding for farmland protection in addition to the State's PDR program and the federal FRPP.

In Summary

In summary, the Michigan Fruit Belt and much of the southern Lower Peninsula make up a diverse and agriculturally bountiful part of the state. Methods for protecting agriculture vary across the state. Influential partners, circumstances under which PDR ordinances were passed, drivers for land protection, and the type of farmland most critical to protect vary from region to region across the state. However, **successful agriculture preservation efforts have several things in common across the state:**

- **Clear communication with landowners and voters and understanding their needs,**
- **Communications with other local farmland and open space protection efforts,**
- **Adaptation to local need and circumstances, and**
- **Inclusion of land conservancies in farmland protection efforts.**

The Role of Land Conservancies in Agricultural Land Conservation

Land conservancies (also known as land trusts) are non-government, non-profit entities. They offer a land protection option to private landowners through donation or purchase of conservation easements.

A conservation easement is a voluntary legal agreement between a landowner and a land conservancy that permanently limits development of the property in order to protect the conservation values of the land. It's important to note that conservation easements and agricultural PDR programs essentially result in the same kind of protection; they both remove the development rights from the property. "Conservation easement" is often a term used when talking about preserving "natural land" through easement *donation* and PDR is usually the term used when talking about protecting farmland and open space through *purchase*. In both cases, the land remains in private ownership and can continue to be used by the landowner. Michigan landowners who donate or sell conservation easements may receive property, income, or estate tax benefits because the overall property value may be reduced due to the development limitations.

Land conservancies are uniquely positioned to act swiftly and professionally to help individual landowners protect valuable land on which the agricultural industry is based, and thus ensure sustainable agriculture production in the future. The expertise of land conservancies has been greatly beneficial to local units of government as they establish and implement PDR programs. However there are varying levels of involvement and capacity among Michigan conservancies in farmland preservation. Conservancies in the northwest Lower Peninsula (Grand Traverse Regional Land Conservancy, Leelanau Conservancy, and Little Traverse Conservancy) and southeast Michigan (Legacy Land Conservancy) have focused most heavily on farmland preservation easements to date.

Heart of the Lakes surveyed 17 member land conservancies to better assess conservancy capacity and opportunities for increased conservancy engagement in farmland preservation. These 17 conservancies operate within an "L"-shaped region of prime agricultural areas in the southern Lower Peninsula, where the majority of arable land exists, and along the Lake Michigan coast

extending from the northwest Lower Peninsula south to the Indiana boarder in a region commonly known as the Fruit Belt. The survey revealed that conservancies were separated into three categories, each with particular needs but having some overlap.

1. **Conservancies with substantial experience, interest and or dedicated staff** . (4 conservancies)
   - The primary need for these more advanced conservancies is funding for additional staff and for purchasing agricultural conservation easements.
   - All have completed farmland protection projects through conservation easement donations, easement purchases, fee acquisitions (donation or purchase) involving farmland and assisting other agencies or organizations.
   - All have included farmland protection in their strategic plans, identified priority areas and have staff partially or wholly dedicated to farmland projects.
   - The challenge for these groups is to build on their notable successes with more landowner outreach, partnership development and understanding of agriculture's role and value in the community.
   - Some staff skill development for agricultural easements was also cited.

2. **Conservancies with some experience, defined interest, and/or limited staff**. (4 conservancies)
   - Needs are exactly those of the first group with two exceptions: Staffing needs are for new personnel rather than additional, and identification of priority areas needs to be conducted.
   - These conservancies are doing or considering farmland projects, but lack the focus of those in the first group on farmland. For example, two cited a change in organizational focus or mission currently in process.

3. **Conservancies with little or no experience, some or no interest and/or limited or no staff**. (9 conservancies)
   - Many conservancies in this group cited a need to shift or expand priorities to include farmland as a focus.
   - Factors that would help their boards of trustees expand missions to farmland preservation include:
     - obtaining an indication that conservation easements are of interest in the farm community,
     - identifying potential partnerships,
     - understanding agriculture's role and value in the community,
     - opportunities for staff development or outsourcing needed skills and drawing links to other organizational priorities (natural areas, water quality).
   - Funds to hire staff or consultants to purchase conservation easements would also be of great benefit.
   - Like both other groups, these conservancies often cited a need for more landowner outreach and identification of priority areas. Many are ready and willing to take on farmland projects if resources to support them are available.

Call to Action

Findings Summary

Now is the time to protect farmland in Michigan. **Agriculture is a $73 billion industry, likely to soon surpass the declining auto industry and be the leading revenue source for the state**. Michigan can't afford to not invest in and bolster this valuable, land-based industry. Some argue that because development rates have slowed in a lean economy, development threat has lessened. Counter to that argument is that *now* is the time to plan, needed policy change, and to take action to preserve Michigan's farmland and the jobs that depend on it.

Increasing food safety and water quality issues are prime reasons to shorten supply chains so that we know where our food is coming from, so costs are reduced due to lessened transportation time, and so Michigan farmers are supported and Michigan investments are kept within the state.

Michigan's farmland not only employs over 1 million residents, it is also valuable ecologically. Agricultural land filters rain and snow, allowing groundwater recharge over large, pervious surfaces. It provides food, shelter and breeding habitat for many wildlife species. Agricultural lands should be seen and valued as an opportunity for carbon offsets, a land base for alternative energy production, and a vital piece of Michigan's cultural heritage.

Current state, federal and local funding tools for farmland preservation exist, but are not robust enough to protect the volume of demand for valuable land that faces eminent threat of development and fragmentation. A novel tool like Leelanau Conservancy's "FarmAbility" land preservation option for farmers is one creative way to protect land until better, permanent options become feasible.

Land conservancies are uniquely positioned to act swiftly and professionally to help individual landowners protect valuable land on which the agricultural industry is based. However, conservancies and local governments must determine where the most threatened prime and unique soils exist and what other metrics to consider when assessing where future farmland protection should occur (e.g., proximity to needed farm services and business infrastructure, to other farmland, to water). Beyond that, conservancies require additional capacity to expand their scope of work to farmland preservation. Those that are working on farmland preservation require capacity support to do more.

Relationships between state, federal, and nonprofit entities aligned in thought and vision will allow movement on farmland protection efforts. **Growing partnerships between groups such as Heart of the Lakes Center for Land Conservation Policy, Michigan Farm Bureau, American Farmland Trust, and state and federal agencies represent a unique opportunity to advance strategic and public policy efforts for farmland preservation now and into the future**.

Policy Recommendations

Changes in public policy can create new opportunities for preserving Michigan's agricultural land base. While there are local, state, and federal mechanisms for funding farmland preservation, available matching funds are not meeting the demand for farmland protection. The farmland protection tools, while successful in several parts of the state, aren't working on a statewide level. Heart of the Lakes offers the following policy recommendations for consideration:

Route NRCS FRPP dollars through Michigan's Farmland Protection Program

Heart of the Lakes suggests that rules NRCS develops enable, though do not require, large grants to state agencies with established farmland protection programs that meet the eligibility criteria. State agencies (e.g., Michigan Department of Agriculture) could then re-distribute funds to local units of government, conservancies and other eligible entities. This could allow for a more streamlined process with common easement language statewide, leveraging of public/private partnerships to better facilitate meeting unique statewide priorities such as Great Lakes restoration, and removal of much of the administrative burden from NRCS, while still providing the federal contingent right of enforcement on lands affected by the program, the burden for all parties concerned, and streamline efficiencies.

A proposed process for routing FRPP funds through the state is as follows:

1. The state would issue an offer to act as a third party participant to entities that could qualify for FRPP funds.
2. In exchange for being a third party participant (co-signer on the easement) the state would do the following:
   a. Submit a group application to NRCS for FRPP funds.
   b. Hold the cooperative agreement with NRCS for the funds.
   c. Work with the qualifying entities to complete the acquisition of conservation easements on applicant parcels that were selected by NRCS out of the application cycle using their scoring system.
   d. Work with NRCS to perfect boilerplate conservation easement language that can be used throughout the state and is acceptable to NRCS.
   e. Assist the entities in completing the acquisition process by helping with appraisal questions, closing questions, title questions, baseline report questions and the like.
   f. Act as point of contact with NRCS.
   g. Provide to the entity the state dollars that would represent the FRPP portion of the purchase price, later to be reimbursed to the State from NRCS.

In short, the state would provide notice to potential eligible entities that they would be willing to act as the applicant with the NRCS for FRPP funds. A deadline for an application submittal would be established based on NRCS deadlines. The state would assist those wishing to apply through them with their applications to meet NRCS requirements. A group of applications would be submitted to NRCS. Those selected by NRCS via their scoring system would be notified. The state would sign a Cooperative Agreement with NRCS and begin the process of completing the acquisitions within the 18-month time period. The state would assist entities where appropriate with details to get to a closing. Prior to the closing the state would issue a check to the local entity representing the FRPP share of the purchase. Once the purchase is

closed, as cooperative agreement holder, the state would request reimbursement from FRPP for the funds. The state would provide direction to local entities regarding annual monitoring of easements and would assist where necessary. The state would enforce the provisions of the conservation easement in the event that the local entity does not.

Local PDR programs and organizations would still have the option to apply for FRPP funds through the state to NRCS. The following are seen as potential benefits to this flexibility:

1. If the local unit of government applies through the state, the state would be a co-holder of the conservation easement and would therefore have an interest. The state would perfect language for a conservation easement that would meet the requirements of NRCS and would act as a boilerplate for all conservation easements running through the state.
2. Since the local program would be applying through the state the endowment fund requirement would be met by the state participation in the process.
3. The state would assist the local units of government in perfecting the conservation easements, baseline reports, closings and monitoring functions.
4. For those choosing to apply through the state, NRCS would be dealing with a single point of contact, the State of Michigan.
5. Since the state would be a co-signer on the conservation easement, the state would provide the FRPP portion of the funds for the closing that would later be reimbursed by USDA/NRCS to the state.
6. This same process could be used when state funds become available for matching FRPP and local dollars.
7. The cooperative agreement would be held between the State and NRCS with the local program being a sub-grantee.

Introduce P.A. 116 Lien Recapture Legislation

There are currently $12.8 million in outstanding P.A. 116 liens on properties. This money originates from an accumulation of property owners not renewing their P.A. 116 agreements and failing to pay back an amount equivalent to the credits claimed during the last seven years as required by law. The tax credit is equivalent to that amount of the property tax that exceeds 3.5% of the adjusted household income.

This payback of credit is the basis for in the state's permanent farmland protection program, the Agricultural Preservation Fund. (There has been no interest applied to the monies owed to the state, as current law does not provide that penalty). Further, there is currently no incentive in place for farmers to pay these liens back unless they sell the property and need to clear the title. In some cases, even when land has been sold and land use changed from farming to another use, the state has not been made aware and lien repayment has not occurred.

Legislation as been introduced to provide a discount for lien repayments during a limited timeframe and to instill interest penalties for unpaid liens (Rep. Mayes, HB 4158). This would provide an incentive to farmers to pay back liens owed to the state and would secure State Agriculture Preservation Program (PDR) dollars. While a discount for lien repayments will certainly not trigger all landowners to pay back their liens, it may encourage some to do so thus enabling the state to offer a round of PDR funding. Heart of the Lakes Center for Land

Conservation Policy is collaborating with Michigan Farm Bureau and Michigan Department of Agriculture staff to offer recommendations for minor modifications to the currently introduced legislation.

Introduce Enabling Legislation for Local Real Estate Transfer Tax

Millages, it is seen by some, are the way to raise local funds. Others feel that farmers shouldn't have to tax themselves to save their land. The public needs a vehicle to raise funds beyond millages. It is felt by some that local government should drive the process and be responsible for saving their local farmland. However, they need a mechanism to raise funds. Creating and passing enabling legislation for local governments to opt to voluntarily dedicate a local real estate transfer tax to farmland preservation may be one method to use local dollars for local land protection. Creating enabling statute to allow a local unit of government to raise local funds would allow them, during times of development and growth, to have another funding option beyond a tax millage.

Adopt a Land Use-Based Tax Structure

Millages have only been successful in areas where there is a mix of urban and rural land use. Historically in Michigan, farmers have not passed millages, urban populations have. Currently, farmers already pay a disproportionate amount for public services (e.g., police, ambulance, school) based on owned acreage. While many states have a use-based tax structure, that allow farming to be more viable for farmers, Michigan taxes farmland at its developable value. This leaves farmers unwilling, and often unable, to support additional taxes on their land. If Michigan were able to couple PDR with use-based taxation and potentially other tools, farming would be a more viable option for financially-stressed landowners, thus encouraging the preservation of farmland.

Phase II Proposed: Statewide Farmland Protection Strategy

The **first phase** of Heart of the Lakes' Farmland Preservation Initiative, results of which are provided in preceding pages, had objectives focused around researching the state of farmland preservation in Michigan. **The ultimate goal of Phase I was to lead to a Phase II effort focused on taking action.**

Phase I objectives:

1. Make the case for the value of farmland preservation to impact policy, preserve ecological function on the landscape, and enhance practitioners' on-the-ground efforts.

2. Map the areas in Michigan that have prime or unique agricultural soils that are threatened with conversion to non-agricultural uses, as well as those farmlands already protected with conservation easements and/or enrolled in P.A. 116.

3. Identify and evaluate publicly- and privately-funded farmland preservation efforts, their status, capacity, and successes as well as opportunities for partnerships with other farming advocates.

4. Conduct case studies on farmland preservation programs in Peninsula Township, Washtenaw County, and other areas to inform future farmland preservation programs.

5. Determine whether there are prime soils not serviced by an existing conservancy. Ascertain conservancy interest in farmland preservation, staffing needs, and other capacity issues or information gaps through interviews with staff and board members.

6. Determine a plan of action to implement a focused and coordinated statewide farmland protection strategy including land conservancy involvement.

Phase II of Heart of the Lakes Center for Land Conservation Policy's Farmland Protection Initiative will focus on building off the strong foundation that Michigan land conservancies and their partnerships have built. It will focus on increasing planning, training, and conservancy capacity to expand farmland preservation efforts. In addition, Phase II should focus on strengthening the case for farmland preservation and **driving policy change**.

Heart of the Lakes submits the following as a "first draft" outline of items that could be included in a Phase II proposal:

I. Determine Michigan's agricultural land preservation goal: improve data collection, management and mapping efforts

a. Model and target the most important land to protect. Although some local or regional conservation and government entities may have already targeted prime agricultural land to protect, a statewide effort has not been undertaken. Additional variables to consider when assessing where future farmland protection should occur could include:
   i. Soils and other ecological/geological parameters
   ii. Regional growth priorities
   iii. Local conservation priority target areas (local conservancy, DNR, other)
   iv. Conserved lands: permanent (conservation easement)
   v. Conserved lands: temporary (e.g., CREP, PA116)
   vi. Available water supply (e.g., for irrigation, livestock)
   vii. Proximity to farm services infrastructure (processors, implement dealers, export venues, banks and accountants that deal with farm issues, Farm Bureau office, MSU Extension office)
   viii. Proximity of transportation routes to farm service providers
   ix. Economic viability (economic cluster analysis)
   x. Social will (i.e., family ties to farming industry; protect land where people are likely to and have a means to continue farming)

b. Conservancy training for strategic conservation planning: Strategic conservation planning should consider overall landscape patterns and processes and aim to secure large, contiguous areas of agriculture, protected forests, wetlands, and natural areas to maintain wildlife corridors, wildlife habitat, ample area for viable ecosystem processes, and open space for people to enjoy. The questions "What is

the minimum acreage needed to preserve ecological integrity and maintain viable farming" or "What are the highest priorities to protect" can attempt to be answered by assessing areas of spatial overlap for a variety of scenarios in which different land cover variables, or metrics, chosen.

i. Distribute GIS tool showing all map layers and how the geographic "overlap" of these priority farmland indicator variables suggest the most important areas in which to prioritize farmland protection efforts. Post map PDF on HOTL website.
ii. Develop a statewide vision for farmland preservation based on knowledge of the best places to protect agriculture in the state
iii. Coordinate with Conservation And Recreational Land (CARL) database managers, administered by The Nature Conservancy and Ducks Unlimited, to keep statewide conservancy data (protected properties) updated annually.

c. Update the 2020-2040 land transformation model to include current economic and development trends.
    i. Goal: Determine effects of different land conservation scenarios under different development, economic, and ecological change scenarios
    ii. Tie in relationship between land development potential and projected effects of climate change

d. Develop a 20-year and 40-year projection map of what Michigan looks like if we're successful at farmland protection goals. This map would be artistic, rather than academic, to show results of objectives a. and b. (e.g., show fruit belt, represent diversity of crops with images, show transportation routes, show industry infrastructure)
    i. Make the case to funders, policymakers, stakeholders

II. Tie agricultural land preservation goal to a broader vision for strategic land conservation in Michigan

a. What do we want Michigan to look like in 20, 50, 100 years?
b. Strengthen partnerships with other organizations and agencies
c. Convene a statewide council of other organizations to develop a vision for Michigan

III. Strengthen the Case for Michigan Farmland Preservation

a. Development and dissemination of communications pieces explaining the economic, social and ecological benefits of agricultural land to Michigan and it's citizens
    i. Creation of maps for distribution to stakeholders
b. Share information on agricultural preservation with new groups (e.g. economic developers, planners) as well as policymakers, community leaders and other stakeholders.
c. Research and disseminate traditional and non-traditional financing mechanisms that could benefit new and/or young farmers

d. Research and disseminate traditional and nontraditional financing mechanisms that could benefit Michigan's aging farmers who may be "land rich and cash poor"; make retirement possible without necessitating sale of land to developers for high cash payoff.

IV. Advance Public Policies

a. Recommend a Conservation Caucus of legislators to present ideas to and get feedback on new ideas for land use legislation
b. Route NRCS FRPP dollars through the State of Michigan's Farmland Protection Program
c. Advance and support P.A. 116 Lien Recapture Legislation
d. Advance and support Enabling Legislation for Local Real Estate Transfer Tax
e. Adopt a Land Use-Based Tax Structure
f. Other policy issues to explore:
    i. Research the value of investing in public transit initiatives throughout Michigan (e.g. transit tax for local funding for bus, rail and other alternatives?). Examine ways in which transportation infrastructure affects farming viability.
        1. Urban transit encourages development and jobs in the urban core, thereby alleviating development pressure on nearby farmlands
        2. Statewide transportation infrastructure (highway, rail) is necessary for farmers to deliver products to processors and transporters, and to access other service infrastructure (e.g. implement dealers, supply stores). Explore creation of incentives for the retention, expansion, and recruitment of food processing facilities.
    ii. Examine proposed planning and zoning measures that would positively affect farmland preservation and strategic conservation planning initiatives along with urban economic growth.
    iii. Explore how transfer of development rights agreements could be utilized to encourage urban growth and farmland preservation.
    iv. Explore ties with Farm-To-School Programs and other efforts. (Farm-to-Schools legislation signed by Governor in December 2008. Makes it easier for schools to purchase food from local farmers. Directs Michigan Departments of Agriculture and Education to connect with Michigan farms.)

V. Increase capacity of local land conservancies

a. Peer-to-peer training
    i. "Floating" land protection specialist to train on agricultural easement preparation, state and federal funds acquisition, working with other agricultural interest groups.
b. Provide seed money for conservancies to hire staff, undertake planning and mapping efforts to better engage in farmland preservation efforts.

Figures

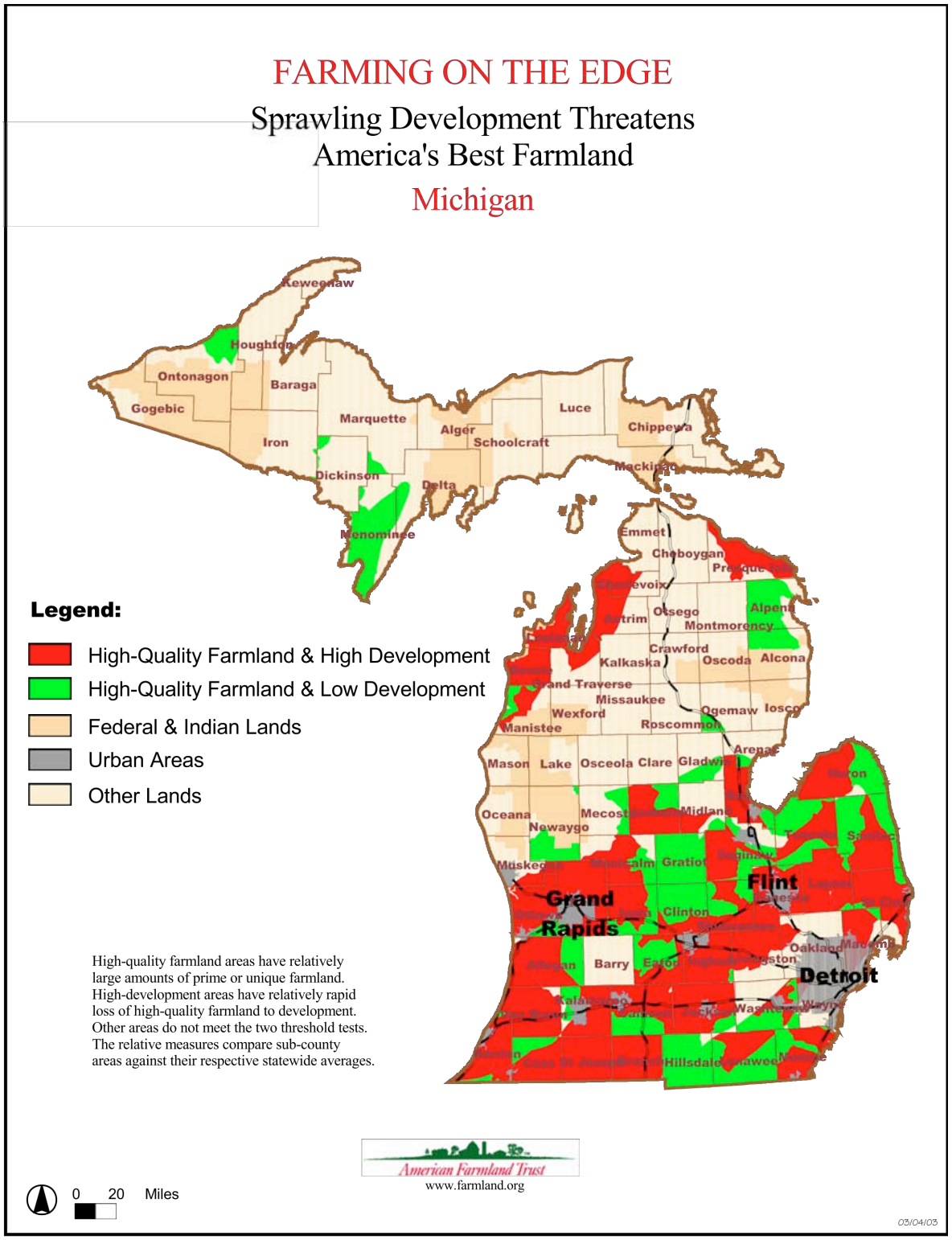

Fig. 1. American Farmland Trust's 2002 "Farming on the Edge" report named the west Michigan fruit belt as one of the top-10 most unique and most threatened agricultural regions in the United States.

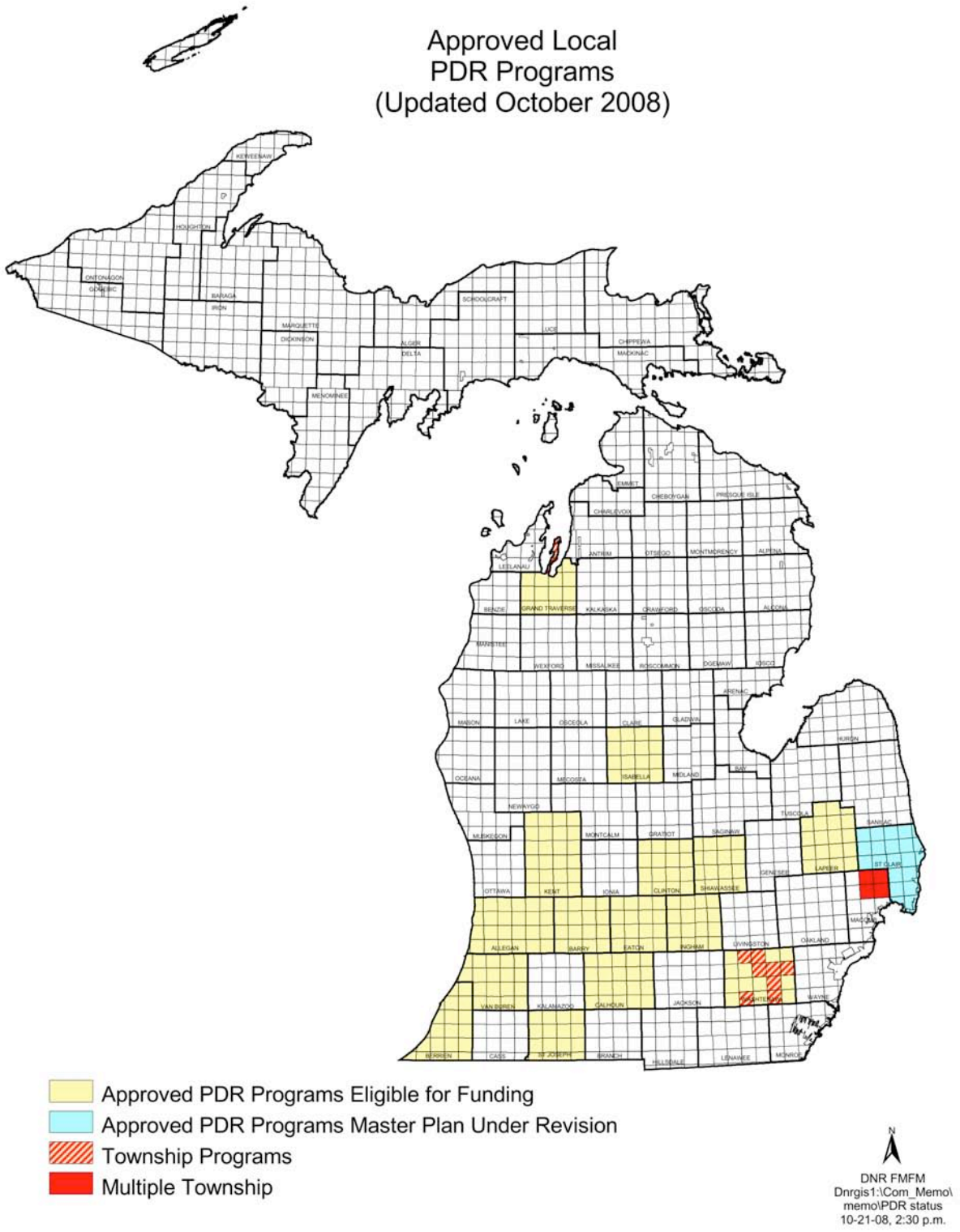

Fig. 2. Approved local purchase of development rights programs in Michigan.

Tables

Table 1. Heart of the Lakes Center for Land Conservation Policy 2009 Protected Michigan Conservancy Lands by Member. Acreages area reported through December 31, 2008.

Heart of the Lakes Member Conservancy	Acres in Preserve (Owned)	Acres under Easement	Transfers and / or Assists	Acres Under Management Agreement	TOTAL
Cadillac Area Land Conservancy	14	1,200	0	0	1,214
Chikaming Open Lands	161	409	263	0	833
Chippewa Watershed Conservancy	289	2,868	0	0	3,157
Grand Traverse Regional Land Conservancy	6,195	14,827	9,952	3,300	34,274
Grass River Natural Area	0	0	1,325	0	1,325
Great Lakes Bioregional Land Conservancy	105	80	0	0	185
Grosse Ile Nature and Land Conservancy	137	16	0	0	153
Headwaters Land Conservancy	48	7,414	0	0	7,462
Keweenaw Land Trust	542	2,636	240	0	3,418
Land Conservancy of West Michigan	509	3,186	1,338	0	5,033
Legacy Land Conservancy	188	2,118	1,450	0	3,756
Leelanau Conservancy	1,705	4,698	876	0	7,279
Little Traverse Conservancy	11,475	18,548	5,885	0	35,908
Little Forks Conservancy	503	2,068	0	0	2,571
Livingston Land Conservancy	150	376	850	0	2,327
Michigan Karst Conservancy	589	0	0	0	589
Michigan Nature Association	8,939	164	0	0	9,103
Mid-Michigan Land Conservancy	0	1,411	0	0	1,411
North Oakland Headwaters Land Conservancy	349	725	0	0	1,074
Raisin Valley Land Trust	0	530	0	0	530
Saginaw Basin Land Conservancy	304	4,250	0	0	4,554
Six Rivers Land Conservancy	161	714	80	229	1,184
Southeast Michigan Land Conservancy	955	506	1,011	0	2,472
Southwest Michigan Land Conservancy	1,869	5,679	128	0	7,676
The Conservation Fund	0	0	26,361	0	26,361
The Dahlem Conservancy	0	0	0	0	0
The Nature Conservancy in Michigan	44,512	193,559	65,655	23,041	326,767
TOTAL:	79,684	266,783	116,837	26,570	**490,617**

Table 2. Changes in Land Use, by Land Cover Type as shown by the Land Transformation Model (Exhibit 6 from Public Sector Consultants 2001).

Changes in Land Use, by Land Cover Type

Class	1980	2040	Change	Percentage
Agriculture	11	9.1	-1.9	-17
Built	2.3	6.4	+4.1	+178
Forest	18.2	16.9	-1.3	-8
Other Vegetation	2.9	2.2	-0.7	-24
Wetland	1.8	1.7	-0.2	-10

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Appendices

Appendix A.

Graceland Fruit, Inc. (Benzie County/Gilmore Township) Graceland Fruit, Inc. is a fruit manufacturer that processes and freezes fresh and infused fruit and dries various forms of fruits and vegetables. It is anticipated that the company will invest $15 million and create 45 new jobs over the life of the zone.

Peterson Farms (Oceana County) Processes apples, tart cherries, peaches, asparagus, black sweet cherries and blueberries. It is anticipated that Peterson Farms will invest $15 million and create 225 full-time equivalent jobs over the life of the zone.

Gray & Company (Oceana County) Packages chocolate cordial cherries and maraschino cherries. They are the eighth largest boxed chocolate manufacturer in the United States. It is anticipated that Gray & Company will invest $8.3 million and create 150 jobs over the life of the zone.

New Era Canning (Oceana County) Processes canned green beans, wax beans, pumpkin, asparagus, applesauce, sliced apples, carrots, and many types of dry beans. It is anticipated that New Era Canning will invest $5 million and create 40 jobs over the life of the zone.

Chase Farms (Oceana County) Processes frozen fruit and vegetables. It is anticipated that Chase Farms will invest $21 million and create 55 new jobs over the life of the zone. This 10-year zone was designated September 30, 2005 and will begin January 1, 2006.

Subterra, LLC (Ontonagon County/White Pine) Subterra, LLC provides the biopharmaceutical industry with contract growing services for high-value, genetically modified crops, along with bioprocessing and protein extraction services. They currently service biopharmaceutical companies during the pre-clinical/clinical trial state of production. It is anticipated the company will invest $22 million and create 125 new jobs over the life of the zone.

Zeeland Farm Services, LLC (Ottawa County/Zeeland Township) Zeeland Farm Services, LLC processes soybean meal for animal feed and soybean oil for cooking and products. It is anticipated that the company will invest $4 million and create 30 new jobs over the life of the zone.

Kellogg Company (Kent County/City of Grand Rapids) Kellogg Company processes and produces toaster pastries and cookies. It is anticipated that the company will invest $35 million in equipment, retain 390 jobs and create 43 new jobs over the life of the zone.

Kellogg Company (Calhoun County/City of Battle Creek) This new Agricultural Processing Renaissance Zone was designated in July 2004 by the State Administrative Board and became effective in 2005 for a duration of five years. The anchor company in this zone is Kellogg Company. The zone was created as part of the overall incentive package offered to the company

to move the Kellogg Snacks Division (formerly Keebler) from Elmhurst, Illinois to Battle Creek, Michigan. One of Kellogg's existing manufacturing operations was placed within the Agricultural Processing Renaissance Zone in exchange for the company to relocate. The relocated Snacks Division will move into current Kellogg facilities in Battle Creek that are not in the zone. As a result of the relocation, however, Kellogg will invest $3.2 million in building renovation and improvements and create 200 jobs in Battle Creek.

Heartland Ingredients, LLC (Montmorency County/Hillman) This Agricultural Processing Renaissance Zone became effective in 2003. The anchor company was originally Sunrise Aquaculture, LLC, which planned to invest $8 million and create 30 new jobs. This did not occur. Instead, a company named Heartland Ingredients, LLC, will build a 12,000- to 15,000-square-foot food processing facility in Hillman's Industrial Park. Heartland Ingredients is a contract manufacturer and producer of gluten-free and other allergenic-sensitive food products. Its product line is based on dry-bean derived flour (powder) that is processed to match the custom formulas and product needs of its target customers. The company plans to employ 15-20 people. The food processing facility will cost more that $500,000 to construct and equipment will cost $1.5 to $1.75 million.

Sunny Fresh (Ionia County/Odessa Township) This Agricultural Processing Renaissance Zone became effective in 2003. Sunny Fresh Foods will invest $9 million in new plant and equipment and create 25 to 30 jobs. NOTE: THIS SPECIFIC PROJECT HAS NOT OCCURRED. UPDATED INFORMATION FOLLOWS.

Sunny Fresh (Ionia County, Odessa Township) REVOCATION OF EXISTING APRZ *was a $9 million private investment and 30 new jobs.* Ionia County and Odessa Township requested revocation of existing Agricultural Processing Renaissance Zone. Construction did not begin due to boundaries needing to be changed for the facility expansion and the company waiting to secure a contract with McDonald's before moving forward with the facility expansion. MSF Board: October 20, 2005 – State Admin Board Revoked: November 2005

Sunny Fresh (Ionia County, Odessa Township) NEW APRZ. Ionia County and Odessa Township requested a new Agricultural Processing Renaissance Zone for Sunny Fresh with new boundaries. They have secured the contract with McDonald's and are ready to proceed with construction of a 78,000-square-foot building to process eggs. 7 year zone: Begins January 1, 2006 – December 31, 2012 21.03 acres, 30 new jobs, $22 million investment. MSF Board: October 20, 2005 – State Admin Board Designated: November 2005

Leprino Foods Company (Ottawa County, Allendale Township) 10 year zone: Begins January 1, 2006 – December 31, 2015 6.44 acres, 53 new jobs, $85 million investment 80,000-square-foot expansion to cheese production facility. Project will be conducted in phases. MSF Board: October 20, 2005 – State Admin Board Designated: November 2005

ETHANOL PROJECTS

Marysville Ethanol, LLC (St. Clair County, Marysville) 7 year zone: Begins January 1, 2006 - December 31, 2012 42 acres, 30 new jobs, $95 million investment 17M bushels, 50M gallons MSF Board: August 18, 2005 – State Admin Board Designated: September 20, 2005

Superior Corn Products, LLC (Barry County, Woodland Township) 15 year zone: Begins January 1, 2006 - December 31, 2020 47 acres, 33 new jobs, $55 million investment 15-16M bushels, 45M gallons MSF Board: August 18, 2005 – State Admin Board Designated: September 20, 2005

The Andersons Albion Ethanol, LLC (Calhoun County, Sheridan Township) 15 year zone: Begins January 1, 2006 - December 31, 2020 39 acres, 30 new jobs, $70 million investment 18M bushels, 55M gallons MSF Board: August 18, 2005 – State Admin Board Designated: September 20, 2005

Great Lakes Ethanol, LLC (Lenawee County, Riga Township) 15 year zone: Begins January 1, 2006 - December 31, 2020 102.53 acres, 62 new jobs, $90 million investment 17M bushels, 57M gallons MSF Board: September 15, 2005 – State Admin Board Designated: September 30, 2005

Updated October 24, 2005

Appendix B.

An Evaluation of the Peninsula Township Farmland Preservation Program

(Executive Summary)

By

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Table of Contents

Acknowledgments

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Gordon Hayward, Town Planner, Peninsula Township

Rob Manigold, Town Supervisor and farmer, Peninsula Township

Josh Wunsch, farmer and Vice-President, Michigan Farm Bureau, Peninsula Township

Steve Nichols, Appraiser, Traverse City

Dean Velliquette, farmer and fruit processor Acme Township

Nels Velliquette, farmer and fruit processor Acme Township

Glen Chown, Executive Director, Grand Traverse Regional Land Conservancy,

Xiomara Cordoba-Lepczyk, Director of Land Protection, Grand Traverse Regional Land Conservancy

Brian Bourdages, Land Preservation Specialist, Grand Traverse Regional Land Conservancy

I would also like to thank my student, Beth Houser, for her background paper on Peninsula Township in my ENVS 645 course at the University of Pennsylvania.

Executive Summary

Peninsula Township is a very special place. Its combination of scenic beauty along the east and west arms of Grand Traverse Bay and the excellent conditions for fruit production make it attractive for year-round residents, farmers, part-time residents, and visitors alike. Yet, the desirability of the land both for housing and for agricultural uses has resulted in a competition over the land base.

Successes of the Peninsula Township PDR Program

Peninsula Township has forged the oldest and the leading local farmland preservation program in Michigan, and one of the most successful township-level land preservation programs in the United States. As of December 2007, 5,311 of the Township's 17,755 acres were now protected by perpetual conservation easements or in government ownership. Of the preserved lands, a total of 4,323 acres were inside the Township's 9,860-acre agricultural preservation zone. Township taxpayers have shown their support for land preservation by approving two millage increases in the property tax. The first vote in 1994 created the Township's Purchase of Development Rights (PDR) program aimed at preserving farmland in the Township's Agricultural Preservation Area. The second vote in 2002 provided additional funding for the PDR program. Also, the Town Board approved a bond issue to help fund the PDR program.

Outside funding has been very important to the success of Peninsula Township's land preservation efforts. Funding has come from the State of Michigan, American Farmland Trust, the Grand Traverse Regional Land Conservancy, and the federal Farm and Ranch Land Protection program.

The situation in Peninsula Township has changed considerably since 1994. Many landowners have voluntarily preserved their land through the sale of development rights to the Township or the Grand Traverse Regional Land Conservancy. Land preservation has helped to stabilize the market for farmland; since 1994, only one farm has been fully developed for non-farm uses and several landowners have made large investments in Red Tart Cherry orchards, grapes and wineries, and Honey Crisp apple orchards.

These investments are fully evident as one travels through the Township, and bode well for the future of the agricultural industry in the Township.

* * *

As it attempts to build on these successes, Peninsula Township will need to address a number of challenges and turn them into opportunities to enhance the farmland preservation program.

Challenge #1: Celebrating the success of the land preservation effort in Peninsula Township. Peninsula Township has created the most successful farmland preservation program in Michigan and one of the most successful among local governments in the United States. The measures of success are many: a) Nearly one-third of the Township's 17,755 acres have been placed under permanent conservation easements; b) The preserved farms are often adjacent to each other; c) Landowners continue to apply to sell their development rights; d) The Township has identified a 9,200-acre Agricultural Preservation Zone in its Master Plan where agriculture is the preferred use and 80% of the preserved land is located within the APZ; e) Township taxpayers have approved two millage increases to fund the land preservation effort, and the Town Board has authorized $10 million in bonds; f) The Township has partnered with a number of other organizations over the years, including the Grand Traverse Regional Land Conservancy, the State of Michigan, American Farmland Trust, and the Federal Farm and Ranchland Protection Program.

The Township and its partners should publicize these achievements—through websites, newsletters, and brochures, and at public meetings as part of keeping Township residents informed, for landowner and land preservation information programs, and possibly for attracting additional outside funding.

Challenge #2: Cost of the future land preservation. Despite the achievements in land preservation, challenges remain. First, about 5,000 acres out of the 9,500 acres in the Agricultural Preservation Zone are not preserved, and could support a significant amount of residential development at the base zoning density of one house per five acres. The Township goal is to preserve the remaining 5,000 acres. Second, land prices have more than doubled since 1994, pushing up the cost of purchasing development rights. For instance, the Township was able to make offers to purchase development rights

on all applicants' farm properties in the first three funding rounds. Currently, in round 4, the Township has only enough money to make offers to four out of 17 applicants. In addition, the more land that is preserved on the peninsula, the more expensive it becomes to preserve the remaining land because of the increased competition for land that is not yet preserved.

Prices for development rights are running at $10,000 an acre and above, depending on property location and size. Thus, to preserve all of the remaining 5,000 acres would cost more than $50 million as of 2008. Yet, the Town Board should be aware that some landowners may still not wish to participate in the voluntary PDR program, even at very high PDR prices.

It is probably more important for the Township to continue to be strategic in its land preservation rather than fix on a specific acreage goal. While preserving as much of the remaining 5,000 unpreserved acres may be worthy, the preservation of large blocks of active farmland should have a higher priority. Moreover, given the high cost of preserving farmland, the Township will be hard-pressed to raise enough money to preserve all of the remaining 5,000 unpreserved acres. Also, partners are more likely to work with the Township if the Township is trying to be strategic in its preservation, such as preserving parcels of 50 or more acres that are adjacent to already preserved farms, rather than simply attempting meet a certain preserved acreage goal.

Challenge # 3: Farmland preservation strategy. The strategy of the Township PDR program has featured the preservation of farmland with scenic views of Grand Traverse Bay. This strategy has attempted to accomplish two goals at the same time: 1) preserve the scenic views which both the Township residents and tourists enjoy; and 2) preserve agricultural land in order to keep the fruit industry alive and thriving on the peninsula. The Township has done a good job of minimizing development along Michigan Route 37, and the views are often spectacular.

But moving forward, the Township will need to focus more on preserving parcels of productive farmland of 50 or more acres that can help to create large contiguous blocks of preserved farmland. Although scenic views continue to be important, they are secondary to maintaining the agricultural

industry in the Township. The Township's PDR application ranking system should be adjusted to reflect this revised strategy.

The bottom line is that the fruit industry is regional and profitability depends in large part on the volume of fruit produced in order to keep processors in operation.

Challenge #4: Funding the PDR program. Efforts to preserve land in Peninsula Township are best seen as a public-private partnership. In order to preserve up to 5,000 acres of the remaining unpreserved land in the Agricultural Preservation Zone, funding will need to come from a combination of: a) another millage increase; b) the federal Farm and Ranch Lands Protection Program; c) Grand Traverse Regional Land Conservancy; and d) possibly the State of Michigan.

Because of the need to stretch its funding, the Township should explore imposing a $10,000 per acre cap for PDR purchases. PDR caps in general are common among major PDR programs in other parts of the U.S. Grand Traverse Regional Land Conservancy funds or FRPP funds could be used to supplement Township funds on a case-by-case basis. Also, a landowner can use the difference between the appraised development rights value and the price paid as an income tax deduction.

Challenge #5: Administration of the Township PDR program. The administration of the Township PDR program has been split among the Township PDR Selection Committee, the Grand Traverse Regional Land Conservancy on a contractual basis, an outside monitoring person also on a contractual basis, and the Town Board. Administration of the PDR program needs to be as transparent and objective as possible to maintain public and landowner support. The Township should consider hiring a full-time PDR staff person to serve as staff to the PDR Selection Committee, conduct monitoring of preserved properties, and manage the PDR program on a day-to-day basis. A member of the Town Board should be appointed to the PDR Selection Committee to strengthen communications between the Selection Committee and the Town Board. The Town Board should retain the role of negotiating with landowners over the purchase of development rights.

Alternatively, Peninsula Township could contract with the Grand Traverse Regional Land Conservancy to manage the PDR program, work with the PDR Selection Committee, jointly hold conservation easements, and monitor properties on which the Township holds conservation easements.

The purpose of these recommendations is to help the Township PDR program to adjust to new circumstances. The Township program is mature and has a clear record of success. But some of the strategy and administration should change from the 1994 approach in order to proceed strategically in preserving much of the remaining 5,000 acres in the Agricultural Preservation Zone.

Table 3. Summary of agricultural preservation methods available in Michigan.

Available Tools	Process	Challenge
County or Township Purchase of Development Rights (PDR) program	1. Local/regional unit of government must approve PDR program. 2. Local unit must have a comprehensive land use plan containing an agricultural preservation component with: b. Ag preservation zone indicated on a land use map c. Description of how and why the area was selected d. Goals for local farmland preservation e. Language indicating why farmland should be preserved f. Strategies intended to be used to preserve agricultural land g. Must be a monitoring and enforcement plan for agricultural conservation easements 3. Applicant lands prioritized and selected based on state Agricultural Preservation Fund scoring system. 4. State recommends to County/Township commissioners for approval to proceed with PDR.	Even though local PDR ordinance passes, board is established and ag preservation zone exists, there is often no local match to leverage Ag Preservation Board Fund or FRPP dollars.
Local Millage	Process varies based on location, political will, local buy in. Goal is to build local match revenue for PDR through local tax.	Local ballot initiative; "Short term" solution.
Michigan Farmland and Open Space Preservation	Consists of 3 methods for preserving farmland and open space: 1. Farmland Development Rights Agreements (PA 116) 2. Donated conservation easement 3. Agricultural Preservation Fund (minimum of $500,000 awarded annually to aide local PDR programs)	Demand is much greater than funds available
Federal Farm and Ranch Lands Protection (FRPP)	Administered through USDA NRCS; $2.2 million available for MI in 2009. Interim Rule in effect until final rules are published. Uncertainty as to whether approved FRPP agreements administered during the Interim rule period will be held to Interim or Final rule.	Administered through NRCS – may reduce workload and streamline projects if allocated through State (MDA)
Conservation Reserve Enhancement Program (CREP)	State-Federal partnership to address soil erosion, water quality and wildlife habitat. Landowner receives reimbursement for establishing approved conservation practices, incentive payments for sign-up, rental payments for length of contract. Payments based on soil rental rate in the farmer's area as determined by USDA's Farm Service Agency. Eligible lands include cropland planted with commodity crops for at least 4 out of 6 years (1996-2001).	Only available to Saginaw Bay, Lake Macatawa, and River Raisin watersheds.
Conservation Easement	Voluntary legal agreement between a landowner and a land conservancy that permanently limits development of the property in order to protect the conservation values of the land. Landowners who donate or sell conservation easements may receive a property tax reduction because the overall property value may be reduced due to the development limitations.	Landowner is not guaranteed financial benefit.