Michigan Agriculture:
How Farm Subsidies are Killing Growth
and the Environment

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With 2014’s Agricultural Act, otherwise known as the “Farm Bill” signed by President Obama at Michigan State University, there was a new doubling-down on federal subsidies as well as a new investment in young, beginner farmers. This is in response to a thirty-year trend within the United States Department of Agriculture’s (USDA) census data conveying the ever-increasing age of the average American farmer which is now almost 60 years of age as well as a 4.3 percent reduction in overall farmers. Michigan in particular has seen a 7 percent loss in number of farms as well as an overall 1 percent reduction in land used for farming. In this investment effort, the federal government will subsidize or fully grant education and training about farm management, improve access to a variety of crop insurances, as well as provides different loans and loan assistance. However, I argue that although these subsidies provide a foundation for beginner farmers, the current crop subsidies in place do not allow for sustaining this new growth. Additionally, both the subsidies and grants targeting new, young farmers as well as the crop subsidies benefiting larger agribusiness create harmful consequences for Michigan’s environmental quality.

I will argue these claims through three points. First, current federal subsidies overall hinder beginner farmers, preventing sustainability, by giving advantage to already large agribusiness through crop subsidies. Second, Michigan’s lax regulations on conditions of subsidizing agricultural practices – both on large and small farm operations – greatly threaten Michigan’s environmental quality. Third, the previous points showcase an unnecessary cost to tax payers that could otherwise be invested or spent to grow the economy elsewhere. Lastly, since the Farm Bill is up for renegotiation and possible renewal in the year 2018, I will recommend some policy changes to both the federal subsidies programs seen as well as Michigan’s own environmental regulations, so that these subsidies can be the most advantageous for all Michigan residents.
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Federal Farm Subsidies in the US & Michigan

Federal farm subsidies appear in many different forms. There is massive crop insurance, market-revenue assurances, loans, disaster payments, etc. As previously mentioned, there is a new investment in young, beginner farmers through the Beginning Farmer and Rancher Development Program. This program handles $18 million in educational farming grants alone and $100 million in assistance methods, $33 million in transition efforts to provide new farmers with land from retiring ones, and perhaps most importantly, this program gives preference to US
veterans and “socially disadvantaged” farmers. The overall goal of these initiatives is to incentivize young Americans to join the agricultural industry in hopes to decrease the average age of farmers making for a more sustainable agricultural industry. However, the massive subsidies perpetuated by the 2014 Farm Bill does not allow for fair advantage to these young farms and farmers.

Agribusinesses in America are disproportionately benefiting from these subsidies over smaller farms. This happens for two reasons: they grow the correct cash crop and they already function on a large-scale operation. The crop subsidies in place by the federal Farm Bill provide over one-hundred crop-specific insurance policies, however it seems to specially target only the major cash crops of the agricultural industry such as corn, cotton, wheat, and soybeans. The USDA’s Risk Management Agency (RMA) oversees the insurance eligibility of the crops and acreage, yet even though it retains over one-hundred crop policies, more than two-thirds of acres insured were of corn, cotton, wheat, and soybeans. Michigan produces 300 different agricultural commodities across 10 million acres of farmland. Corn, cotton, wheat, and soybeans only makeup 4.6 million acres within Michigan. Why do cash crops that only makeup less than half of Michigan’s total farmland receiving over two-thirds of all federal subsidies? Exports.

The Michigan Department of Agriculture and Rural Development (MDARD) administers the International Marketing Program in Michigan designed to assist agribusiness in effectively exporting commodities. Services provided by this program include online export

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directory, export assistance and participation in trade shows, as well as funding for marketing reimbursement. In 2012, around 80 percent of Michigan soybeans were exported out of the country with a market value of just under $1 billion; in 2013, between Michigan’s wheat, soy, and corn, the market value and approximate overall worth was $2.7 billion; in 2014, Michigan’s agricultural exports reached a total of $3.18 billion with top export markets being Canada, Japan, Mexico, China, and South Korea.

These cash crops are consistently valuable in the international marketplace, so why are American taxpayers subsidizing crops that are not only the highest revenue earners among cash crops, but also the large majority of which are exported overseas? According to USDA, 59 percent of Michigan farms did not collect any federal subsidy. This trend is not unique to Michigan. Nationally, these three crops, in addition to cotton, received 90 percent of all crop insurance payouts in 2012. As a U.S. News & World Report article states, “the largest 15 percent of farm operations and the richest farmers and landowners, with incomes and wealth that are many times the national average, receive over 85 percent of all farm subsidies.”

Subsidies and the Michigan’s Environment

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Unfortunately, there is an area of agriculture in which both agribusiness and small farms are provided equal opportunity and that is environmental damage. Since the agricultural market primarily favors corn and soybean, the farming methods used to yield the most profitable crops—which also hold the largest acreage of cropland—of the is an important practice. Corn and soybean are grown in similar climatological and soil conditions, but corn especially contributes to the phosphorus and nitrates in the air and water. Legislation such as Michigan’s “Right to Farm” pose difficult obstacles regarding environmental regulation in agriculture.

The USDA only grants subsidies on the stipulation of agreed conservation of wetlands and highly erodible lands. There are no overarching federal limitations on agricultural practices such as fertilizer and runoff containment nor phosphorus regulations for air quality. Besides this stipulation, the USDA has Environmental Quality Incentive Programs (EQIPs) that are entirely voluntarily. In Michigan, less than 3,000 farms opted into these EQIPs in the past two decades; as of 2014, Michigan has approximately 52,000 farms.12

The Michigan Department of Agriculture and Rural Development has its own regulatory system for Michigan, Generally Accepted Agricultural and Management Practices (GAAMPS). Brad Deacon, senior official at MDARD, explained the Right to Farm bill is not purposed with regulating individual farms, so if no conflict within the community arises, there is no immediate concern with Right to Farm.13 If farmers comply with GAAMP (Generally Accepted Agricultural and Management Practices) standards, MDARD does not concern themselves with communal concerns. According to the Michigan Public Policy Survey (MPPS) – a survey conducted by the University of Michigan of all elected officials in the state – MDARD has

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12 “Michigan Farm Subsidy Information,” Environmental Watch Group.
favorable reviews or none at all. Regarding MDARD’s overall job performance in Spring 2014, from the surveyed public officials, an average of 22 percent “don’t know” and an average of 33 percent or respondents evaluate the performance as “good.”

Michigan has experienced first-hand a need for more regulatory reform regarding environmental policy, especially within the agricultural industry. It was only last month that Michigan Department of Environmental Quality (MDEQ) declared the western basin of Lake Erie an impaired body of water. This declaration follows the biggest algal bloom in the lake’s recorded history in 2015 and a contamination so prevalent it left more than 400,000 people in surrounding areas unable to drink tap water for days in 2014. It has been demonstrated that unregulated livestock fertilizer, manure, and its field runoff are, at least partially, to blame for the contamination of a lot of Michigan’s rivers and streams.

The use of cow manure to fertilize fields is common among farmers because not only is it cheaper than most commercial fertilizer, but benefits other livestock farmers that need land on which to spread their own surplus of manure. Runoff occurs whenever fertilizer is not absorbed into the farmland or the soil no longer has the capacity to absorb the surplus of fertilizer being spread. For example, when manure is spread onto already-frozen ground in the fall season or when spread onto ice or snow in late winter or early spring – a prominent time of the year farmer’s use to prep the cropland nutrients. When the ice and snow melt, or any rain occurs, the excess nutrients left on the topsoil get flooded into the closest stream, river, water table, etc. In Lake Erie’s case, Business Insider reports roughly 63 percent of Lake Erie’s watershed is used

for agriculture, a main source of phosphorus-heavy runoffs resulting from farm fertilizers and manures.\textsuperscript{16} A prime example is the Maumee River Watershed in northwestern Ohio which has 6,600-square-miles contributing to Lake Erie – 75 percent of that area is agricultural fields of corn, soybeans, and winter wheat.\textsuperscript{17}

For these bodies of water to be overloaded with nutrients causes algae-blooms, hundreds of thousands of dead aquatic life, and hyper-nitrated drinking wells – all of which render the water undrinkable and environmentally hazardous. A more concerning consequence is the algae-bloom that does appear to have any color, but is more subtle and unnoticeable. Resulted toxins from an algae-bloom have caused vomiting, hives, abdominal pain, pneumonia, and in some cases, liver damage.\textsuperscript{18} However, in addition to the negative health effects both on humans and on freshwater ecosystems, the strain placed on the region’s tourism industry is an indirect result of these fertilizer run offs. An algal bloom within Lake Erie in 2011 caused an estimated 2.4 million dollar loss in Ohio’s recreational fishing industry alone and a $1.3 million dollar loss due to lack of visitors to an Ohio state park whose waters were entrenched with the bloom.\textsuperscript{19} These issues combined have generated both Michigan and Ohio state legislators to call for a federal response to this ongoing environmental issue. The few lawmakers believe new legal enforcement and oversight from the EPA would help fix this recurring problem that not only affects the health of constituents, but threatens the sustainability of the Great Lakes’ ecosystems and the many Midwest industries that depend on its clean waters.

\textsuperscript{17} Frost-Gorder, Pam. “Number of severe algal blooms in Lake Erie to double, forecast says.” Ohio State University, December 16, 2015. https://news.osu.edu/news/2015/12/16/eriecentury/
\textsuperscript{19} “Lake Erie Is Turning to Slime.” Business Insider.
Below is data from the Michigan Public Policy Survey from their Fall 2013 dataset where Michigan governmental officials responded whether they felt the Federal or State government had a responsibility to the Great Lakes. As you can see below, an overwhelming majority think both the state of Michigan and Federal government hold a “Great Deal” of responsibility to the Great Lakes.

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<tr>
<th>MI State Officials</th>
<th>Federal Responsibility</th>
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<td>1</td>
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Both the billions of dollars in agriculture subsidies themselves as well as continually maintaining and repairing Michigan’s damaged and contaminated bodies of water, Michigan taxpayers should be aware and concerned of the cost. A report done by a union of scientists illustrates three major consequential costs to taxpayers by federally subsidizing these crops. First, the crop insurance program is estimated to cost $22 billion in payouts from years 2016-2018 alone; second, $4.8 billion is estimated to be spent per year on water treatment plants removing nitrates and phosphorus from public drinking water; finally, the tourism industry has estimated losses of about $1 billion per year as a result of polluted waters and damaged or dead wildlife. The subsidies themselves that the federal government provides are still remain a prominent cost and are increasing. With the 2014 farm bill and all of its new programs in

addition to crop subsidy costs growing by 50 percent, it is estimated to cost billions more than in previous years.22

Policy Recommendations for Farm Bill 2018

Since this issue permeates through federal and state governments, a recommendation for each in their respective capacity is warranted. Farm subsidies exist on the federal level, however, I believe Michigan has much work to do regarding MDEQ and protecting its waters. In tackling the algae blooms of Lake Erie, Michigan legislature, along with Ohio and Ontario have agreed to cut the amount of phosphorus escaping into the Great Lake by 40 percent within the next ten years.23 Michigan, like Ohio, should implement more preventative measures, focusing on more incentivization of land conservation practices and policing environmentally-harmful agricultural practices. As previously mentioned, the federal government offers an incentive program for those wishing to practice land conservation and environmentally-friendly practices, however, the amount of farmers who participate is infinitesimal compared to Michigan’s agricultural industry at large.

The Michigan legislature need not increase the incentive already offered from the federal government, but through MDARD and MDEQ, needs an overhaul of safe and sustainable agricultural practices. Specifically, these policies will be mandates and will revamp the Generally Accepted Agriculture and Management Practices (GAAMP) to include mandated land

conservation practices of highly erodible lands such as instituting one’s own drainage system as
well as preventative measures to reduce runoff such as restricting the phosphorus levels and
amount of fertilizer that can be spread per acre, prohibiting spreading fertilizer in certain months
of the year, and building grass filter strips to further reduce runoff. Both MDARD and MDEQ
are necessary in this policy rollout because MDARD implements and mandates these practices
and MDEQ measures the positive net impact, or lack thereof, these new practices produce.

The Michigan state government, a very strong agricultural state and Right to Farm
advocate, will not take up legislation that impedes farmers’ autonomy and independence to farm
how they so choose. Since farmland is quite prominent throughout all counties in Michigan,
aside from possibly southeastern regions, farmers are a solid voting block and a noticeable
constituency. Regarding more stringent environmental policies, the Michigan legislature
introduced a bill last year that would prohibit any state regulation that is more strict than the
already existing federal regulation. Although this piece of legislation has yet to be acted on,
Michigan Republicans, controlling all branches of Michigan state government, could easily pass
this in the upcoming 2017 session. Since the federal EPA grants state governments autonomy
over agricultural practices, my policy recommendations seem to have an unlikely chance of
progressing through either of Michigan’s legislative chambers.

With President-elect Trump compiling his cabinet, a position on the federal farm
subsidies is a pivotal stance the upcoming agricultural department head, whoever it may be, must
act on. The 2014 farm bill is up for renegotiation and reauthorization in year 2018, so President-
elect Trump’s pick for agriculture department may be a pivotal one. Within the past week, it has

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been reported that first-term, Democratic Senator from North Dakota Heidi Heitkamp is on Trump’s shortlist for Agriculture Secretary.25 Although partied with the Democrats, in her first term, Heitkamp votes with Republicans in regards to agricultural practices and agribusiness – many of her supported legislation is also backed by large agriculture groups, but most notably she signed onto a bill calling for the EPA to revise and redefine its Clean Water Act.26

Although Heitkamp has not been officially selected nor accepted the position, in the 2016 election, Republicans retained control of the US House and Senate. I recommend that for the 2018 farm bill subsidies be removed for the following crops: corn, soybean, and wheat. Instead, a smaller subsidy for all other crops may be available for states to give on the restricted stipulation. This would allow for farming to still be subsidized, but it will now focus on the smaller, independent farmer growing average crops – not just the most marketable cash crop. This policy allows for state’s discretion when accepting the federal subsidy and is intended to be tailored state-to-state. For example, if MDARD evaluates a potential opportunity for growth among its 300 different agricultural commodities such as hay, the next year the state has the chance to subsidize that, further encouraging agricultural industry growth. Since the 2014 farm bill received overwhelming support from both sides of the aisle, this new policy recommendation will not be taken up by the US Congress. However, the 2018 farm bill still presents an opportunity to be subsidize more equitably among all farmers, regardless of what they grow, as well as innovative farm practices that may be environmentally compatible.

26 “Heitkamp tops Trump’s list for agriculture secretary.”