



Vision 2010



President Obama's Budget, Clean Energy & The Environment



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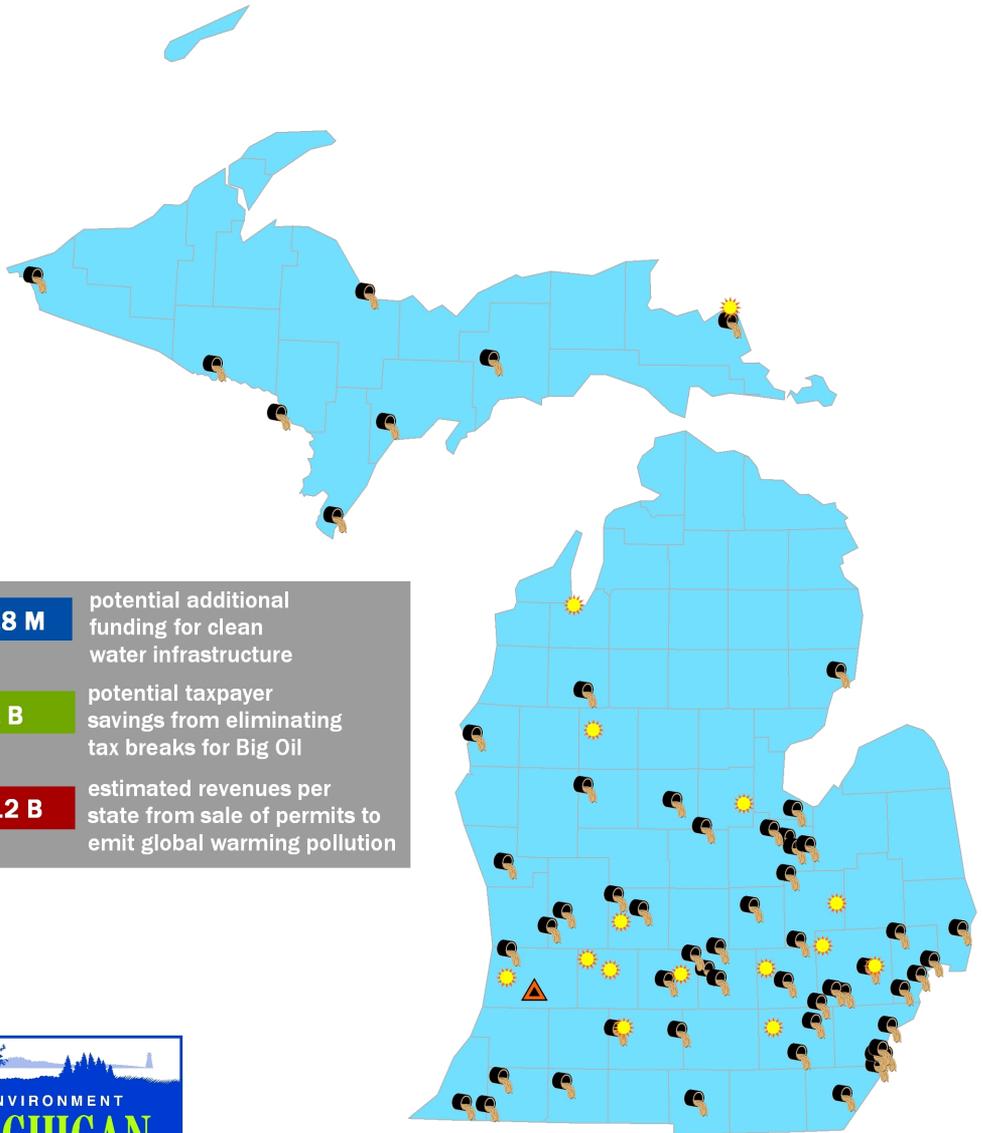
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Michigan



- \$85.8 M** potential additional funding for clean water infrastructure
- \$1 B** potential taxpayer savings from eliminating tax breaks for Big Oil
- \$21.2 B** estimated revenues per state from sale of permits to emit global warming pollution



-  clean energy businesses benefit from investment in renewable energy
-  "imminent hazard" Superfund sites more likely to be cleaned up with revitalization of Superfund
-  sewage treatment plants that exceeded their Clean Water Act permits in 2005 can be addressed with more clean water infrastructure funding for states

EXECUTIVE SUMMARY

President Obama has in two short months set the nation in a new direction when it comes to transitioning to a clean energy economy, stopping global warming and protecting the environment.

The president's proposed federal budget makes clean energy and environmental protection cornerstones of his Fiscal Year 2010 (FY2010) budget, by doing the following:

- Includes an estimated \$646 billion in revenues over 10 years from reducing global warming emissions and requiring polluters to pay for allowances to pollute;
- Invests \$150 billion from global warming revenues in clean energy industries such as wind, solar and geothermal power sources and supports efforts to increase energy efficiency. These renewable, home-grown energy sources can provide energy now and for generations to come and will create millions of green jobs;
- Includes \$17.2 billion in revenues from the polluter pays fee, which requires private industry to pay for the clean up of Superfund toxic waste sites;
- Invests \$3.9 billion to clean up America's lakes, rivers and other fresh water sources. \$2.4 billion of this is dedicated to the Clean Water State Revolving Fund – an Environmental Protection Agency program that disburses money to the states for repairs and improvements to sewage infrastructure; and
- Ends taxpayer subsidies to Big Oil, resulting in \$30 billion of benefits to taxpayers over 10 years.

This report details specific environmental and economic benefits from these proposals for Michigan, which if approved lay the groundwork for curbing global warming pollution and protecting the environment. This report visually displays examples of these benefits with a comprehensive state map.

Unfortunately, the proposed budget and subsequent policies to implement these proposals face major roadblocks from Big Oil and other special interests who are dedicated to defending the status quo. As this report shows, the environmental and economic benefits of this budget and the policies it assumes will benefit every state.

STOPPING GLOBAL WARMING

Fossil fuels – a threat to the environment and the economy

America's reliance on fossil fuels – coal, oil, and natural gas – is fueling global warming, polluting our environment, harming our health, stalling our economy, and threatening our security.

Coal-fired power plants, gas-guzzling cars, and other dirty energy from fossil fuels are responsible for more than 80 percent of total U.S. global warming emissions, which are already starting to raise temperatures, sea levels, and the frequency of dangerous storms.¹

Meanwhile, dirty energy sources are also polluting our air and water, leaving children and the elderly particularly at risk. Global price fluctuations in the price of fossil fuels, such as the gasoline price spike in 2008, leave our economy battered. And costly fuel imports entangle our national interests in unstable regions of the world.

Transitioning to a clean energy economy

In his first address to a joint Congress, President Obama said, “To truly transform our economy, protect our security, and save our planet from the ravages of climate change, we need to ultimately make clean, renewable energy.”²

To shift to a clean energy economy, our nation needs a comprehensive global warming policy that addresses the scope and urgency of the problem. We must reduce global warming pollution by 35 percent below 2005 levels by 2020, and at least 80 percent by 2050. Reducing global warming emissions to these levels is justified by the science and will protect our planet and help rebuild our economy with clean energy.

Since his election campaign, President Obama has called for auctioning 100 percent of global warming pollution permits and using the revenues raised to transition to a

¹ Over 80 percent of U.S. global warming pollution comes from fossil fuels: Environmental Protection Agency, *2009 Draft U.S. Greenhouse Gas Inventory Report*, February 2009.

Temperatures are rising in the United States: Emily Figdor, Environment America Research & Policy Center, *Feeling the Heat: Global Warming and Rising Temperatures in the United States*, October 2008

Sea levels are rising: Intergovernmental Panel on Climate Change, *Climate Change 2007: The Physical Science Basis, Summary for Policy Makers*, February 2007

The frequency of dangerous storms are increasing in the United States: Emily Figdor and Travis Madsen, Environment America Research & Policy Center, *When It Rains, It Pours: Global Warming and the Rising Frequency of Extreme Precipitation*, December 2007

² President Barack Obama, *Remarks of President Barack Obama – Address to Joint Session of Congress*, February 24, 2009

clean energy future and assist consumers.³ Any global warming policy should avoid loopholes such as “offsets” and other mechanisms that allow polluters to delay cutting pollution.

A comprehensive global warming policy should also require utilities to use at least 25 percent renewable energy by 2025 and reduce energy consumption by 15 percent by 2020. Finally, we can, and should cut energy use in new buildings in half by 2020 with a goal of zero energy used by 2030.

Because our current dependence on fossil fuels is causing such enormous environmental and economic problems, we must finally start the transition to a clean energy economy. As the President has said, “The time to take charge of our future is here.”

How the president’s budget helps

President Obama’s budget includes \$646 billion in revenues from auctioning global warming pollution allowances, and the actual amount of revenues generated in a 100 percent auction could be even greater. President Obama recognizes that polluters should pay for their emissions and that revenues generated from polluters should reduce the impact to consumers and speed the transition to a clean energy economy.

How Michigan would benefit

The budget paves the way for future global warming policy to cap emissions and auction off the permits. Revenues flowing to Michigan would approximate \$21.24 billion over 10 years if the revenues proposed in President Obama’s budget are apportioned on a per capita basis. Making sure that polluters pay for the cost of global warming pollution through an auction is fair, economically efficient and also generates significant revenues that can be used to create green jobs and speed the transition to a clean energy economy in every state.

³ Obama for America, *Barack Obama and Joe Biden: Promoting a Healthy Environment*, Fact Sheet, downloaded from www.barackobama.com, April 5, 2009

CLEAN ENERGY

Americans rely too much on dirty energy

Global warming threatens our way of life, and our economy is ailing; over-reliance on fossil fuels leaves us vulnerable to global price swings and polluted air and water. We must face these challenges and shift to a clean energy economy that reduces global warming emissions to levels justified by science to reverse global warming damage.

We must Repower America

The good news is that clean energy solutions to global warming will help recharge our economy and reduce our dependence on oil. Wind and solar power sources could replace dirty energy completely and provide clean, renewable energy for now and generations to come. Solar plants covering just nine percent of Nevada could power the entire country.⁴ Finally, investing in clean energy generates more jobs than dirty energy. Every dollar invested in making buildings more efficient creates seven times more jobs than investing the same amount in coal.⁵ Each dollar invested in wind energy creates 30 percent more jobs compared to the same investment in coal.⁶

How the president's budget helps

President Obama's proposed budget includes \$150 billion to invest in clean energy, funded by revenues from capping global warming pollution and auctioning the pollution allowances. If approved, this would speed the transition to a clean energy economy. Investing in these clean energy industries will put millions of Americans to work in new green jobs, and help rebuild our economy.

How Michigan would benefit

Green jobs from clean, renewable energy exist throughout the state. These businesses representing the engine of a clean energy economy are ready to shift up a gear with new jobs and investment. This map reflects current clean energy businesses, such as solar and wind power production, which could benefit from the proposed investment in clean energy. This data has been compiled by the Environmental Defense Fund and Environment America.⁷ While representative of

⁴ US Department of Energy, *Feasibility of 1,000 Megawatts of Solar Power in the Southwest by 2006*, Report to Congress, August 2002

⁵ Lester Brown, *Creating New Jobs, Cutting Carbon Emissions, and Reducing Oil Imports by Investing in Renewable Energy and Energy Efficiency*, Earth Policy Institute, December 2008

⁶ The Wind Coalition, *Why Wind?* April 2009 www.windcoalition.org/wind-energy/why-wind

⁷ Major renewable energy manufacturers and suppliers as identified by the Environmental Defense Fund, *Less Carbon, More Jobs*, April 2009 www.edf.org/page.cfm?tagID=33427; and by Environment America, April 2009 www.solarcompanies.com, www.windustry.org

Michigan's green economy, it does not include all businesses that may benefit from clean energy investment.

SUPERFUND

Cleanup at the nation's worst toxic waste sites has slowed

The nation's worst toxic waste sites, known as Superfund sites, contain hazardous chemicals that threaten public health and the environment. In numerous playgrounds, backyards, streets and drinking water sources surrounding Superfund sites, toxic chemicals such as Trichloroethylene (TCE), a known carcinogen shown to cause lasting damage to the nervous system, liver and lungs,⁸ and Polychlorinated Biphenyls (PCBs) which have been linked to lower birth weights and developmental impairment have been detected.⁹

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) enacted over 25 years ago is designed to provide funding for cleanup at Superfund sites. A central principle of this law is that polluting industries should pay for the cleanup of the toxic legacy they create. As a result, the "polluter pays" fee was put in place to collect money from the polluting industries. The fee provided the majority of the financial support for cleanup. However, it was allowed to expire in 1995, casting most of the financial burden of cleaning up these highly polluted sites onto the shoulders of the American taxpayer.

At its peak in 1997, the Superfund Trust Fund balance topped \$4.7 billion. By 2007, the fund was reduced to \$173 million – 3.9 percent of its former level. This insufficient funding has hindered cleanup progress and the identification of new sites, putting public health in jeopardy.

Protecting our future by cleaning up the past

The Superfund program has seen an almost 50 percent drop in cleanup rates since the expiration of the polluter pays fee. In order to ensure the health and welfare of our communities, we must restore the Superfund Trust Fund by reauthorizing the fee.

As President Obama has outlined, a new era of responsibility is critically important for the health of our communities and the strength of our nation. Nowhere is this more relevant than in dealing with the toxic legacy that tarnishes our country. According to

⁸ Centers for Disease Control, Agency for Toxic Substances and Disease Registry, *Completed Exposure Pathway List*, April 2009 www.atsdr.cdc.gov/cep.html

⁹ CDC *Completed Exposure Pathway List*

the U.S. Environmental Protection Agency (EPA) there are currently 1,258 Superfund sites. Reauthorizing the polluter pays fee will help rebuild the Superfund Trust Fund so money to clean up toxic waste sites can start flowing once again.

president's budget helps By including \$17.2 billion in revenues over ten years from the polluter pays fee, President Obama's budget takes the first step in placing the financial responsibility back where it belongs – with the polluter. Once the fee is reinstated, there will be more funding available to allocate for cleaning up the worst sites. Furthermore, once cleanup has started, it is much more likely to be carried all the way through to completion. The additional funding will help relieve the stop-and-start issues that have plagued the program in the past.

How Michigan would benefit

The fee will generate over one billion dollars annually during a proposed ten year period. The funds will help to ensure the cleanup of Superfund sites across the country. Exactly which sites will receive funding first will be determined once the fee is re-instated. However, currently there is one site here in Michigan – Rockwell International (identified in the accompanying map) where there is an elevated probability of human exposure or uncontrolled ground water contamination. Ideally, sites that pose an imminent threat will be at the top of the priority list.

CLEAN WATER

Sewage pollution a major threat to public health

Our environment and our economy depend on clean water. Yet our rivers, bays, lakes, and streams face numerous challenges – from pollution to excessive withdrawals. At least 850 billion gallons of raw sewage are dumped into U.S. waterways every year.¹⁰

Combined sewage overflows are a significant cause of beach closings, wildlife destruction, and human health problems.¹¹ Untreated sewage may contain disease-causing pathogens including *E. Coli*, Hepatitis A virus, and *Giardia*.¹² Anyone who comes into contact with water that is contaminated with sewage is putting their

¹⁰ U.S. EPA, *Report to Congress: Impacts and Controls of CSOs and SSOs*, EPA 833-R-04-001, August 2004
http://www.epa.gov/npdes/pubs/csosso_rtc_factsheet.pdf

¹¹ EPA Report: *Impacts and Control of CSOs and SSOs*

¹² U.S. EPA, *Mid-Atlantic Water Protection: Combined Sewer Overflows & Sanitary Sewer Overflows*. Last updated June 21, 2005 <http://www.epa.gov/reg3wapd/cso/EnvironmentalHealth.htm>

health at risk. This problem persists because U.S. sewer systems are often poorly maintained and/or poorly designed.

Infrastructure investments can reverse the damage

Without significant investment in wastewater treatment infrastructure, sewage pollution is expected to reach the highest levels in U.S. history by 2025.¹³ In particular, we need to begin investing in green infrastructure – projects that prevent sewage overflows by guiding stormwater back into natural systems, rain barrels, or rooftop gardens.

How the president's budget helps

The president's proposed budget for FY2010 addresses this problem by investing \$2.4 billion in the Clean Water State Revolving Fund (SRF) – a longstanding program through which the EPA disburses money to the states for repairs and improvements to sewage infrastructure.

Many of these facilities will be unable to begin curbing their pollution without the funds proposed in the president's 2010 budget. The just-enacted American Recovery and Reinvestment Act included \$4 billion for the Clean Water SRF. However, EPA has estimated a \$388 billion funding gap for wastewater treatment systems.¹⁴ Therefore, there is little doubt that the president's proposed \$2.4 billion in SRF spending is urgently needed to fix these systems, including their sewage overflows.

As the summer approaches, America should aspire to be a nation where our beaches are free from sewage pollution. By investing \$2.4 billion in the Clean Water SRF, the president's proposed budget takes us one crucial step toward realizing that goal.

How Michigan would benefit

The Clean Water SRF would provide funds to states for repairs and improvements to sewage infrastructure on a formula basis. Under this formula, Michigan could expect to receive \$85.8 million from the Clean Water SRF as proposed by President Obama's budget.

Because EPA does not approve state project lists until after the budget is approved by Congress, it is not possible to pinpoint exactly which sewage treatment facilities

¹³ U.S. EPA. *The Clean Water and Drinking Water Infrastructure Gap Analysis*. EPA- 816-R-02-020. September 2002

¹⁴ These EPA estimates are cited in House Appropriations Committee's January 15, 2009 "American Recovery and Reinvestment" proposal ("House Appropriations 1/15/09 proposal")

will receive funding from the Clean Water SRF next year. However, it is not difficult to identify sewage treatment plants that urgently need work to curb their pollution. Environment America's annual Troubled Waters report identifies 2,515 sewage treatment plants across the country that have a record of discharging more pollution into our rivers, lakes, streams, and bays than their permits allow. Here in Michigan, 59 facilities exceeded pollution limits in 2005.¹⁵ These facilities are marked on the state map in this report.

OIL SUBSIDIES

Reducing America's dependence on oil

America's addiction to oil causes a host of environmental problems – from oil spills to air pollution to global warming – while harming our economy and jeopardizing our national security. We must reduce our dependence on oil and protect our environment. Despite this commonly accepted goal, the federal government is actively subsidizing the big oil companies, even as they make billions of dollars in record-breaking profits year after year.

Eliminate billions in subsidies to Big Oil

Elimination of several subsidies and tax loopholes benefiting the oil and gas industries would generate funds that could help to encourage clean, renewable sources of energy.

How the president's budget helps

Fortunately, President Obama has charted a path forward to an economy based on clean energy, and away from dirty and dangerous dependence on oil. The proposed budget closes loopholes and eliminates unnecessary subsidies to the oil industry. These big oil giveaways from American taxpayers are worth \$30 billion over the next 10 years.¹⁶

¹⁵ Environment America, *Troubled Waters*, October 2007
<http://www.environmentamerica.org/home/reports/report-archives/our-rivers-lakes-and-streams/our-rivers-lakes-and-streams/troubled-waters-an-analysis-of-2005-clean-water-act-compliance>

¹⁶ Center For American Progress Action Fund, President Obama's Budget Eliminates Federal Giveaways to Big Oil and Gas, fact sheet, March 31, 2009

How Michigan would benefit

Continuing to allow tax breaks for Big Oil means that taxpayers from every state in the country must pay their fair share of taxes while a small number of wildly profitable companies do not. The report map shows these subsidies would cost \$1 billion to Michigan taxpayers over 10 years, as calculated by the Center for American Progress Action Fund.¹⁷

CONCLUSION

President Obama's proposed budget paves the way for America to transition to a clean energy economy, stop global warming and protect the environment. Making industries pay for allowances to pollute is a critical step toward reducing global warming pollution to levels needed to stop global warming. Revenues gained from such an action would, in addition to reducing costs to consumers, fund investments in renewable, home-grown energy sources that will make the country more energy secure now and in the future.

The proposed budget sets the stage to reinstate the polluter pays rule, which would ensure polluting industries pay for the toxic legacy they've created at Superfund sites throughout the nation. Funding the Clean Water SRF would enable states to make much-needed sewage repairs and upgrades, making our lakes, rivers and streams safer and cleaner. Ending subsidies to Big Oil would free billions of taxpayer dollars that could be more wisely invested rather than underwriting windfall profits for oil corporations.

The time for action on these issues is now. The president's proposed budget would bring significant environmental and economic benefits to communities in this state, and put America on a path to a cleaner, cooler, more energy secure future.

¹⁷ Ibid

Appendix:

Representative clean energy industry, priority Superfund, and sewage treatment locations in Michigan

Representative clean energy industries

Basic Solar & Renewables Co LLC	Hastings	MI
BTF Solar	Fennville	MI
Event Horizon Solar & Wind	Middleville	MI
Event Horizon Solar & Wind	Middleville	MI
Evergreen Solar	Midland	MI
Geo-Renew Systems	Holly	MI
Geothermal Systems of Lapeer LLC	Davison	MI
Michigan Windpower	Traverse City	MI
Power of the Sun	Sault Ste. Marie	MI
Renewable Energy Solutions	Chelsea	MI
Self Reliant Energy Company	Fowlerville	MI
Sun Energy	Saranac	MI
Sundu Solar LLC	Potterville	MI
United Solar Ovonic	Battle Creek	MI
United Solar Ovonic	Auburn Hills	MI
Wind Power Services LLC	Leroy	MI

Imminent hazard Superfund sites

ROCKWELL INTERNATIONAL CORP.	ALLEGAN	MI
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Sewage treatment facilities exceeding pollution permits - 2005

GOGEBIC-IRON WW AUTHORITY WWTP	IRONWOOD	MI
CADILLAC WWTP	CADILLAC	MI
SOUTH LYON WWTP	SOUTH LYON	MI
MASON WWTP	MASON	MI
ST CLAIR WWTP	ST CLAIR	MI
CHARLOTTE WWTP	CHARLOTTE	MI
BELDING WWTP	BELDING	MI
THREE RIVERS WWTP	THREE RIVERS	MI
IONIA WWTP	IONIA	MI

TAWAS UTILITY AUTHORITY WWTP	EAST TAWAS	MI
HOWELL WWTP	HOWELL	MI
WAYNE CO-DOWNRIVER WWTP	WYANDOTTE	MI
TRENTON WWTP	TRENTON	MI
LUDINGTON WWTP	LUDINGTON	MI
ST LOUIS WWTP	ST LOUIS	MI
ROMEO WWTP	ROMEO	MI
HILLSDALE WWTP	HILLSDALE	MI
ALBION WWTP	ALBION	MI
ANN ARBOR WWTP	ANN ARBOR	MI
BATTLE CREEK WWTP	BATTLE CREEK	MI
BAY CITY WWTP	BAY CITY	MI
BIG RAPIDS WWTP	BIG RAPIDS	MI
BRIDGEPORT TWP WWTP	BRIDGEPORT	MI
BUCHANAN WWTP	BUCHANAN	MI
BUENA VISTA TWP WWTP	SAGINAW	MI
DELHI TWP WWTP	HOLT	MI
DETROIT WWTP	DETROIT	MI
DOWAGIAC WWTP	DOWAGIAC	MI
EAST LANSING WWTP	EAST LANSING	MI
FRANKENMUTH WWTP	FRANKENMUTH	MI
GENESEE CO-RAGNONE WWTP	MONTROSE	MI
GENESEE COUNTY #3 WWTP	LINDEN	MI
HOLLAND WWTP	HOLLAND	MI
IRON MOUNTAIN-KINGSFORD WWTP	KINGSFORD	MI
LANSING WWTP	LANSING	MI
MANISTIQUE WWTP	MANISTIQUE	MI
MARQUETTE WWTP	MARQUETTE	MI
MT CLEMENS WWTP	MOUNT CLEMENS	MI
MT PLEASANT WWTP	MT PLEASANT	MI
NEW BALTIMORE WWTP	NEW BALTIMORE	MI
NILES WWTP	NILES	MI
OWOSSO/MID SHIAWASSEE CO WWTP	OWOSSO	MI
PONTIAC WWTP	PONTIAC	MI
SAGINAW TWP WWTP	SAGINAW	MI
SALINE WWTP	SALINE	MI
SAULT STE MARIE WWTP	SAULT STE MARIE	MI

OAKLAND CO WALLED LK/NOVI WWTP	NOVI	MI
WARREN WWTP	WARREN	MI
WIXOM WWTP	WIXOM	MI
WYOMING WWTP	WYOMING	MI
ESCANABA WWTP	ESCANABA	MI
SAGINAW WWTP	SAGINAW	MI
MENOMINEE WWTP	MENOMINEE	MI
GRAND RAPIDS WWTP	GRAND RAPIDS	MI
GROSSE ILE TWP WWTP	GROSSE ILE	MI
MUSKEGON CO WWMS METRO WWTP	MUSKEGON	MI
MONROE METRO WWTP	MONROE	MI
WEST IRON CO SA WWTP	CASPIAN	MI
S HURON VALLEY UA WWTP	ROCKWOOD	MI