

**From:** [Willi Water](#)  
**To:** [mi-waterstrategy](#)  
**Subject:** \*\*\*\_\_ Clinton River - Red Run \_\_\*\*\*  
**Date:** Wednesday, August 26, 2015 3:26:48 PM

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Hello,

LBrooksPatterson and OaklandCounty need to clean up their act. Combined Sewer Overflow discharges into Warren Michigan via the open channel Red Run cause huge issues of health, flooding, and ugliness.

Red Run flows into Clinton River and on to Lake St Clair, creating a Delta of sediment deposition by Harley Ensign Marina

Need more info :  
Check out the Red Run blog

People who think the Clinton River is clean, swim in it, etc do not truly know what happens via underground Stormwater contamination and Sewage overflow

Willi G. Gutmann

The Saginaw Chippewa Indian Tribe of Michigan is providing the following comments and explanation of potential collaborations through the implementation of the Office of Great Lakes, Water Strategy.

The following table is amended from 2015 Office of the Great Lakes Draft Water Strategy Table 2. Water Strategy Implementation Plan. The Saginaw Chippewa Indian Tribe of Michigan has added the column providing information on the potential involvement of SCITM in the implementation of the Strategy.

<b>Goal 1: Michigan’s aquatic ecosystems are healthy and functional.</b>				
<b>Outcome: Aquatic ecosystems are resilient and diverse.</b>				
<b>#</b>	<b>Recommendation</b>	<b>Implementation Metric</b>	<b>Lead Actor</b>	<b>Potential Involvement SCITM</b>
1	Prevent the introduction of new aquatic invasive species and control existing populations of aquatic invasive species in accordance with the Michigan Aquatic Invasive Species Management Plan.	By 2020, the ecological separation of the Great Lakes basin and the Mississippi River basin, especially in the Chicago Area Waterways system has been initiated.	State and federal agencies, nongovernmental organizations (NGOs), local units of governments, individuals.	<ul style="list-style-type: none"> <li>• Planning, design, and implementation of a boat wash at Eagle Bay Marina.</li> <li>• Add green infrastructure language to construction RFP language as a mandatory consideration in all planning and designs.</li> </ul>
2	Work with other Great Lakes states and provinces to harmonize aquatic invasive species prevention, early detection processes and response actions across the Great Lakes region.	By 2016, implement a pilot project with Ontario and interested states to evaluate and pursue areas of harmonization.	State agencies	
3	Accelerate research and solutions to identify mechanisms of food web disruption and changes of nutrient flows in the Great Lakes with a focus on the effects of invasive species.	By 2017, a minimum of three new research projects will be established for the purposes of evaluating nutrient shifts in Great Lakes food webs to help focus appropriate management, social, and economic responses.	Universities	Continue and promote research partnerships with the Universities in the Saginaw Bay to identify and resolve issues.

4	Develop a comprehensive strategy to prevent nuisance and harmful algal blooms.	By 2017, develop a strategy to prevent harmful algal blooms and HABs based on desired outcomes.	MDEQ, local public health departments	<ul style="list-style-type: none"> <li>Reduce nutrient application to Tribal Properties.</li> <li>Develop program to reduce failing septic systems.</li> </ul>
5	Achieve a 40% phosphorus reduction in western Lake Erie basin.	Pending finalization and/or agreement with Annex 4 Water Quality Workgroup.	MDEQ, MDARD	
6	Develop harmful algal toxin water quality criteria and implement a real-time monitoring strategy for Michigan's Great Lakes drinking water intakes and public recreation locations threatened by harmful algae.	<p>By 2020, increase by 20% the number of people served by drinking water suppliers using surface water sources with real-time monitoring equipment installed to provide early warning of potential public health threats.</p> <p>By 2020, develop harmful algal toxin assessment criteria.</p> <p>By 2020, implement a real-time monitoring strategy for Michigan's Great Lakes drinking water intakes and public recreation locations threatened by HABs.</p>	MDEQ	Develop Tribal Monitoring Strategy to include harmful algal toxin water quality criteria for implementation for Tribal source and surface water.
7	Support the development of a national drinking water advisory or action level target for harmful algal toxins.	Work with federal agencies to develop a national advisory target.	MDEQ	
8	Incorporate planning for wet weather extremes and increased variability into state, regional, and community planning.	Best management practices are reviewed every five years and updated (if necessary) to reflect climatic changes such as changes in rainfall frequency, duration or intensity.	State, regional governmental entities, communities	<ul style="list-style-type: none"> <li>Collaborate with County Drain Commissioners to manage wet weather events within Tribal Boundary and on Tribal Property.</li> <li>Work with landowners impacting Tribal Waters to develop a strategy to reduce flooding and high flow.</li> </ul>

9	Provide technical assistance and develop technical tools and training programs for communities, local officials and water stakeholders to inform and improve their water literacy and help them integrate water impacts into local land-use planning and decisions.	By 2020, develop a public official water literacy measurement. By 2020, develop a training module for local elected officials and decision-makers on the connection between land-use planning and zoning and the siting and approval of new projects. By 2020, develop a training module for local elected officials and decision-makers on the merits and benefits of asset management planning.	Universities, regional government and planning organizations, MDEQ	<ul style="list-style-type: none"> <li>• Continue annual presentation updating Tribal Council on Water Quality issues being identified and addressed.</li> <li>• Continue outreach efforts to local municipalities regarding water quality program.</li> <li>• Develop training for local decision makers such as Drain Commissioners and other water quantity managers impacting Tribal surface water.</li> </ul>
10	Develop tools and guidance related to shoreline and riparian ecology and management and provide necessary technical support and training to municipalities, watershed-based organizations and landowners to achieve full benefits of riparian areas.	By 2020, develop a baseline for the current research and educational capacities. <ul style="list-style-type: none"> <li>• Coordinate to pinpoint areas of capacity expansion.</li> <li>• Develop tools, guidance and training on best practices.</li> <li>• Determine need to update guidance and training materials.</li> </ul>	MDNR, MDEQ	Continue working with collaborating agencies, organizations, and community members to provide updated information on implementing best management practices within Tribal watersheds.
11	Remove or improve dams that are no longer safe or ecologically, economically, or socially viable to protect public safety and create healthy, connected aquatic systems.	By 2020, address all dams most at risk of failure.	MDEQ, MDNR	
12	Focus river and stream restoration efforts on addressing small hydrological impediments like culverts to create connectivity and restore stream stability.	By 2020, increase the number of small hydrologic impediments that are restored over a baseline established in 2015.	NGOs and local units of governments	Establish updated design criteria on all new structures that may impede or reduce natural flow, fish and wildlife accessibility, etc. impacting Tribal Water Resources.

13	Refine and improve the water withdrawal assessment process to ensure sustainable use of water resources and that high priority is given to incorporating existing and new data and models to better represent local and regional water resources and surface water / groundwater interactions.	By 2016, develop a list of priority Water Use Advisory Council recommendations and an implementation plan.	MDEQ, MDNR, MDARD	
14	Provide technical and financial support to communities to plan and implement green infrastructure techniques and low-impact development while preserving natural spaces in the design of new developments, redevelopments and road projects to ensure storm water management and improve hydrology.	By 2020, increase the number of attendees to green infrastructure conferences, applications for projects, amount of grant dollars awarded to projects incorporating green infrastructure or low-impact development, and number of programs incentivizing green infrastructure projects and the number of Michigan communities that are recognized for green infrastructure projects and strategies over a baseline established in 2015.	MDEQ, MDOT, MDNR, Michigan State Housing Development Authority, MEDC	<ul style="list-style-type: none"> <li>• Update Tribal Codes to include green infrastructure practices.</li> <li>• Work with local agencies to establish low-impact development and green infrastructure incentivizing programs through to secure sustainable stormwater management practices.</li> </ul>
15	Modernize road and highway planning and infrastructure to effectively accommodate storm water runoff and infiltration needs, thereby reducing the costs and impacts of flooding.	By 2020, increase the number of Michigan's new road and highway projects designed to better accommodate storm water runoff and infiltration needs over a baseline established in 2015.	MDOT, local road and highway commissions	
16	Enhance financial and technical support of local stakeholder efforts to develop and implement watershed management plans to restore impaired waters, protect high quality waters, and develop and utilize local water resource assets.	By 2018, increase the number of grants, training and educational opportunities on the development and implementation of watershed management plans over a baseline established in 2015.	MDEQ	Work with collaborating agencies to develop watershed management plans on impaired Tribal waters.

17	Use existing authority to work with local units of government with storm water discharge or storm water-related hydrologic impairments in their waterways to establish Phase II storm water plans for impaired water bodies.	By 2020, increase the number of water bodies with storm water plans in place to address designated use impairments caused by storm water discharges and hydrologic impairments over a baseline established in 2015.	MDEQ, MDNR	
18	Eliminate impairments in priority watersheds that have degraded water quality and/or aquatic ecosystems due to nutrient runoff and soil erosion. Engage landowners through a collaborative and adaptive community-based natural resource management process to identify local actions to change behaviors and solution to achieve those outcomes. Failure to achieve demonstrable outcomes within established timeframes could trigger additional measures.	Agricultural land-use will directly follow MAEAP guidelines and participation criteria to remain consistent with the state's recent efforts. Concurrently develop the escalated "additional actions" triggered once a watershed has been determined to be impaired. By 2018, develop regional action teams with protocols for working with landowners. Educate collaborative teams on existing regulations and enforcement mechanisms allowed in their regions. By 2020, collaborative processes are in place with plans to achieve water quality outcomes in priority watersheds.	MDEQ, MDARD	<ul style="list-style-type: none"> <li>• Continue efforts with local agricultural community to reduce farming impacts to water quality on impaired waters.</li> <li>• Continue efforts with collaborating agencies to reduce impact of failing and antiquated septic systems on impaired waters.</li> </ul>

**Goal 2: Michigan's water resources are clean and safe.**

**Outcome: Surface and groundwater are managed to support sustainable human uses and ecological function.**

#	Recommendation	Implementation Metric	Lead Actor	Potential Involvement SCITM
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1	<p>Protect drinking and source water areas by:</p> <ul style="list-style-type: none"> <li>Continuing to ensure remediation activities address the long-term impact on drinking water sources.</li> <li>Identifying and diligently protecting source water protection areas.</li> <li>Assisting well owners with identifying potential water well vulnerabilities.</li> <li>Focusing resources on contamination sources with the highest potential for causing contamination of drinking water supplies, including chemical storage facilities.</li> <li>Enhancing the drinking water geographic information system database and making information available across MDEQ programs and to local public health department environmental health personnel.</li> <li>Supporting mapping of local groundwater conditions in partnership with well contractors and others who collect groundwater information.</li> </ul>	<p>By 2020, address IT security issues, such as firewall and server capacity, to make information publically available.</p> <p>By 2020, develop educational materials to encourage residents with private drinking water wells to test new wells prior to use for nitrates and arsenic and to test wells prior to sale or transfer for bacteria, nitrates, and arsenic.</p> <p>By 2020, develop an interface to effectively and efficiently track and monitor for groundwater contamination, and implement data tracking.</p>	MDEQ, Local health departments.	<p><i>Continue to support the Abandoned Well Closure Program through the Isabella Conservation District to protect groundwater.</i></p>
2	<p>Develop a plan for aquifer protection that addresses geothermal construction and proper abandonment of wells.</p>	<p>By 2016, convene a stakeholder work group to develop draft legislation to regulate closed-loop geothermal construction.</p> <p>By 2020, develop educational materials for community land-use water systems and local health departments to increase plugging rates of abandoned wells when</p>	MDEQ	<p><i>Continue to support efforts of Isabella Conservation District through the Abandoned Well Closure Program.</i></p>

		municipal water mains are extended.		
3	Establish inspection requirements for residential wells, including testing wells for nitrates, bacteria, and arsenic.	By 2020, implement a statewide requirement for periodic inspections of drinking water quality.	Legislature	Work with local agencies to develop programs for point of sale inspections and evaluation.
4	Develop a spill and communication strategy and organize an incident command approach to prevent, prepare for and respond to environmental disasters and chemical releases.	By 2016, implement the pipeline strategy currently being developed under the leadership of MDEQ and the Attorney General.	MDEQ, MDNR, MDARD, Michigan State Police Department of Technology, Management and Budget	Continue collaborative efforts to develop environmental emergency response planning.
5	Develop and implement a uniform statewide sanitary code that is flexible and provides standards for site suitability based on risk. Establish a long-term, sustainable funding source to support onsite wastewater programs at the state and local levels and to assist financially distressed owners of private on-site wastewater systems with repair and replacement costs.	By 2020, every county health department has an inventory and assessment of private, single-family home water supplies and all septic systems. By 2020, secure a long-term funding source to complete the inventory and to assist distressed owners.	Legislature	<ul style="list-style-type: none"> <li>Continue educating partnering agencies and decision makers on the impacts of antiquated and lack of septic systems on Tribal Waters.</li> <li>Support efforts to develop point of sale inspection programs.</li> </ul>
6	Establish inspection requirements for residential on-site wastewater systems.	By 2020, implement a statewide requirement for periodic inspections of on-site septic system performance for properties with on-site wastewater systems.	Legislature	<ul style="list-style-type: none"> <li>Work with local agencies to develop criteria suggestions for elected officials interested in developing ordinances for programs such as point of sale inspections, septic failures, illicit discharge regulation, etc.</li> </ul>

7	Develop marketing and education campaigns and outreach tools directed at homeowners' on-site wastewater management and maintenance and funding opportunities to assist with repair and replacement.	By 2020, increase the number of entities implementing outreach campaigns directed at homeowners on septic management.	NGOs, local units of government	Continue efforts to educate the community on water quality issues, Tribal Programs, restoration efforts, homeowner responsibility, and cultural stewardship practices through outreach and education campaigns.
8	Secure a long-term funding source to accelerate the cleanup of legacy contaminated sites.	By 2027, close and remove 7,500 sites from the 201 Facilities Inventory, National Priority List, Leaking Underground Storage Tank Site database and designated Areas of Concern.	Legislature	
9	Pass comprehensive legislation phasing out the use and sale of microbeads in Michigan.	By 2017, comprehensive legislation phasing out the use and sale of microbeads is signed into law.	Legislature	Take part in consultation and comment efforts to support initiative.
10	Establish research priorities for "emerging pollutants of concern" in partnership with Michigan's research universities to: <ul style="list-style-type: none"> <li>Better understand potential ecological and human health impacts.</li> <li>Adapt monitoring protocols to detect concentrations, fate and transport.</li> <li>Recommend standards for protection of human health and the environment.</li> <li>Develop technologies to remove such pollutants from manufacturing processes.</li> </ul>	By 2016, increase the number of evaluations and risk assessments completed, new standards developed, and monitoring protocols developed.	MDEQ, Michigan Department of Community Health	Support collaborating agencies and universities on these research efforts.

**Goal 3: Michigan communities use water as a strategic asset for community and economic development.**

**Outcome: Economic and community development plans and efforts fully leverage water assets to create great places to live, work, and play.**

#	Recommendation	Implementation Metric	Lead Actor	Potential Involvement SCITM
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1	Emphasize water resources as assets in state, regional, and community planning efforts to provide appropriate, sustainable protection and to fully leverage community-based economic opportunities.	Increase walkability score of waterfront communities to measure the effect of economic activity and investment on or near water in a community, watershed or region.	MSDHA, MEDC, MDEQ, MDNR regional governments, local units of government	<ul style="list-style-type: none"> <li>Support development of ecotourism center in Saginaw Bay.</li> <li>Work with agencies and organizations to plan property use in the Saginaw area considering sustainable practice.</li> <li>Promote Saginaw area as an ecotourism opportunity for visitors.</li> </ul>
2	Host an annual mayor's summit focused on creating high-quality communities that leverage strategic water assets.	Increase in property values as a result of increased economic activity and investment on or near water in a community, watershed, or region.	Mayors	
3	Provide in-depth technical assistance to support communities with developing and implementing community visions and strategies for waterfront redevelopment, access, and use.	Increase in the number of communities participating in Redevelopment Ready Communities Program.	Regional and interagency teams	Utilize agency assistance to develop Saginaw as an access point for the Saginaw Bay and Lake Huron, while supporting local economy through the ecotourism message.
4	Prioritize investments around strategic economic assets of commercial harbors and long-term, sustainable infrastructure.	By 2020, increase the percentage of commercial traffic and other economic activity at Michigan's commercial ports over a baseline established in 2015.	MDOT, MDNR, MDEQ's Office of the Great Lakes, Governor's Office of Public-Private Partnerships, commercial maritime interests, local planning professionals	

**Goal 4: Michigan's water resources support quality recreation and cultural opportunities.**

**Outcome: Waters of the state are world renowned for recreational pursuits such as hunting, fishing, boating, and swimming.**

#	Recommendation	Implementation Metric	Lead Actor	Potential Involvement SCTM
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1	Expand the use of real-time monitoring and source tracking techniques at high-risk beaches by local health departments, counties, communities and universities, and address sources of beach contamination.	By 2020, all of Michigan's water meets total and partial body contact designated uses with no closures or advisories. Real time monitoring at all high-risk beaches.	MDEQ, local health departments, local units of government, universities	Work with Central Michigan District Health Department, Saginaw Valley State University, and other collaborators to implement real-time monitoring on our beaches, impaired rivers, and other areas of interest.
2	Continue national and regional coordination of mercury reduction activities, such as implementation of the Great Lakes Mercury in Products Phase-Down Strategy and the Great Lakes Mercury Emission Reduction Strategy.	Reduce the mercury levels in edible portions of Great Lakes, inland lakes and stream fish to below 0.35 parts per million by 2020.	MDEQ, MDCH	Support collaborating agencies in efforts in mercury reduction through consultation, comments, and efforts as opportunities are presented.
3	Prioritize infrastructure needs for repair and upgrade of public recreational harbors and their landslide access.	By 2020, increase the number of recreational harbors with asset management plans over a baseline established in 2015.	MDNR, Waterways Commission, MDEQ, MDOT	
4	Establish a harbor town program and improve marketing of harbors. The program should work with MDEQ to address sources of upstream sediment, sediment reduction and relocation strategies.	By 2017, establish a harbor town program.	MDNR	
5	Work with local partners to provide public access every five miles on the Great Lakes, on all priority lakes over 100 acres in size and on every five miles of navigable water, as environmentally appropriate.	Public access every five miles on the Great Lakes and on all priority inland lakes larger than 100 acres.	MDNR	Develop the Saginaw area as an access point to the Saginaw Bay and Lake Huron through an ecotourism effort.
6	Work with stakeholders to develop and implement a designated water trail system for inland waterways and along the coast.	By 2020, a designated water trail system has been established by the MDNR.	MDNR, local units of governments, NGOs	Support efforts of collaborating agencies.
<b>Goal 5: Michigan has a strategic focus on water technology and innovation to grow sustainable water-based economies.</b>				

**Outcome: Policies and innovative technologies are developed and adopted to grow and promote sustainable water-based economies.**

#	Recommendation	Implementation Metric	Lead Actor	Potential Involvement SCITM
1	Market the state's competitive advantage as a highly attractive place for business creation and investment because of our abundant natural water assets, water research capabilities, highly skilled talent, economic development expertise, and powerful tourism and business-marketing brand.	Increased the number of water-dependent companies and investments locating in Michigan. Specifically track aquaculture technology and related opportunities.	MEDC	<i>Work with agencies, organizations, universities, and other partners to provide opportunities for economic development, ecotourism, and research within the Saginaw Bay Watershed.</i>
2	Establish voluntary water efficiency targets for all major water sectors to reduce water use impacts and costs.	By 2020, develop a baseline for water usage, data collection and definitions to inform development of water conservation goals and objectives. Collect data for two years. Increase by 20% the number of businesses, industries, and municipalities with water efficiency within their water management plants.	Water use Sectors	
3	Promote innovative technologies that reduce cost and water loss, or convert waste products to usable materials.	By 2020, increase the number of new, innovative and cost-effective technologies, pilot projects, and startups are commercialized, come to market and result in connections with end users to reduce costs and water consumption, or convert waste products to usable materials and produce energy over a baseline established in 2015.	MDEQ, MDARD, MEDC	
4	Develop water conservation and reuse strategy for the state that incorporates the use of green infrastructure, grey water systems, and energy production that includes recognition programs.	By 2018, develop a water conservation and reuse strategy that identifies major sectors by water use and their locations.	MDEQ, MDARD, MDOT	<i>Develop a Tribal water conservation and reuse strategy that promotes sustainable practices such as green infrastructure, grey water systems, etc.</i>

5	<p>Fund a pilot project, through a competitive bid process, for the initiation and evaluation of a new model for wastewater management. This pilot program will assess the opportunities and barriers to creating a "Water Resources Utility of the Future", focused on:</p> <ul style="list-style-type: none"> <li>• Reclaiming and reusing water</li> <li>• Extracting and finding commercial uses for nutrients and other constituents</li> <li>• Capturing waste heat and latent energy in biosolids and liquid streams</li> <li>• Generating renewable energy using its land and other assets</li> <li>• Using green infrastructure to manage storm water and improve urban quality of life.</li> </ul>	By 2017, pilot project is funded.	Legislature	
6	Establish voluntary water efficiency targets for agriculture in areas of existing or potential water stress.	By 2017, develop a baseline for water usage, data collection and definitions to inform development of water conservation goals and objectives in areas of existing or potential water stress. Collect data for two years. Establish targets. Increase in the number of water stressed regions that have water efficiency plans and water efficiency targets by 2020.	MDARD	
7	Create a strategic focus on water innovation to attract and accelerate new technologies to market through a business-led council comprised of private investors, entrepreneurs, corporations, public agencies and universities to better	By 2020, increase the number of new, innovative and cost effective technologies, pilot projects, and startups that are commercialized, come to market and result in connections with end users to solve water problems	MDEQ, MEDC, MDNR, MDARD	<i>Support collaborative effort.</i>

manage water challenges in Michigan and worldwide.	over a baseline established in 2015.		
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**Goal 6: Michigan invests in infrastructure and supports funding to maintain clean water and healthy aquatic ecosystems.**

**Outcome: People support investment of both public and private funding of Michigan water resources.**

#	Recommendation	Implementation Metric	Lead Actor	Potential Involvement SCITM
1	Implement a communication strategy focused on messages that link the relationship between investments in water infrastructure and clean water and the benefits infrastructure provides for drinking water, recreation, and cultural and economic opportunity.	By 2017, implement a communication strategy focused on connecting economic, environmental, social and cultural values to Water Strategy Outcomes.	NGOs, MDEQ, MDCH	<ul style="list-style-type: none"> <li>Collaborate to provide the Tribal perspective on the implementation strategy.</li> <li>Support implementation of communication strategy.</li> </ul>
2	Utilize pricing and funding strategies to support infrastructure improvements while allowing for water conservation.	By 2020, increase the number of communities that have pricing and funding strategies as part of their asset management plans to support infrastructure improvements over a baseline established in 2015.	Local units of governments, water utilities	Develop Tribal implementation plan to work toward the goal of water conservation and sustainable funding for water programs.
3	Evaluate current community practices regarding providing water to financially distressed customers to ensure all citizens have affordable access to water for drinking and sanitation.	By 2017, increase the number of communities that have practices in place to ensure financially distressed customers have access to water for drinking and sanitation over a baseline established in 2015.	Local units of governments, water utilities	Continue efforts to provide safe, clean, water source to community members.
4	Incentivize and require outcome-based asset management planning for all public water utilities that includes more efficient use of resources.	By 2020, require all major NPDES-permitted dischargers to develop and implement asset management planning for each system. By 2020, require all municipal community water suppliers serving	MDEQ	

		more than 1,000 people to develop and implement asset management planning for each system.		
5	Establish sustainable funding mechanisms to achieve the Water Strategy goals including water infrastructure management.	By 2020, implement a long-term funding strategy to achieve goals of the Water Strategy and support existing Quality of Life Agency programs and policies.	State agencies, Legislature	
6	Develop an "enterprise budget" in order to better understand the complex relationships between managing water, infrastructure needs and funding	By 2016, develop an enterprise budget for water to inform the long-term funding strategy.	MDEQ	

**Goal 7: Michigan has integrated outcome-based monitoring systems that support critical water-based decisions.**

**Outcome: Monitoring systems are in place at a scale and frequency to ensure water quality and quantity are maintained to support diverse uses and values.**

#	Recommendation	Implementation Metric	Lead Actor	Potential Involvement SCITM
1	Implement a pilot decision support framework that includes monitoring; data and information; and analytical tools for assessing ecological, economic, social and cultural values and outcomes at local and regional watershed scales.	By 2017, fund and implement a water resource decision support framework that provides information about the integration of ecological, economic, social and cultural values and outcomes.	MDEQ, MDNR, MDCH, MDARD	<ul style="list-style-type: none"> <li>• Provide support to collaborating agencies as available.</li> <li>• Provide Tribal perspective.</li> </ul>
2	Develop a coordinated, comprehensive monitoring strategy for groundwater quantity and quality, including a data management system.	By 2018, implement a long-term groundwater monitoring strategy that provides information sufficient to assess status and trends in quality and predict impacts from groundwater withdrawal.	MDEQ	
3	Develop a long-term, sustainable funding source for groundwater and surface water quality and quantity monitoring that is continually improved with new technologies.	By 2018, fund and implement surface water and groundwater monitoring strategies that provide information sufficient to assess water quality and quantity status and trends, and detect	Legislature	

		emerging issues.		
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**Goal 8: Michigan has the governance tools to address water challenges and provide clean water and healthy aquatic ecosystems.**

**Outcome: Policies, organizational and institutional structures are in place to achieve goals and outcomes of the Strategy.**

#	Recommendation	Implementation Metric	Lead Actor	Potential Involvement SCITM
1	Enhance the understanding, knowledge and skill set of communities to facilitate and support community-based dialogue and water-related vision development.	By 2016, work with community foundations and private foundations to support community-based dialogues.	Community and private foundations	<ul style="list-style-type: none"> <li>Continue efforts to support dialogue and collaboration with agency, organization, community, and university partners.</li> <li>Continue to provide financial support through grant partnerships and Two-Percent funding opportunities.</li> </ul>
2	Create a statewide Water Fellows Program and Network to build community leadership and inform critical local leaders about how to leverage water resource assets to build community and economic vitality.	By 2016, establish and implement a Water Fellows Program	Private philanthropy	Support effort as available through collaboration and providing input.
3	Evaluate and implement necessary changes to laws including state and local land-use statutes as well as the Michigan Drain Code to create a more integrated, watershed based system for managing water at the landscape level and achieving water quantity and quality outcomes.	By 2016, create an ad hoc external advisory body to evaluate existing laws and statutes including the Drain Code and local land-use statutes. By 2018, panel should provide recommendations to the Directors.	MDEQ and MDARD Directors	<ul style="list-style-type: none"> <li>Provide support as available.</li> <li>Provide technical support.</li> </ul>

4	Retain full authority under the Clean Water Act to continue to manage Michigan's own water resources.	Continue assumption of federal programs under the Clean Water Act.	MDEQ	<ul style="list-style-type: none"> <li>Retain programs delegated through Clean Water Act to manage Tribal Water Resources.</li> <li>Obtain delegated authorities as necessary and available through US EPA for Tribal waters.</li> </ul>
5	Create an Interdepartmental Water Team to unite agencies to ensure a cohesive common strategy around implementation of the Water Strategy. The team will establish a process for stakeholder collaboration, criteria for setting implementation priorities, identifying cross agency joint projects and an approach to assess and evaluate progress achieved against the metrics and outcomes.	By 2015, create interdepartmental water team. By 2015, put a working agreement in place to establish implementation priorities, a process for stakeholder collaboration, and an adaptive management approach to evaluate progress achieved against metrics and outcomes.	MDEQ, MDNR, MDARD, and MEDC Directors	Tribal staff will be available as a resource to the State of Michigan's Interdepartmental Water Team for continued collaboration and implementation of the Water Strategy.

**Goal 9: Michigan citizens are stewards of clean water and healthy aquatic ecosystems.**

**Outcome: Individuals and communities understand their responsibility for and make informed and responsible decisions regarding water resources.**

#	Recommendation	Implementation Metric	Lead Actor	Potential Involvement SCITM
1	Integrate water literacy principles into place-based education and state of Michigan curriculum standards tied to Science, Technology, Engineering and Math (STEM) across all grade levels.	By 2016, develop a strategy to integrate freshwater literacy principles into place-based education and state curriculum standards.	MDEQ, MDNR, Department of Education, State Board of Education	Continue to provide Two-percent funding to Environmental Education Program through the Isabella Conservation District, which follows curriculum standards of Michigan.
2	Develop a survey tool to assess behaviors and attitudes toward Michigan's water resources to assess changes over time.	By 2016, develop a Grant chart that encompasses all implementation activity timelines. Develop clear metrics about stewardship related to: <ul style="list-style-type: none"> <li>Ability to fund water quality infrastructure</li> <li>Measuring the</li> </ul>	MDEQ, MDNR, Universities	

		<p>community's connection to local water assets</p> <ul style="list-style-type: none"> <li>• Knowledge of, and affinity for, local waters</li> <li>• Metrics of volunteerism and local philanthropy that support a community's vision for water and water-related assets</li> <li>• Measuring actual progress versus planned</li> </ul>		
3	<p>Expand opportunities to engage citizen volunteers and participation, such as the Michigan Clean Water Corp (MI Corps) program, in gathering water quality and quantity data, in restoration, providing access and maintenance of important water-related resources.</p>	<p>By 2016, develop a list of participants and define engagement levels. Track progress toward increasing engagement levels.</p>	MDEQ, MDNR	





# The Saginaw Chippewa Indian Tribe Of Michigan

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August 24, 2015

**RE: Saginaw Chippewa Indian Tribe Comments on the Office of Great Lakes Water Strategy**

To Whom It May Concern:

The Saginaw Chippewa Indian Tribe of Michigan (SCITM) would like to thank the Office of Great Lakes for the consultation and comment opportunity regarding the Office of Great Lakes Water Strategy. Implementation of the Water Strategy is in the best interest of current and future generations. SCITM is committed to protection, stewardship, and restoration of our water resources. Water represents a cultural cornerstone for our community, along with being essential to sustain life. Traditional Lifeway's including fishing, hunting, gathering, conducting ceremonies, and other cultural practices are dependent on clean water resources. Attached you will find comments regarding potential involvement by SCITM to collaborate and partner in the implementation of the Water Strategy.

Sincerely,

Steven Pego, Tribal Chief  
Saginaw Chippewa Indian Tribe



RICK SNYDER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF HEALTH AND HUMAN SERVICES  
LANSING

NICK LYON  
DIRECTOR

The MDHHS Toxicology and Response Section supports the thoughtful work of the Michigan Department of Environmental Quality on their progressive efforts to protect the waters of Michigan and ensure a vibrant and healthy future for our state.

We appreciate the opportunity to provide further comment on the Water Strategy Draft dated June 4, 2015 and submit the following requested changes:

- Page 32, 2<sup>nd</sup> paragraph:
  - “Although atmospheric deposition of Hg, PCBs and other PBTs cause most of the fish consumption advisories in Michigan, the **most restrict advisories** are caused by site specific legacy issues.”
    - Grammatical and technical issue. Please update to:
      - “most restrictive consumption guidelines.”
  - Velsicol is not a great example as a worst case scenario because extensive remediation and natural attenuation has greatly improved the environmental status of the Pine River.
    - Pending future data, MDHHS suspects that the fish consumption guidelines will be relaxed and limited fish consumption will be possible within the timeline presented in the Water Strategy.
    - One location that will not likely change within the scope of the Water Strategy’s vision is St Clair Shores’ Lange-Revere Canal. A “Do Not Eat” consumption advisory currently exists on all fish in the canal due to extremely elevated levels of PCBs.
  - “Some restriction advisories have been successfully removed in Michigan’s AOCs due to restoration efforts over the last several decades.”
    - Sadly, this is untrue. Fish consumption guidelines are and will continue to be in place in Areas of Concern even after the Restrictions on Fish and Wildlife Consumption Beneficial Use Impairment is removed and the site is eventually delisted. Please update to:
      - “The fish consumption beneficial use impairment (BUI) designation has been removed in several Areas of Concern (AOC) due to restoration efforts over the last several decades. Although improved, fish consumption guidelines will continue to be in place for the undetermined future in these sites – even after BUI removal and AOC delisting – due to lingering (albeit lessened) contamination in the sediment, as well as ongoing air deposition.”

#### Additional Recommendations:

1. MDHHS would like to see the State prioritize and institutionalize the continued monitoring of fish for legacy and emerging contaminants in order to ensure that Michigan maintains its status within the Great Lakes as a leader in the adoption and implementation of best available science to protect public health.
2. MDHHS also recommends the inclusion of perfluorooctane sulfonate (PFOS) in the list of PBTs. PFOS first appeared in MDHHS's ***Eat Safe Fish Guide*** as a chemical of concern for fish consumption in 2014 for the Au Sable River near the decommissioned Wurtsmith Air Force Base in Oscoda. In 2015, PFOS guidelines were also included for the Flint River, Rogue River, and St Joseph River. MDHHS expects this emerging contaminant to be found in fish throughout the state as additional testing occurs. MDHHS will issue fish consumption guidelines for PFOS as needed.

If you have further questions or would like clarification, please feel free to contact Kory Groetsch, Jennifer Gray, or Michelle Bruneau within the Toxicology and Response Section at MDHHS at 1-800-648-6942.

Thank you!



August 24, 2015

Office of the Great Lakes  
Department of Environmental Quality  
PO Box 30473-7973  
Lansing, MI 48909

Re: Sustaining Michigan Water Heritage, A Strategy for the Next Generation

The City of Bay City has reviewed the draft Water Strategy “Sustaining Michigan Water Heritage, A Strategy for the Next Generation.” The City strongly supports the recommendations identified in the report and commends your Agency’s efforts in undertaking this critical project for the future of our Bay Area Region and the entire State of Michigan.

The draft report is extremely thorough and provides an excellent long term plan for the State. The City wishes to highlight the following recommendations which we believe are essential elements of the overall plan.

- The City strongly supports all efforts to increase public access to the Saginaw Bay including a commitment to clean up the beaches and restore them to useable condition as they were once many years ago.
- The City strongly supports the proposal to restore the pier that once extended into the Saginaw Bay. Such restoration would have a significant economic impact on the region including our City.
- It is of critical importance that a long term funding source be identified and secured to aggressively accelerate the clean-up of contaminated sites located along various waterways.
- The City supports the establishment of a long term Water Fund which would assist in implementing Water Strategy goals including water infrastructure management.

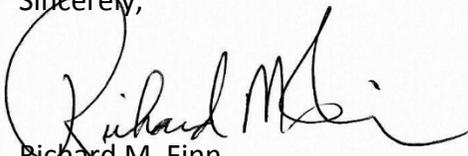
- The City supports the recommendation for the State to, “prioritize investments around strategic economic assets of commercial harbors and long term sustainable infrastructure.”

We appreciate the tremendous time and effort that has gone into the preparation of this long term plan. The City supports the final adoption and approve of this plan especially the recommendations sited above. However, it is critical to the success of this plan that a comprehensive implementation plan be incorporated into this long term State Water Strategy. Right now the plan does not provide for how it will be implemented nor does it identify a preferred time line for accomplishing its many important recommendations. Furthermore, it is of critical importance to identify who will lead and oversee this plan and how it will be funded as well as assigning appropriate authority to the entity that is charged with implementing the Strategy.

If these critical plan elements are not addressed then it is our fear that the Water Strategy as written and recommended will not be successfully implemented and the many excellent recommendations will not be pursued.

Thank you for the opportunity to comment on this Water Strategy Plan.

Sincerely,



Richard M. Finn  
City Manager

C: Laura Ogar, Director  
Bay County Environmental Affairs & Community Development



food systems for a healthier world

33 Lynwood Dr., Battle Creek, MI 49015  
www.originz.com 616-581-1360

August 25, 2015

20150828 Input into MI Water Strategy II.doc

Ms Emily Finnell  
DEQ Office of the Great Lakes  
PO Box 30437-7973  
Lansing Michigan 48099

Sent Via e-mail to: [mi-waterstrategy@michigan.gov](mailto:mi-waterstrategy@michigan.gov)

Re: Public Comment on the Michigan draft Water Strategy, "**Sustaining Michigan Water Heritage, A Strategy for the Next Generation**," regarding the development opportunity for Aquaculture.

Dear Ms. Finnell,

Thank you for the opportunity to provide comment on the draft Water Strategy. Originz, LLC is a Michigan-based agri-food knowledge services provider that works with clients to deliver "*food systems for a healthier world*". Originz has been engaged for the past five years in the in advancing the opportunity for the development of aquaculture in the state and the entire Great Lakes watershed.

We offer the following comments specifically to the subject of aquaculture in **Chapter 5: Promote Water-Based Economies** of the draft.

The June 2015 Water Strategy draft includes this reference to aquaculture development:

Aquaculture is another area that could thrive based on Michigan's plentiful water supply and high water quality. In a world demanding ever-increasing amounts of high-quality fish and protein, growing the state's aquaculture industry will require significant innovation in water technology. In particular, industry and the state should continue to support closed-loop or recirculating systems. Lowering energy costs of production, improving water filtration and strengthening supply chains for commercial aquaculture systems will enable the industry to grow substantially in an ecologically responsible fashion.

**First,**

we suggest that, since aquaculture production systems can take many forms, the strategy should not be limited to supporting only closed-loop or recirculating systems.

**Recommendation:** We urge restating that sentence to state, "**...support aquaculture development in ways that both build the sector and protect water quality**".

**Second,**

As pertains to the opportunity to advance aquaculture in the Great Lakes region we recommend expanding this section of the strategy to include allowing for commercial fish production in the open waters of the Great Lakes.

**Background:** The public trust for stewardship of the Great Lakes water currently includes a number of commercial uses of those waters including:

- Commercial marina for recreational watercraft mooring, servicing, etc.
- Designation of navigation channels for lakera and other commercial vessels
- Trap-net placements by commercial fishery operators
- Permit access to the waters by the charter and personal recreational fishing industry
- Power plant and other commercial access for cooling, process, discharge waters.

These various bottomland permitting and other permits and licenses of the state for these activities on/in the public waters are effectively commercial access agreements for which the public is compensated through those permit and license fees.

Furthermore the designation of those uses to specified bottomlands or water surface areas of Great Lakes are effectively zoning of public trust waters of the state for contractual commercial use – the contract between the commercial user and the citizens of the state, managed by the state on behalf of the citizens.

**Recommendation:** We recommend that the Water Strategy section on Aquaculture be expanded to include extending the zoning and permitting of open water commercial aquaculture operations on/in the Great Lakes’ waters of the state, through right regulation and in a way that properly compensates the state for such access. This would allow for the production of food to complement the other commercial uses of public-trust waters of the state for the broad benefit of society.

**Support:** As domestic and global demand for fresh healthy and affordable seafood grows the state’s thriving agriculture sector can extend beyond our land base into our waters. By applying known best management practices to such operations our local food economy will become more robust without compromising our water environments. In adapting current bottomland use policy for aquacultural uses we can learn from analogous precedence in other sectors of the agriculture and natural resource economy such as the leasing of government lands for lumbering, mining and cattle ranching that can contribute to defining the framework for advancing this opportunity.

At Originz, LLC we take a holistic approach to solution and believe that aquaculture can and will be practiced in away that advance the economic, ecological, and societal needs of Michigan. Please feel free to contact me if you have any question.

Sincerely,  
Joe Colyn,



Originz, LLC

**From:** [cheryl.fwf@gmail.com](mailto:cheryl.fwf@gmail.com) on behalf of [Cheryl Kallio](#)  
**To:** [mi-waterstrategy](#)  
**Subject:** 30-Year Vision for Water comments  
**Date:** Monday, August 24, 2015 1:02:11 PM  
**Attachments:** [Michigan 30 year vision Freshwater Future comments.pdf](#)

---

Thank you for the opportunity to submit the attached comments with regard to the DEQ's 30-Year Vision for Water.

Sincerely,

--

Cheryl Kallio  
Associate Director, Freshwater Future  
P: 231-571-5001  
W: [www.freshwaterfuture.org](http://www.freshwaterfuture.org)

Follow Us - [Facebook](#) | [Twitter](#)

**From:** [Frances E Johnson](#)  
**To:** [mi-waterstrategy](#)  
**Subject:** 30-Year Water & Recreation Plan Top Suggestions  
**Date:** Sunday, August 23, 2015 4:36:19 PM

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## **Chalkboards & Flags with Colors showing the danger level on the Lakes for the State Park & City Beaches as done in Florida!!**

### **Keep OUT the ASIAN Carp!!**

Keeping out Asian Carp is the Main Issue! Asian Carp will ruin Michigan's food sources and massive revenue from the lake fish... Force the Chicago Lock to open only Southbound or Inland not allowing water into Lake Michigan. Put extra high barriers along the river system in Illinois to keep these invasive and dangerous fish out.

### **Rivers and Navigable Waters Open to ALL Boaters!!**

Make all the river waterways like the Grand River available to motor boats as well as the other boats! These are navigable waters! All navigable waters should be open to all!

The motorists should go at slow speed near anyone in a canoe... likewise, the slow kayakers & boarders .... should learn manners on the water & how to stay in areas appropriate for them on the water. This is extremely exciting for all motorists to see and use. It could even replace driving to this area if wanted or necessary.

### **Safety & Boating Classes for ALL regardless of water craft!!!**

Each person who buys a board to stand on & paddle or kayaker or canoeist or personal watercraft or sailor or motor boat person should ALL be forced to take a Safety class on the water, therefore learning safety manners and what they need to always carry even if on a board. All of these classes of water people do stupid things including kayakers & boarders. They need to know the rules of the water. Designated water drivers if over drinking. This should be mandatory of each whatever their age when purchasing a water craft or planning to use one. They need to carry their water license which could go on their drivers license.

This is important. Too many idiots are out there.

**From:** [Jim MacInnes](#)  
**To:** [mi-waterstrategy](#)  
**Subject:** Aquifer Assessment  
**Date:** Tuesday, July 07, 2015 1:45:11 PM

---

An aquifer status assessment would be very useful. Will you be including this in your report?

Thank you,

Jim MacInnes



**Jim MacInnes** | President  
**p:** 231.378.2000 x2201  
**f:** 231.378.4594  
**e:** [jmacinnes@crystalmountain.com](mailto:jmacinnes@crystalmountain.com)

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# MICHIGAN STATE UNIVERSITY

August 26, 2015

Mr. Jon Allan  
Director, Office of the Great Lakes  
Michigan Department of Environmental Quality  
P.O. Box 30473-797  
Lansing, Michigan 48909

Dear Director Allan,

Thank you for the opportunity to comment on the June 4, 2015, draft Michigan Water Strategy, "Sustaining Michigan's Water Heritage," (hereafter "Strategy"). The Institute of Water Research (IWR) at Michigan State University (MSU) offers the following comments and looks forward to a response to these comments and the final Strategy.

The IWR believes that the Strategy does a remarkable job undertaking a difficult set of tasks: 1) Articulating an underlying philosophy and policy approach to water resources management, 2) constructing a comprehensive conceptual framework to implement that philosophy, 3) identifying and evaluating necessary components within that framework, 4) determining program and policy gaps and necessary steps to fill those gaps, 5) setting priorities among those steps, 6) developing mechanisms to implement those priorities, 7) describing responsibilities for implementation, and 8) establishing metrics to evaluate successful implementation.

The IWR therefore supports the Strategy as a whole. The following comments are organized as follows: 1) Noteworthy discussions that the IWR specifically supports. 2) Opportunities for leadership that should be addressed or improved in the final Strategy. 3) Thoughts on Motivation. 4) Comments on specific details of the Strategy. 5) Comments on the Strategy Implementation plan.

## **Noteworthy Discussions that the IWR Specifically Supports**

The IWR views the Strategy as an opportunity for leadership on water management issues. To that end, the Strategy is successful with respect to, and the IWR specifically supports, the following:

1. The Strategy's vision and overall operating philosophy. The IWR agrees that leveraging the benefits of water and sustainability is "critical to advancing Michigan's prosperity" as is, crucially, the recognition that Michiganders are "part of the ecosystem" (1)<sup>1</sup>. We also agree with identifying economic, environmental, social and cultural factors as four core values. (1). Importantly, these four values need to be balanced on an on-going basis. The discussion of any significant decision made during implementation of the Strategy should explicitly address how these values were balanced in that decision.

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<sup>1</sup> All parenthetical numbers reference page numbers of the Strategy. Thus "(1)" should be read as "page 1."



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Natural  
Resources**

Institute of Water  
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2. The importance of durable relationships and collaboration among the myriad actors necessarily involved in implementing the Strategy (e.g., 3).
3. The central role of, and the need to encourage, stewardship in water management (4).
4. The identification of the role for near term/on-going actions and long term cultural/attitudinal shifts. The IWR strongly endorses this as an appropriate approach to water management. We suggest that the significance of this approach be more explicitly recognized in the beginning of the Strategy.
5. The comprehensive explanation throughout, that describes how water fits into our lives.
6. The recognition that "the development of a robust and effective water management program...will be an ongoing, iterative process" (16). While this characterization is explicitly afforded to the Water Withdrawal Assessment Process, it accurately describes essentially all water management issues, and indeed the entire evolving relationship of humans to the rest of the natural world.
7. The insightful and helpful discussions of the "true cost of water" (42 - 43) and "enterprise budget" (45 - 46).
8. The necessity of, and need to invest in, monitoring (48 - 50). The IWR specifically applauds the recommendations to improve and increase monitoring for groundwater quantity and quality. We note, however, the Strategy calls for the implementation of a long term monitoring approach before funding sources are secured. As with other aspects of the Strategy highly dependent upon funding (see below), the failure to be more specific about funding sources calls into significant question the ability to implement this approach.
9. The Strategy's approach to and, relative to most strategy papers, detailed discussion of implementation. The following are specifically noteworthy:
  - a. The creation of the interdepartmental water team (54). The IWR highly recommends that two crucial details of this team be included in the final Strategy: 1) The team should consist of sufficiently high ranking officials to ensure broad perspective and adequate authority to ensure decisions are implemented. We recommend that department Deputy Directors be the appointed members of this Team and that they personally participate. 2) The specific commitment to form, and significantly involve, an advisory group of non-governmental personnel to assist implementation.
  - b. The Water Strategy Implementation Plan in Table 2 (58). Since this is a Five Year Plan, we encourage adding a description of how this five year increment fits into the 30 year span of the Strategy. For example, how will progress over the first five years fit into evaluation of whether and how to modify the Strategy over the next five year increment. This is especially important for those Strategy components that are necessarily adaptive. See, e.g., the discussion below of voluntary approaches to conservation.

## **Opportunities for Leadership that should be Addressed or Improved in the Final Strategy**

There are several opportunities for leadership that the Strategy misses. These should be addressed in the final Strategy:

1. Identifying and proposing funding for the Strategy's work. The Strategy contains only a non-committal discussion of water as a commodity and a water fee (43), very general reference to a public education campaign as a precursor to a funding discussion (43), so-weak-as-to-be-a meaningless recommendation (45) and merely a hopeful implementation step (67). Given the imperative of funding implementation, ideally the Strategy should propose a specific mechanism to fund its recommendations. At a minimum, the Strategy should identify the advantages and disadvantages of specific funding alternatives and a process for the State to decide among those alternatives and adopt the selected approach. With respect to a preferred approach, see the further comment on this point in Item 6 below. It is highly unfortunate that the Strategy has failed to take this approach so that public comment could focus on the decisions surrounding the complete necessity of funding. The IWR is concerned that without a bona fide approach to the funding issue, the Strategy, despite its many strong qualities, will be perceived as and tend toward the good intentions rather than action end of the public policy continuum.
2. Being explicit on the issue of climate change. Because it contains only highly veiled references to the projected effects of climate change in Michigan (11, 59), the Strategy is effectively silent on this issue. While the IWR recognizes the unfortunate public division on climate change – but most certainly not among the scientific community – it is precisely because of that division that the Strategy should have, and to date has missed, an important leadership role. This omission should be corrected in the final document.
3. Providing necessary citations. The IWR recognizes that the Strategy could be bogged down by pervasive citations. However, citation support should be provided both for such things as significant conclusions/recommendations on emerging issues – such as to ban microbeads (25) – and fundamental factual statements upon which major conclusions rest – such as the status of water conservation efforts underlying the voluntary approach to agricultural conservation (39).
4. Describing a comprehensive approach to conservation. The Strategy's approach to water conservation is piecemeal, disjointed and incomplete. Rather than disparate discussions for different users (e.g., agriculture, industry, municipalities, domestic users), the Strategy should contain a unified discussion that describes an overall philosophy and policy approach to conservation of Michigan's water resources.
5. Recognizing the need for meaningful evaluation of voluntary approaches (37 - 39). The Strategy supports voluntary approaches to many important behavioral changes. See, e.g., control of nonpoint pollution (18) and conservation (36-38). While the IWR does not fault this approach per se, we believe that it needs to be part of an iterative approach that measures its effect, evaluates the need for modification and makes changes appropriately. The Strategy does provide a nod to such an adaptive approach (54), but more detail, especially specific desired outcomes and evaluation/modification processes, would provide greater assurance.
6. Providing consistent approaches to responsibility/accountability. The Strategy should take a consistent approach to identifying which parties create externalities imposing costs on others and which parties benefit from positive conditions, and therefore who has responsibility for changing behavior and/or incurring costs. As an example, the Strategy recognizes that infrastructure

maintenance need to be within business models of maritime companies (28), but fails to assign some responsibility for sedimentation creating some of those costs in that commercial context, while it does so in the similar recreational one (32). From a broader perspective, since all Michigan citizens benefit from a healthy and robust hydrologic system, and indeed impose burdens on it, all Michigan citizens should share in the costs of providing that system.

7. Providing adequate implementation metrics. The IWR recognizes lower priority recommendations described in Table 3 (70). But the lack of any metrics for progress on these priorities implies that a complete lack of progress would be acceptable. Perhaps there is a way for developing a metric for this entire group of recommendations.
8. In general, we perceive a relative inattention to issues affecting inland lakes in favor of the Great Lakes. There is, for example, no discussion of threats to and ways to protect high quality inland lakes. The Strategy would benefit from some additional attention to these issues.

### **Thoughts on Motivation**

The Strategy identifies the need for new and evolving governance models as described, for example, in the discussion of the Natural Resources Working Group (18) and the work of the Department of Environmental Quality Environmental Advisory Council and MSU Natural Resources Governance Fellows Program (52). Likewise, the Strategy recognizes that "critical elements" of the Strategy must be "adopted and deeply engrained" into a variety of involved parties for the Strategy to be ultimately successful (54).

Yet the Strategy is somewhat short on discussing how this transformation is to occur, calling for only integrating relevant concepts into educational curriculum and increasing volunteer opportunities (56 - 57). Unfortunately, the former has been repeatedly recommended for both environmental and other social concerns with, given the demands on educational curriculum generally, little success. And given IWR's own experiences with regulatory impediments to volunteer activities (crowd-sourcing collection of water levels), the latter is easier said than done.

The government has traditionally approached motivation of individual behavior through incentives (primarily financial) and disincentives (primarily regulatory sanctions). The IWR believes that the Strategy provides an excellent opportunity to explore broader and more nuanced perspectives in at least three contexts:

1. Governance: How can Michigan encourage and nurture the multi-interest collaborative governance model described in the Strategy?
2. Involvement: How can Michigan recruit and motivate the contributions of the wide array of necessary actors and institutions identified in the Strategy?
3. De minimis impacts: How can Michigan effectively sensitize actors that the discreet impacts of their individual activities are cumulatively significant and, therefore, need to be meaningfully addressed?

This is a relatively new frontier for government recognition much less understanding and effective response. And, of course, the opportunity is not government's alone. The Strategy could be characterized as truly visionary if it explored deeper into this frontier than it currently does.

## **Comments on Specific Details**

1. There does not appear to be a corresponding recommendation for the discussion of increasing holistic watershed based approaches to improving hydrology (11).
2. The discussion of harmful algal blooms (12 - 13) should be expanded.
3. Assuming the specific pollutants named in the second paragraph on page 20 are examples, not the definitive listing, "i.e." should be "e.g".
4. The IWR supports the recommendation to adopt a uniform statewide sanitary code (22-23).
5. There should be a recognition of the role of responsible parties to address legacy contamination and recommendations to assist government in holding those parties accountable for that responsibility (23).
6. It is not clear what is meant by the sentence: "*Prioritize investments around strategic economic assets of commercial harbors and long-term sustainable infrastructure*" (29).
7. It would be instructive to know the status of implementation of the 2008 Mercury Strategy (32).
8. The basis of the specified goals for water access should be described lest those goals be perceived as arbitrary (33).
9. One alternative to the time-consuming effort of "designating" water trails (33) would be to simply ensure information about any particular trail is available so that users can make choices about their needs.
10. It is not clear why voluntary efficiency targets are only recommended for agriculture in areas of existing or potential water stress (39).

## **Implementation Plan Comments**

### Goal 1

1. Item 11 (59) calls for addressing dams most at risk of failure by 2020. Has this list been developed? If so, where is it available? If not, will one be developed and available for public comment?
2. Some metrics are inadequate in that they provide no indication of magnitude. For example, see Items 14 ("increase"), 15 ("better accommodate"), and 16 ("increase") (60). In each instance, a single occurrence would technically satisfy this metric. This is either very unambitious or simple hesitancy to commit. Either case provides little assurance that much progress will be made.
3. The IWR supports development of priority watersheds (60), but recommends a more ambitious date than 2018 (60).
4. Item 18 references "escalated 'additional actions'" should a priority watershed fail to improve (60). But there is no discussion of this concept or approach in the Strategy itself.

Goal 2

1. There does not appear to be an implementation metric for "ensur[ing that] remediation activities address the long term impact of drinking water sources" (61).
2. "Convening" a stakeholder group to develop draft legislation on regulating geothermal construction should be extended to achieving passage of legislation thus developed (62).

Goal 4

1. There is no date for increases in public access (64).

Goal 5

1. The IWR supports the structure of the metric for agriculture water efficiency but recommends it be applied more broadly than areas of existing or potential water stress (66).
2. The IWR supports the concept of reduction targets for water use, but recommends that "Water Use Sectors" be spelled out to signify accountability and leadership opportunities within those sectors. These would include Industrial Manufacturers, Business, Municipalities and NGOs; as well as their industry professional associations. Another stakeholder which may need to be mentioned here and in other Goals would be the risk management industry, such as private insurance agencies, since for businesses best water management is about risk management and sustainability (65).

Goal 6

1. The IWR supports the development of a communications plan on water infrastructure by 2017 (66).
2. As described above a much more ambitious approach to funding the Strategy is imperative. With so much of the Strategy depending on funding, 2020 is simply not timely (67).

Goal 8

1. The IWR supports creating a Water Fellows Program by 2016 (68).
2. The IWR supports efforts to review the Drain Code but recommends completion by 2017 (68).
3. The IWR supports the metrics for the interdepartmental water team (68).

Goal 9

1. Although the IWR believes it is not a sufficient step (see Thoughts on Motivation above), we do support the development of a strategy for integrating fresh water literacy principles into education standards by 2016 (69).

Thank you again for the opportunity to comment on this important document. We look forward to your response to our comments and the final Strategy.

Sincerely,



Dr. Jon Bartholic,  
Director

**From:** [Laura Ogar](#)  
**To:** [mi-waterstrategy](#)  
**Cc:** [Tom Hickner](#); [rfinn@baycitymi.org](mailto:rfinn@baycitymi.org); [Deanne Berger](#); [Debra Russell](#); [RSpencer](#); [Robert Redmond](#); [Cynthia Gaul](#); [Eileen Curtis](#)  
**Subject:** Bay Co. Comments on Draft Water Strategy  
**Date:** Friday, August 28, 2015 2:56:26 PM  
**Attachments:** [BayCoWaterStrategy2015.pdf](#)

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Please accept the attached comments on the draft Water Strategy, thank you.

Laura Ogar, Bay County Director  
Environmental Affairs and Community Development  
Bay County Building  
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**THOMAS HICKNER**  
County Executive

**LAURA OGAR, DIRECTOR**  
ogarl@baycounty.net

Community Initiatives  
Geographic Information Systems  
Gypsy Moth Suppression Program  
Mosquito Control  
Saginaw Bay Coastal Initiative (SBCI)  
Transportation Planning

August 26, 2015

Mr. Jon Allan, Director  
Office of the Great Lakes  
Department of Environmental Quality  
PO Box 30473-7973  
Lansing, Michigan 48909

Re: Comments on the draft Sustaining Michigan Water Heritage, A Strategy for the Next Generation

Dear Mr. Allan,

Thank you for providing this opportunity to comment on the draft "Sustaining Michigan Water Heritage, A Strategy for the Next Generation" (Strategy). We were pleased to have been a part of the regional (Saginaw) focus group during the development of the Strategy and are especially appreciative that our community priority for greater access (pier) to the Saginaw Bay was acknowledged and included. Increasing stewardship of our water resources by our next generation is directly related to the positive experiences our youth have with the resource. In the Saginaw Bay area, even viewing access (the simple ability to see the water and waves) is rare. Developing visual and physical access to the Saginaw Bay shoreline is critical and assistance towards construction of an access pier would greatly enhance stewardship potential and stakeholder engagement.

The proposed Strategy is a comprehensive and well done plan for ensuring our water resources are improved and protected for the next generation. As the key Great Lakes state, we recognize that our brand is harmed when our waters are damaged from pollution sources. With that in mind we offer the following comments:

- 1) We encourage the Department of Environmental Quality (DEQ) to build the integrated governance tools identified in the Strategy by utilizing and realigning existing programmatic activities and staff resources. Specifically assigning DEQ staff to act as liaison with local communities would improve communication and understanding of local challenges. Providing targeted resources to support and partner with those communities who are actively engaged in on-the-ground problem solving efforts would help reduce institutional barriers and lead to more effective pollution prevention and durable water quality improvements.
- 2) We support efforts to explore creative long term funding source(s) for water quality improvements that include funding assistance for upgrades to our aging water utility infrastructure.
- 3) We support greater oversight and improved transparency in the management of active and inactive or abandoned oil and gas pipelines.
- 4) We support and encourage the proposed numerical limits for Phosphorus control within the Western Lake Erie Basin and request similar, meaningful limits also be established for the Saginaw Bay.
- 5) We strongly urge the development and adoption of a statewide Sanitary Code to ensure adequate operations and maintenance are built in to the ownership of these systems. The Saginaw Bay Coastal Initiative (SBCI) has a draft Regional Sanitary Code that we can offer as a good example for this.

The Office of the Great Lakes has done a very good job in developing the draft Strategy, which will be a comprehensive and effective approach to ensuring the health of our shared water resources once implemented. We support the elements identified in the Strategy and will work with DEQ to ensure its success. Implementation of its many focus areas will be a challenge and we encourage continued stakeholder involvement as the Strategy is put into action.

Sincerely,

Laura Ogar, Director  
Bay County Environmental Affairs and Community Development  
[ogarl@baycounty.net](mailto:ogarl@baycounty.net)

Cc: Tom Hickner, County Executive, Bay County  
Bay County Board of Commissioners  
Rick Finn, City Manager, Bay City



## **Proposal**

### **The Brāv Mission**

*Making Conflict Resolution without Violence a Reality*

#### **Introduction**

Brāv is a 24/7 dispute resolution website that through egames, trains anyone in conflict resolution and management. In turn, these trained Brāv Ones aid in the conflicts of others on the site's face-to-face platforms.

#### **Platform**

Secure online conflict resolution through face-to-face video chats, messaging, email, and more with trained community members utilized as conflict managers. Integration of trainers (Brāv Ones) into schools, organizations, workplaces, and more will expand the reach into most corners of society.

#### **Why?**

Our world is plagued with conflict and devastating violence everywhere you look: bullying in schools from elementary age to college, workplace bullying from blue collar to white collar, violence in our homes, on the streets, across borders, everywhere.

#### **Connected learning**

Brāv ultimately prepares anyone in learning and utilizing a healthy coping and resolution skill set and cultivates the art of conflict resolution by providing a work and learning environment where they feel challenged, respected, and accountable as they strive to meet the demands of adulthood.

Brāv is the first of its kind in online dispute resolution with a focus on anyone on the global planet learning conflict management and/or seeking someone to resolve a conflict - personal, professional or otherwise.

Brāv involves global Brāv Ones in such diverse areas as dispute resolution, mental health, juvenile justice, positive youth and adult development, education and work readiness. We intend to broaden globally to include as many languages as possible, promoting these essential skills worldwide. The virtual training game will be fun, efficient and educational.

Once a user successfully completes training, they have the option of entering into the membership algorithm in order for others to find someone to help manage their conflict(s). Data access and data integrity are important to consider. Our data will be accessed and modified on a



regular basis and therefore should be stored on a hard drive or flash media because these types of media provide quick access and allow the data to be moved or changed.

The information exchanged between parties in dispute during an online session must have top protection. As a result, we have researched top SSL protection. In addition, we must include a firewall to prevent unauthorized access to computers and encrypt personal data that is submitted online or shared with other users. It is also important to backup our data.

### **How?**

Technology and the human heart. We are communicating differently now. Mobile devices and computers are everywhere. Brāv capitalizes on this reality to facilitate a new way to solve problems, large and small. At our root, an online source of caring individuals for those in need- a resource for support, maintaining the utmost values to uphold privacy concerns while focusing on one goal: nonviolent conflict resolution.

### **Who could use Brāv?**

Students, employees of workplaces small and large, civic organizations, religious organizations, sports leagues, families, trafficking victims and more. The human experience is met daily with difficult situations- the potential for good is unlimited.

### **Brāv as a Preventative Resource**

Brāv is also utilized as a preventative resource; for example, the Department of Justice estimates that between 200, 000 to 300, 000 of those aged 12 – 18 are targeted for trafficking each year\*. More, many traffickers and pimps are using the Internet for exploitation purposes. Brāv's online presence can serve as a resource for those targeted and seeking information and/or advice on a questionable and/or new online interaction.

### **...as a Crisis Resource**

For those victims currently in a crisis, Brāv can be used as a present resource to potentially help resolve an immediate situation.

### **...as a Post Trauma Therapy**

A new study came out last month that discussed talk therapy as a conflict resolution alternative. Cultivating Brāv to be the largest online network, training ordinary people in conflict management who in turn resolve the conflicts of others on the website's face to face platform through talk therapy and debriefing provides psycho social resolution.

### **Technology**

Brāv intends to be on the cutting edge with games, visuals, and communication through our platform. Games will be utilized for training community members to become Brāv Ones, and



also for any individual desiring to learn conflict resolution skills. Privacy concerns will be addressed with the latest in graphics. Multiple types of online communication will be utilized in our program to facilitate the best experience and the individual's need.

### **Objectives**

- Through incentives, train and certify millions to resolve the conflicts of others (Brāv Ones).
- Build Brāv video-to-video face, Skype-like chat online platform.
- Incorporate digital masks that simulate users' actual facial expressions in real time for those who wish not to show their faces during a session.
- Provide volunteer or credit recovery toward a high school diploma and enhance the career. Program diversion/ alternative to those who have been penalized, suspended, expelled, etc.
- Match Brāv Ones with disputing parties through Brāv database.
- Brāv is used as the first option to a conflict, followed by regular organizational policies as a second/ last option.

### **Potential**

International reach = changing the world, one resolution at a time. We hope to integrate nonviolent conflict resolution as a common core throughout many facets of society worldwide, taking advantage of the latest in technology to make Brāv accessible, desirable, and effective.

### **The Challenge**

To market the benefits to individuals and organizations, to be at the forefront of technological advances, and to integrate the online platform into “real-life” programs for all ages.

### **The Benefits of Brāv**

- The improvement of the individual's conflict resolution skill set
- Individuals are empowered through direct compromise
- Individuals can use this skill set for future issues that arise
- Brāv Ones serve as neutral third parties providing non-bias information
- Early intervention is possible prior to escalation and potential legal action
- Provides accountability that is crucial for maintaining peace, and preventing future conflict
- Problem solving through Brāv Ones can save money for potential legal costs
- Greater potential for long lasting personal and professional relationships



- Use of latest technology improves engagement= greater possibility of nonviolent conflict resolution.

### **Why we need you:**

#### **Funding:**

- For the implementation of the full Brāv online platform
- For marketing to schools, businesses, organizations, and people in need around the world
- For physical integration into all aspects of society that could benefit from Brāv
- For branding Brāv as a cohesive network of Brāv Ones, individuals, and groups focused on the resolution of personal and professional issues through dialogue and compromise.
- For the purchase of a building for headquarters and onsite sessions.
- For the employment of staff to teach or answer questions.
- For the hiring of User Acquisition, Membership and Outreach Coordinator(s)
- For cultivating an identity (brand) for Brāv as an organization in the global community. Includes shirts for 'Brāv Ones – those who train to help manage conflicts - wear during sessions.
- For expanding our user base in one United States geographical market, then to key United States cities and ultimately internationally.
- For hiring a year-round business manager for on-site sessions, thereby providing possible member employment twelve months of the year.
- For expanding the donor/ corporate partner base and corporate contributions that add to the financial resources of programs.
- For providing member incentives including the entrepreneurial job skill set that can open doors to future employment opportunities and membership gear.
- For acquiring additional software to support future growth and offer greater flexibility, leading to expanded services offered by Brāv that will further the goal of providing valuable work opportunities for youth and adults.
- For providing certificates to graduates upon successful completion of conflict resolution and leadership games designed to strengthen the arts of negotiation through speaking, listening, and thinking. These graduates in turn help resolve the conflicts of others through Brāv's face to face online video chat platform.

### **Scalability and Impact**

As an online service, we are able to have people all over the globe gain access to a website dedicated to managing their conflicts or training ordinary people to resolve them. As such, while the first of its kind platform and algorithm must be fully developed and launched, marketing would also help to implement Brāv much more efficiently.

### **Technical**



Brāv desires for people to be more open about the issues that we all experience and often hinder us emotionally, professional and personally. Our innovative and secure face-to-face platforms encourages us to look at the faces of those we have disagreements with while speaking to a neutral third party who intends to bring about a resolution. We also will employ an encrypted, algorithm database whereby those parties seeking a neutral can seek one at random.

### **Implementation Plan**

Brāv-trained and certified members work and help shape the major aspects of the organization that impact young people and adults in our global community. Brāv will involve Brāv Ones in such diverse areas as dispute resolution, mental health, juvenile justice, positive youth and adult development, education and work readiness.

### **Implementation into Programs**

- Brāv logo use on any and all websites and promotional materials.
- Use of Brāv programs.
- Work together to secure available funding from any and all sources.
- Advertise and hold weekly education and user acquisition presentations and/or conferences.
- Recommend attendees to bring friends to continue the conversation to the next presentation w them.

### **Budget Spreadsheet**

Please contact [info@brav.org](mailto:info@brav.org) for the budget.

### **Budget Narrative**

- Fund the program, including possible expansion of the online platform or purchase of a building for headquarters and onsite sessions.
- Employ staff to teach or answer questions.
- Purchase the additional developers required to launch the virtual training platform.
- Cultivate an identity (brand) for Brāv business in the global community. Includes shirt that Brāv Ones – those who train to help manage conflicts - must wear during every session.
- Expand customer base in 1 United States geographical market, then to key United States cities and ultimately internationally.
- Hire a year-round business manager for on-site sessions, thereby providing possible member employment twelve months of the year.
- Expand the donor/ corporate partner base and corporate contributions that add to the financial resources of programs.
- Provide members with entrepreneurial job skills that can open doors to future employment opportunities.

**Brāv**  
P.O. Box 36081  
Detroit, MI 48236  
*www.brav.org*



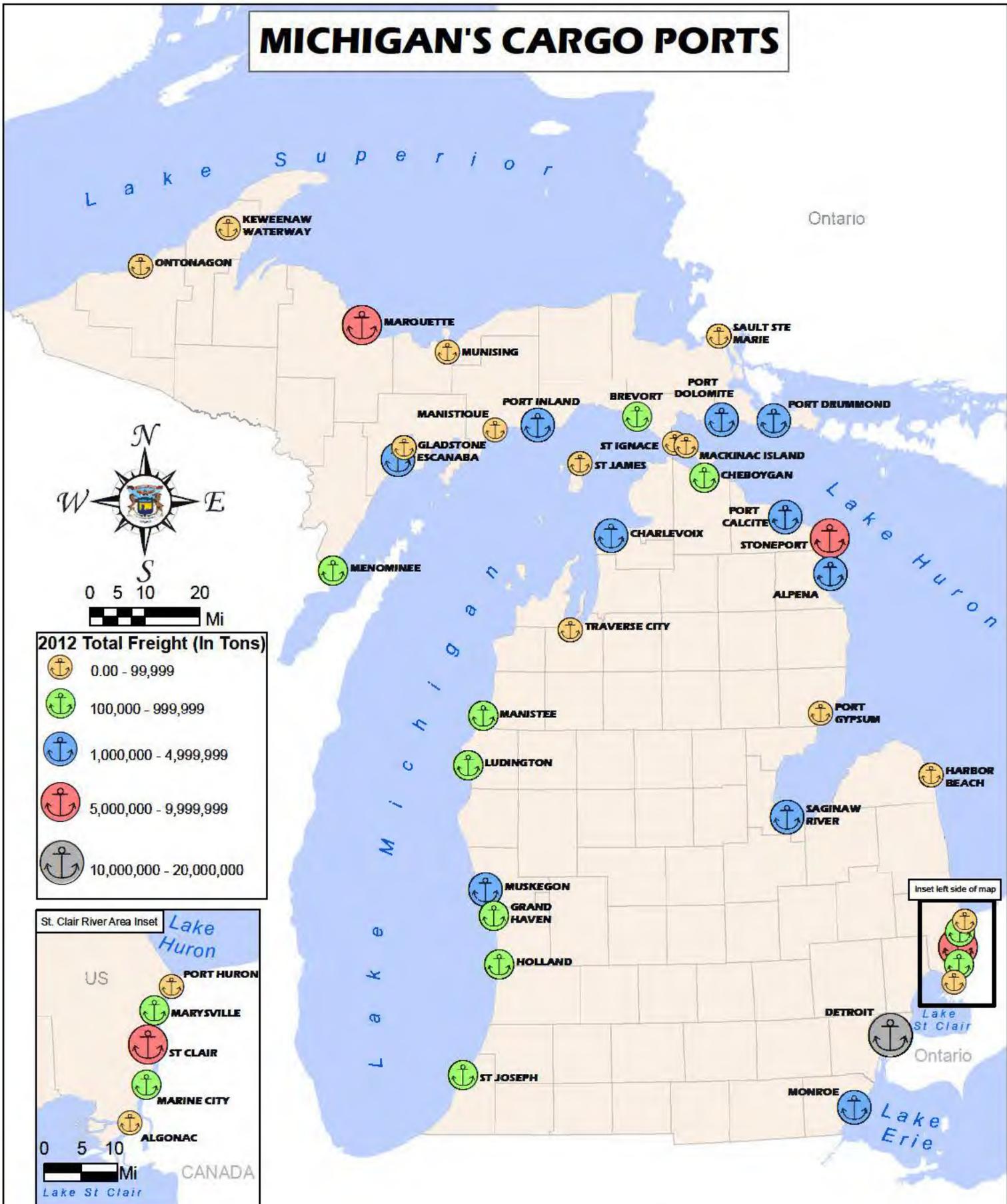
- Acquire additional software to support future growth and offer greater flexibility, leading to expanded services offered by Brāv that will further the goal of providing valuable work opportunities for youth and adults.
- Provide quality certificates to graduates upon successful completion of conflict resolution and leadership games designed to strengthen the arts of negotiation who in turn help resolve the conflicts of others through Brāv's face to face online video chat platform.

**Thank you.**

**Source**

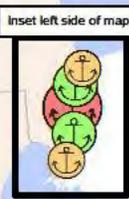
\* [ojp.gov/newsroom/factsheets/ojpfs\\_humantrafficking.html](http://ojp.gov/newsroom/factsheets/ojpfs_humantrafficking.html)  
(Estes & Weiner, 2002a, p.11)

# MICHIGAN'S CARGO PORTS



**2012 Total Freight (In Tons)**

	0.00 - 99,999
	100,000 - 999,999
	1,000,000 - 4,999,999
	5,000,000 - 9,999,999
	10,000,000 - 20,000,000



**From:** [Alexi Chapin-Smith](#)  
**To:** [mi-waterstrategy](#)  
**Cc:** [james@environmentalcouncil.org](#); [pratte@ewashtenaw.org](#)  
**Subject:** Comment from Rep Irwin on draft Water Strategy  
**Date:** Tuesday, August 11, 2015 5:40:01 PM  
**Attachments:** [Office of the Great Lakes Water Strategy comment.pdf](#)

---

Hello,

Please find attached a comment from Rep Jeff Irwin on the draft Water Strategy, "Sustaining Michigan Water Heritage, A Strategy for the Next Generation." I have also copied the text of the letter below my signature.

Sincerely,

Alexi Chapin-Smith

---

Alexi Chapin-Smith

Legislative Aide

District 53 (Rep. Jeff Irwin)

Michigan House of Representatives

517-373-2577

[achapin-smith@house.mi.gov](mailto:achapin-smith@house.mi.gov)

August 11, 2015

Office of the Great Lakes  
Michigan Department of Environmental Quality  
P.O. Box 30473-7973  
Lansing, Michigan 48909

To whom it may concern:

I congratulate the Office of the Great Lakes for your admirable work in drafting a comprehensive water strategy plan. Such forward thinking is particularly necessary in Michigan because of our extraordinary fresh water resources and Great Lakes shorelines. I am grateful for the opportunity to offer constructive comments on the draft on behalf of my constituents. There are three main areas that should be expanded in the final strategy: dealing with climate change, providing for increased stormwater infrastructure, and implementing Michigan's mercury emissions rule.

Climate change is already having an impact on water quality, systematically influencing everything from invasive species to toxic cyanobacteria blooms to catastrophic precipitation. Because the water strategy is meant to be an accurate guide for future action and decision making, it must include an analysis of how climate change will affect water-related environmental outcomes and the methods we plan to use to achieve better outcomes. This

analysis should not be confined to a single area of the strategy. The effects of climate change pervade almost all the areas discussed in the draft strategy, so every chapter should include a discussion of climate trends as they relate to each topic. We cannot plan for the future without considering the best scientific predictions of what will happen in that future.

I also believe the draft strategy would benefit from an explicit commitment to address the challenges and opportunities around stormwater management in our state. As recent events have demonstrated, the Atlas 2 statistical model for 100-year storm events was a gross underestimate for Michigan. Climate change will only make these instances of extreme precipitation more frequent, exacerbating contamination from runoff and overloading antiquated municipal stormwater systems. Many municipalities, including my own district of Ann Arbor, are struggling to accommodate record amounts of runoff and to separate storm and sanitary sewers. Municipalities are very limited in their ability to raise the revenue needed for overhauling stormwater infrastructure, due to a Michigan Supreme Court decision requiring voter approval of stormwater fees. This water strategy should include a strategic path for communities to satisfy their stormwater management needs, coupled with a call for the Legislature to authorize tools such as improved stormwater utilities.

Runoff is a major source of pollution by phosphorus, nitrogen, and pathogenic bacteria in surface water. In order to reduce runoff contamination, the state water strategy should include a recommendation for funds to enable local governments to improve stormwater infrastructure. These funds, in the form of grants or revolving loans, should be available not just for conventional stormwater management but also for bioswales, permeable surfaces, downspout disconnection programs, and other green infrastructure initiatives to mitigate flooding and runoff.

Finally, it is vital that the water strategy include plans to enforce a state rule to protect Michiganders from mercury, in the wake of the Supreme Court decision vitiating the federal mercury emissions rule. The draft strategy recognizes that mercury emitted from power plants is the major contributor to making fish unsafe to eat in our state. The final version of the water strategy should include a strong recommendation that MDEQ fully implement and enforce its Part 15, Air Quality Rules, MAC R.336.2501-2513, to timely reduce mercury emissions from coal-fired power plants. This state rule was in abeyance while the federal Mercury and Air Toxics Standards (MATS) rule was in effect, but the state rule has a clause reinstating it now that the MATS rule is no longer applicable. If the federal government cannot act to save lives and prevent disability in Michigan, our state government must step up to protect our citizens from the deadly effects of mercury.

Thank you again for your work on this strategy to safeguard the people of Michigan and the water resources on which we all depend. I appreciate your careful consideration of the areas of potential improvement I have identified for our state's strategy.

Sincerely,

Jeff Irwin  
Representative, 53<sup>rd</sup> District

CC:  
Evan Pratt, Washtenaw County Water Resources Commissioner  
P.O. Box 8645

Ann Arbor, MI 48107-8645

James Clift  
Michigan Environmental Council  
602 W. Ionia Street  
Lansing, MI 48933

**From:** [Greg Potter](#)  
**To:** [mi-waterstrategy](#)  
**Subject:** comment Michigan Water Strategy  
**Date:** Tuesday, August 25, 2015 8:55:28 PM

---

The Michigan Water Strategy draft was well done. However I do have the following suggestions.

Groundwater, navigable and non navigatable streams should be held in a public trust. The Attorney General should be charged with protecting the citizens of Michigan's interest

All agencies and departments responsible for our waters and fisheries should be organized by watersheds.

Permitting of common practice for dam removals and common habitat projects needs to be streamlined. We have been doing these projects for a while now, not everything is a pilot of demonstration project anymore.

We need to develop common acceptable designs for bufferstrips, stormwater swales and rain gardens to speed up implementation.

Many county drain offices are now water resource commissions. The drain code needs to be rewritten to reflect the change. These offices need to be watershed rather than county based, and permitting standards need to be applied. We have had too many failures through the intercounty system and lack of contractor oversight.

Concentrating on brook trout in our headwaters, sturgeon for connectivity and lake trout for great lakes makes sense. I believe we need to add smallmouth bass as the species of interest on cool water sections of streams and rivers.

Net pen and flow through aquaculture systems need to be treated as CAFOs with site specific and cumulative maximum limits for nutrients and other pollutants with abandonment requirements when limits are reached.

Water literacy needs to be integrated into the K-12 curriculum.

Thank you the opportunity to comment,

Greg Potter  
906 S Kalamazoo Ave  
Marshall, MI 49068  
(269)781-5700

[Sent from AT&T Mail on Android](#)

**From:** [RSpencer](#)  
**To:** [mi-waterstrategy](#)  
**Cc:** [ogarl@baycounty.net](#)  
**Subject:** Comment on DRAFT Sustaining Michigan Water Heritage, A Strategy for the Next Generation  
**Date:** Monday, August 24, 2015 2:15:09 PM  
**Attachments:** [20150824 - ltr to DEQ - Comment on Sustaining Michigan Water Heritage.pdf](#)

---

Good day -

Attached are Comments on the Draft Sustaining Michigan Water Heritage, A Strategy for the Next Generation from Richard M. Finn, City Manager, City of Bay City.

Thank you for the opportunity review and comment.

Kind regards,

Roberta Spencer  
Executive Assistant  
City Manager's Office  
989-894-8246

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**From:** [Margaret Weber](#)  
**To:** [mi-waterstrategy](#)  
**Subject:** comment on Draft Sustaining Michigan's Water Heritage  
**Date:** Monday, August 03, 2015 4:52:28 PM

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Aug 3, 2015

Thank you for the draft document Sustaining Michigan's Water Heritage, and the work to craft a 30-year strategy for protecting the Michigan's water resources.

I respectfully submit the following suggestions for strengthening the "moral/social imperative" of this endeavor:

1. As others commented at the Detroit hearing, the importance of "Inspire Stewardship for Clean Water" is key. Thus, placing it at the TOP of the list of the list under "strategic action," page 3-4 draft. Placing the inspiration piece first makes it clear that energy and inspiration will underpin all the other commitments.
2. Related to the above point, I urge that the Vision and Introduction connect to the global recognition of the importance of water, i.e., the UN's Human Right to Water, and affirm Michigan's commitment to the Human Right to Water. The World Economic Forum is cited, but not the United Nations.
3. I did not see noted that the Great Lakes is one fifth of the Earth's surface fresh water. That lends great social and moral need for leadership in stewardship.

In short, please build the case for this strategy from the social and human, not solely the business and economic perspective. All important, but it feels "light" on the social contract side.

Thank you for your work.

Margaret

Margaret Weber  
Convener, Zero Waste Detroit

Coordinator  
Rosedale Recycles  
15015 Piedmont  
Detroit, Mi 48223  
[weber@igc.org](mailto:weber@igc.org)  
313-938-1133

**From:** [Sarah Nash](#)  
**To:** [mi-waterstrategy](#)  
**Subject:** Comment on the Draft Michigan Water Strategy  
**Date:** Friday, August 28, 2015 2:48:51 PM

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To Whom it May Concern,

My name is Sarah Nash. I am the coordinator of the Justice, Peace and Sustainability Office for the IHM Sisters of Monroe, Michigan.

As you continue to develop the Michigan Water Strategy, I encourage you to think about and refine this strategy using a "Public Trust" framework.

From the FLOW Website <http://flowforwater.org/>:

*"The Public Trust Doctrine holds that certain natural resources like navigable waters are preserved in perpetuity for public use and enjoyment. The state serves as a trustee to maintain the trust or common resources for the benefit of current and future generations who are the beneficiaries. Just as private trustees are judicially accountable to their beneficiaries, so too are state trustees in managing public trust properties.*

*In addition, any private, public or commercial existing or proposed use, diversion or discharge cannot harm the waters of the Great Lakes by materially reducing the flow, changing the levels, or polluting the waters of the Great Lakes Basin. Furthermore, those who seek to use, continue to divert or alter the waters of the Great Lakes Basin, have the burden of proof to show they will not impair, pollute or harm the water. If they do not satisfy this burden of proof, the proposed action is not permitted under the public trust.*

*Lastly, under the public trust, the waters of the Great Lakes Basin can never be controlled by or transferred to private interests for private purposes or gain. Our rights to use the water of the Great Lakes Basin cannot be alienated or subordinated by our governments to special private interests; this means that all reasonable private use and public uses may be accommodated so long as the public trust waters and ecosystem are not harmed and paramount public right to public uses are not subordinated or impaired. Because many citizens are not aware that the public trust doctrine is part of their bundle of rights in our democracy, many of our leaders and big business are ignoring and violating these principles."*

I believe that consideration of this framework will serve you well. It is critical that we think of, value and protect our water not merely as a natural resource to be leveraged but as a priceless part of the commons.

Thank you for your consideration.

Sarah Nash  
Coordinator, IHM Justice, Peace and Sustainability Office  
IHM Sisters – Monroe, Michigan  
Deep Faith. Courageous Spirit. Action for Justice

Direct: (734)240.9691  
[www.ihmsisters.org](http://www.ihmsisters.org)

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Urged by the love of God to respond to the most serious needs of our time, we pursue justice, peace and sustainable ways of life.

For information about the IHM Sisters, visit <http://www.ihmsisters.org>

Electronic Mail is not secure, may not be read every day, and should not be used for urgent or sensitive issues.

**From:** [Chris Boyle](#)  
**To:** [mi-waterstrategy](#)  
**Subject:** Comment on Water Strategy Document  
**Date:** Tuesday, July 14, 2015 6:23:07 PM

---

I would like to make a comment regarding the water based recreation section of the strategy. I own a kayak rental business in Port Austin. I have been open for 9 years. My mission is to get people on the water so they will have a good experience and want to protect the Great Lakes. I have kayakers that drive to Port Austin from all over the state and Midwest for the day just to kayak. My business has been doubling the past three years. I have made significant investments in Port Austin and am opening another business next year because of water based recreation. I have been featured in the Pure Michigan Magazine several years. I have been featured on Under the Radar. We invite people to Port Austin to Kayak to Turnip Rock and they have come in masses. I cannot keep up this year with the number of people that want to kayak.

My customers kayak 3.5 miles out to Turnip Rock. Turnip Rock is in the water. However, the area around it is surrounded by a private gated community. The community has hired guards to chase kayakers that rest at Turnip Rock off the shore. We invite all these tourist to visit the area and a few residents in a gated community ruin the experience by being rude.

If you are going to promote recreation on the Great Lakes you have to address the issues with the Public Trust. Michigan's shoreline should be available for all residents to use and enjoy--not just the people that can afford waterfront property. Tourist should be allowed to pull their kayaks on shore to take a break, eat a snack and take some pictures. The residents of the gated community are not allowing this and are intimidating the tourist with guards. If you allow more access points to the great lakes this is going to become a bigger issue in the future. The fight over beach rights is already heated. Shore line rights have to be straightened out. It should be straightened out to allow more access to more people. This will make Michigan a destination for more people. The more people that get to enjoy the beauty of our shoreline the more they will want to protect it.

Chris Boyle  
Owner, Port Austin Kayak  
  
[www.portaustinkayak.com](http://www.portaustinkayak.com)

**From:** [Jim Diana](#)  
**To:** [mi-waterstrategy](#)  
**Subject:** Comment on water strategy  
**Date:** Friday, August 28, 2015 9:11:39 AM  
**Attachments:** [water strat letter.pdf](#)

---

Our comment is attached.

Jim.

\*\*\*\*\*  
James S. Diana, ([jjmd@umich.edu](mailto:jjmd@umich.edu))  
Director, Michigan Sea Grant College Program  
Professor of Fisheries and Aquaculture  
School of Natural Resources and Environment  
University of Michigan, Ann Arbor, MI 48109-1041  
Phone: 734-763-5834; Fax: 734-936-2195  
Lab Website <http://sitemaker.umich.edu/diana.lab/home>  
\*\*\*\*\*

**From:** [Charter.net](#)  
**To:** [mi-waterstrategy](#)  
**Subject:** Comment  
**Date:** Sunday, August 23, 2015 7:25:37 AM

---

Please do not forget to account for the severe drop in lake levels forecast due to global warming!

**From:** [Patrick Jacuzzo](#)  
**To:** [mi-waterstrategy](#)  
**Subject:** Comments - Goal 2 Statewide Sanitary Code  
**Date:** Thursday, July 16, 2015 9:29:22 AM

---

Hello:

I have not read the water strategy in it's entirety. However, as a local Environmental Public Health Official, I strongly recommend that the proposed Statewide Sanitary Code listed under Goal 2 include a robust "point of sale" inspection program.

A "point of sale" program will enable local Environmental Health Divisions within Public Health Departments to identify all existing on-site wastewater systems that are failing, or improperly functioning, at the time of a real estate transaction. This will significantly reduce contaminant additions to the surface waters and ground waters of the State. This ordinance should also address water supply construction inspections at the time of a real estate transaction. Improperly constructed and maintained water supply wells can contribute significant risk to the groundwater resource. Local Public Health officials should be involved in drafting this language.

Currently, the majority of local health departments do not possess the legal framework to conduct these inspections and are limited to permitting activities as voluntarily requested by property owners.

Another benefit would be to mandate 100% final inspection on newly permitted water supply wells to ensure that they are properly located and constructed... This will provide additional protections to the groundwater resource.

And as always....Adequate funding for Public health will ensure continued protection of our ground water and surface water resources.



Patrick L. Jacuzzo, MS, REHS  
Director of Environmental Health  
Marquette County Health Department  
184 US 41 East  
Negaunee, MI 49866  
(906) 475-4195  
(906) 475-6500 Fax  
[www.mqthealth.org](http://www.mqthealth.org)

**From:** [Gildo Tori](#)  
**To:** [mi-waterstrategy](#)  
**Cc:** [Jason Hill](#)  
**Subject:** Comments from Ducks Unlimited Great Lakes/Atlantic Region  
**Date:** Friday, August 28, 2015 9:07:01 AM  
**Attachments:** [image001.png](#)  
[DU Comments on Final Draft.pdf](#)

---

Please find our comments attached. Thanks for the immense amount of work put into this plan, and for the opportunity to be part of it all.



**GILDO M. TORI**  
*Director of Public Policy  
Great Lakes/Atlantic Region  
1220 Eisenhower Place, Ann Arbor, MI 48108  
734.623.2000 office • 734.623.2035 fax  
www.ducks.org*

**From:** [George Carr](#)  
**To:** [mi-waterstrategy](#)  
**Cc:** [Bud Sebastian](#); [Richard Layman](#)  
**Subject:** Comments from MGWA  
**Date:** Monday, August 31, 2015 2:09:16 PM  
**Attachments:** [MGWA Response to Draft Water Strategy.pdf](#)

---

Please accept the following comments and include them in the record.

Thank You

**From:** [John Loftus](#)  
**To:** [mi-waterstrategy](#)  
**Cc:** [DENNIS H. MARVIN](#); [plamarre@portofmonroe.com](mailto:plamarre@portofmonroe.com); [Kyle Burleson](#)  
**Subject:** Comments from the Detroit Port Authority  
**Date:** Friday, August 28, 2015 3:00:04 PM  
**Attachments:** [Marine Strategy comments.docx](#)

---

Attached please find comments drafted by the Detroit Port Authority with input from other members of the maritime community. If you have any questions or concerns please contact me at (313) 259-5091.

Thank you for your time and attention.

John Loftus.

**From:** [Laura Rubin](#)  
**To:** [mi-waterstrategy](#)  
**Subject:** Comments from the HRWC  
**Date:** Friday, August 28, 2015 2:55:18 PM  
**Attachments:** [image001.png](#)  
[water\\_strategy\\_comments\\_2015.pdf](#)

---

Thank you for the opportunity to comment on the State's Water Strategy. We applaud the effort and vision of the OGL and others involved in the drafting.

Please find our comments attached.

Sincerely,  
Laura

**Laura Rubin**

Executive Director

[Huron River Watershed Council](#)

1100 N. Main Street, Suite 210

Ann Arbor, MI 48104

734.769.5123 x 606

Cell: 734.678.2434





**TOM CASPERSON**  
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FAX: (517) 373-3932  
sentcasperson@senate.michigan.gov

August 28, 2015

Office of the Great Lakes  
Michigan Dept. of Environmental Quality (DEQ)  
PO Box 30473-7973  
Lansing, MI 48909

To Whom It May Concern:

We appreciate the opportunity to review and comment on the draft Water Strategy entitled "Sustaining Michigan's Water Heritage." As Michigan is blessed with the abundant water resources that we all value, the effort to plan and address issues where they exist is important.

After reviewing the voluminous draft strategy, we offer the following points as highlights of some thoughts for consideration:

- Appreciate references in the introduction to the use of water for various purposes including for drinking, use by industry, recreation, wildlife, etc. Maintaining use of water resources and truly balancing that use with other objectives will be crucial to the success of Michigan and our residents in the future (pages 1 and 2).
- Would exercise caution in recommending or pursuing any actions that could lead to the unnecessary or over-regulation of water resources (page 3 middle).
- Appreciate the efforts to ensure aquatic ecosystems are resilient and diverse though we hope common sense is maintained in the discussion (page 6). The problems with blue-green algae are a concern that need addressed to help with water quality issues, particularly around Cleveland. We were asked recently though if it's possible to determine how much of the phosphorous in Lake Erie is from Ohio and Ontario.
- Share the desire for there to be safe drinking water for all but wonder if the measure of success (100 percent of the population has safe drinking water with no reported violations of health-based standards) for Goal #2 is realistic (page 8). Also, if there is a bad test result of a well for example, what happens? Condemnation of property, bleaching, new well requirement, etc? We can foresee this causing concerns with funding and compliance.
- Wonder about the potential creation of a "water fund". Where would funding come from and is this as well as other parts of the strategy a way to grow government (page 8)?
- Curious about the measure of success for Goal #7 on achieving a "net stabilization of groundwater depth across the state" (page 8).
- Concern with the measure of success for Goal #8 which says "By 2030, achieve a 40% reduction in number of designated uses or impaired waters" (page 8). Not much more information is included about such a statement, but it raises questions of what that means and who it will impact?
- Appreciate the reference to preventing new aquatic invasive species (AIS) and controlling existing (AIS) as this issue is routinely mentioned in our districts as an issue by constituents (page 12).
- Regarding riparian systems and checking upstream and downstream of rivers, etc, causes some concern about where this effort may lead with regard to private property rights and impacts on landowners (page 15).

- In regards to managing groundwater withdrawals, this statement caught our attention as it seems to call into question use of groundwater while we have heard that the current approach to evaluating groundwater use lacks a solid scientific basis and needs real improvement: *“Despite the large volumes of surface and groundwater in Michigan – more than one quadrillion gallons by some estimates – there is growing concern about its use and about groundwater withdrawal effects on environmental function and integrity. Groundwater use and value is increasing, and the state must invest in the information and decision systems to realize groundwater’s full value, promote its wise use, and protect its hydrological and ecological integrity.”* As discussed in the past, before any additional regulation is discussed on use, and in the interest of improving the basis of current regulation such as the water withdrawal assessment tool, it is important for better science and data to be on hand (page 16).
- More discussion should be had regarding changes to existing dams (page 15) as we often hear from constituents on issues related to dams.
- Where are the priority watersheds that have degraded water quality and/or aquatic ecosystems due to nutrient runoff and soil erosion (page 18 recommendation)?
- Appreciate the reference to focusing resources on contamination sources with the highest potential for causing contamination of drinking water supplies (page 22) as financial resources to address all potential problems are limited and we need to prioritize.
- Concern with the unknown aspects of what may be pursued relative to well testing (page 22).
- Concern with the recommendation to develop and implement a “uniform statewide sanitary code” and “inspection requirements” as it is not apparent that systems in rural areas are causing problems to be concerned about at the state level (page 23). It would depend a great deal on what is meant by “periodic”.
- Concern with various references throughout the strategy to what conceivably would be very significant financial resources needed to address various recommendations (Page 24 for example). The Legislature is designated as the “lead actor” on most of these funding items. Given fiscal and political constraints, we question the reality of accomplishing certain recommendations.
- Support references to use and increased access on water bodies across the state and efforts to improve commercial and recreational opportunities. Would ask that all areas are considered and not just areas that are more densely populated (page 33 for example).
- Appreciate references to marketing Michigan for business creation and investment because of our abundant natural water assets. With this in mind, we need to maintain and promote policies resulting in wise and balanced use vs the mentality of over-protection (page 36).
- Appreciate the references to reuse, recycling and grey water (page 38).
- Also appreciate the reference to aquaculture and recognition that there is opportunity for growth within the industry. However, the emphasis on closed-loop or recirculating systems over other types of aquaculture, such as commercial net pens, is troubling. The Michigan Aquaculture Association’s (MAA) current strategic plan proposes that Michigan’s aquaculture sector can grow from \$5 million annually with 100 direct jobs to more than \$100 million with 1,500 direct jobs. That growth will not happen solely from recirculating systems. Commercial net pen operations have been in operation in Ontario for years and should be allowed to operate in Michigan. Having an abundance of fresh water, we need to keep an open mind about different types of aquaculture and how it will take all types to grow the aquaculture industry in Michigan (page 38).
- Curious about the following comment on page 43: *“During public outreach for the Water Strategy, many residents suggested either putting a fee on water for all or some groups of water users – in its simplest form, a per gallon charge for water as it comes from the environment.”* How many people made this comment and were they affiliated with a particular group, etc?

- Appreciate the attention to investing in water infrastructure as we commonly hearing about infrastructure update needs from communities and constituents. Are there ideas currently in mind for “establishing sustainable funding mechanisms to achieve water strategy goals including water infrastructure management” (page 45)?
- Reference is made to the MDEQ Environmental Advisory Council. Who is part of this council (page 52)?
- A recommendation is made for the evaluation and implementation of necessary changes to laws including state and local land-use statutes as well as the drain code. Who will be involved in making such recommendations to change various statutes (page 53)?
- Curious about what would be added to state of Michigan curriculum regarding water resources (page 56).
- Concern with the “implementation metric” for local health departments to assess and inventory all private septic systems by 2020 (page 62).
- Water policies may need to vary by region. A one-size fits all approach will not work when water usage and availability varies greatly across the state.

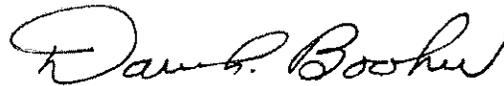
Overall, we appreciate having the discussion on Michigan’s water resources and see the value in pursuing some of the included recommendations; however, much of the strategy and what may result is undefined and causes some concern about the potential cost and growth of government and who ultimately will make certain decisions that will impact Michigan residents, businesses and private property.

Thanks again for the opportunity to comment.

Sincerely,



Tom Casperson  
State Senator – 38<sup>th</sup> District



Darwin L Booher  
State Senator 35<sup>th</sup> District

**From:** [John](#)  
**To:** [mi-waterstrategy](#)  
**Cc:** [Wayne Kiefer](#); [Fred Levantrosser](#)  
**Subject:** Comments on Draft Sustaining Mi water  
**Date:** Friday, July 31, 2015 10:21:42 AM

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I am John W Smith, who along with Wayne Kiefer, we are writing a book entitled Michigan 21st Century Geography, and are well under way on the water and transportation chapters.

I attended the Detroit public hearing in late July, 2015 and herewith are my comments on the well-written and well-researched draft.

Page 21 Abandoned wells estimated at two million must be seen in the context of other abandonments, such as whole ghost towns, mines, collector natural gas lines and unlicensed garbage pits. Together they constitute a category that needs state legislation on their registration and systematic remediation. This turns out to be one of the themes of our volume.

Page 29 Port infrastructure is a major category in water management> It also should include underwater transfer points from land under water and back to land. In addition to the well-publicized Mackinac Enbridge pipeline, there is a major pipeline transfer in East China Township under the St Clair River that is best viewed not on a state-sponsored map, but on the Michcon Michigan Gas Transmission map, 2003 edition. In addition, there are more miles of water pipeline than oil; and gas combined, notable the under-construction Flint and Saginaw County supply line with an inlet separate from the Detroit Water and Sewer system.

Page 72 Item 6. The chemical industry led by Dow and the pharma industry collectively should be permitted or mandated to identify their products that are toxic or health hazards if concentrated beyond parts per million or billion and such data supplied to DEQ or DNR as a precondition for all state tax incentives and loans. As you know a majority of all patented chemicals in the United States have not had their toxicity tested prior to commercial manufacture or distribution nationally.

Pages 15 and 59 discuss dams. I place more importance on these infrastructure projects than the authors of this report because they constitute one of the major non permitted land use categories in the state and a majority have never been reviewed for engineering safety nor and criteria of need. Their listing should be made part of the public record and not kept as a state secret as a threat to public safety by potential terrorists. A complete review of unknown owners ought to be a priority and all such orphans be scheduled for decommissioning. Also, the dam creates backflows that are euphemistically called lakes, many located on property not owned by the constructor of the dam. In some Michigan counties they consist of a majority of all lakes. This needs systematic review.

Page 42 Chapter 6 needs to have dams listed as infrastructure.

Pages 33 and 64. My major suggested modification relates to the concept as we would use it in Political Science of access. As a matter of justice or right, all citizens of Michigan ought to have a fundamental right to access of water for purposes of personal use, that is to say consumption, and for recreation. The key term is access. The Detroit City water cut-offs for nonpayment of bills denies many citizens to water, which like air, cannot be made a commodity. It is not a matter of affordability but of access pe4 se.

Page 44. Water Infrastructure included pipelines carrying water. There are so many more miles of pipes carrying water than oil and gas that geographers have missed the basic fact that of the five major modes of transportation, pipes carrying water measured by weight, not volume, are not the least of the big five!

Page 66. The major issue with calculating the impact of water end users is that in Michigan we have no metric for irrigation consumption. California does in so far as it is transported by surface and not from wells. This report fudges on the percentage of water use by farmers because we have no idea within a magnitude of what it might be, dry or wet years. The variability by season, crop, climatic condition, and leakage all must be calibrated.

Finally, generally, I wish to end with the wise advice given me by a Jordanian Bedouin, who observed that the major consumption of water in that Middle Eastern nation was the sand, through leakage. Welding pipe without flux with a low flame is not conducive to sustainable water consumption. It is a matter of better trained plumbers, or addressing the Michigan case, of conducting vigilant inspections of pipe connectors that would most improve our water stewardship.

Thank you for producing a well-reasoned document. You are to be commended for seeing the big picture, internationally, by watershed, and over time. John W Smith [REDACTED]

[REDACTED] July 31, 2015

**From:** [Eric Harrington](#)  
**To:** [mi-waterstrategy](#)  
**Subject:** Comments on Draft Water Strategy  
**Date:** Monday, August 24, 2015 3:03:47 PM

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Table 1: Goal 1: Isn't the phosphorus load in the western Lake Erie basin primarily influenced by agricultural runoff from the Maumee River watershed? If so, how much influence can Michigan have?

General: All goals should have measurable criteria. "Appropriate", "Reduction in..." are not measurable, at least not in a meaningful way. I can meet a goal that says "reduction" by a 0.00000001% reduction, but that does not accomplish anything.

Table 1, Goal 3: Shouldn't shipping channels be included in the second bullet?

P. 11, 2nd paragraph: Add discussion of the intensity of extreme weather events in terms of what the changes have been and what they are forecasted to be.

P. 15, last paragraph: I don't think focus is the right word in this recommendation.

P. 18: What about recommendations to employ soil-building techniques that can help retain water in the soil, and cropping techniques like no-till that can minimize runoff?

P. 25, 1st recommendation: Add "and/or products containing microbeads". It's not really sale of the microbeads that is the problem, but rather products containing microbeads.

P. 25, last bullet: Add something about developing technologies to remove such pollutants in treatment works, although removing them upstream (pollution prevention and green chemistry) is definitely more desirable.

P. 28, last paragraph: What are the predicted impacts of effects of climate change on water levels and the potential need for additional dredging due to lower wter levels (if any)?

P. 42, last paragraph: Rates should be the other way around to encourage conservation. There are other municipalities that have figured this out so as to not significantly impact the utilities.

P. 43, 1st paragraph: Should consider whether lower water use can lead to lower wastewater velocities in sewers and result in sedimentation of solids in the pipes.

P. 43, 2nd paragraph: What about a fee for "embodied water" in products? This would also address the issue of exporting our water in plastic bottles.

P. 43, 3rd paragraph: Should discuss the ASCE grading of water and wastewater systems.

P. 43, last paragraph: Need to find a way to get around water shutoffs. Water is essential to life and people should not be deprived of it due to inability to pay for it. On the other hand, we should not be encouraging freeloaders.

P. 45: Should discuss impacts of inflow/infiltration, leaking systems, trends in catastrophic maintenance and restoration as opposed to routine maintenance.

P. 54: Consider establishing drain commissioner authority on a watershed basis, not by human political units such as counties.

P. 57: "Pure Michigan - Let's Keep It That Way!"

General: Address threats to water resources from pipeline failures or marine accidents.

General: Consider addressing issue of embodied water in products.

Thank you for the opportunity to provide comments on this strategy.

--

**Eric Harrington**  
Sustainability Consultant

**Green Advantage Consultants**  
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Chelsea, MI 48118 USA

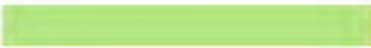
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[The Green Advantage Blog](#)

Sustainability is smart...  
business smart!



**From:** [Dawn](#)  
**To:** [mi-waterstrategy](#)  
**Subject:** Comments on Draft Water Strategy  
**Date:** Friday, August 28, 2015 11:51:59 PM

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I am a board member of *The Presque Isle Alliance for the Protection of Watershed and Natural Resources*, a private non-profit in Presque Isle, MI. I have the following comment on the water strategy plan.

New mines and quarries are effectively exempted from local zoning control except where they lead to "very serious consequences" under MCL 125.3205. This removes local control and input from the proper location of extractive activities, which have been shown to cause significant water pollution and serious impacts to lake levels due to reduction in watershed and dewatering activities. Our input into the Water Strategy Plan is to return to local authority on zoning for mines and quarries by repealing MCL 125.3205.

Thanks you for your consideration.  
Dawn L. Solomon

Sent from my iPad

**From:** [Benjamin Wickerham](#)  
**To:** [mi-waterstrategy](#)  
**Cc:** [Mary Fales](#)  
**Subject:** Comments on draft Water Strategy  
**Date:** Friday, August 28, 2015 5:19:17 PM  
**Attachments:** [image001.png](#)

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To Whom It May Concern,

Thank you for the opportunity to comment on the draft Michigan Water Strategy. There are many facets of this plan that correspond to our scope of work, goals and long-term strategies for water quality. Specifically, there are four main comments/concerns we would like to offer from a water quality standpoint for you to consider:

1. We support the Strategy for its comprehensive breadth and ecosystems approach to managing all the state's water resources.
2. We recommend the Strategy approach the Water Fund concept in Strategic Action 6 (Chapter 6) from a water quality standpoint, instead of just a water quantity (withdrawal/use) standpoint. Perhaps look into a framework of nutrient credit trading?
3. Consider expanding the list of Michigan Water Protection Activities in Appendix 3. In its current extent, the list excludes several key federal and regional water quality related programs and initiatives.
4. Clarify what is meant by "water management systems" on page 38 when discussing efficient use of water for agriculture. Is this specifically regarding irrigation, overall water use, or drainage water management?

I and/or other Michigan TNC staff are available to provide more information on any of the above topics if needed. Furthermore, we welcome any opportunity to participate in current or future water resource planning efforts.

Thank you again for your consideration.

Respectfully Submitted,

Ben Wickerham,

**P.P. Mary Fales, Saginaw Bay Watershed Project Manager**

---

**Ben Wickerham**  
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**The Nature Conservancy**  
**Michigan Chapter & Great Lakes Project**  
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Lansing, MI 48906  
[nature.org](http://nature.org)



**From:** [Jay Richardson](#)  
**To:** [mi-waterstrategy](#)  
**Subject:** Comments on Great Lakes Water Strategy  
**Date:** Thursday, August 27, 2015 11:35:59 AM  
**Attachments:** [Water Strategy Review SWW 8.18.15.docx](#)

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Attached are Sustainable Water Works (a Michigan 501(c)(3) water policy and technology organization) comments on the Michigan Draft Water Strategy. We are very supportive of this strategy and believe Michigan can be a leader in sustainable water development for the benefit of all citizens, visitors and businesses.

**Jay Richardson**  
[Sustainable Water Works!](#)  
[248 767-2031](#)

**From:** [Molly Flanagan](#)  
**To:** [mi-waterstrategy](#)  
**Subject:** Comments on Michigan's Draft Water Strategy  
**Date:** Thursday, August 27, 2015 10:33:13 PM  
**Attachments:** [Michigan Water Strategy Alliance and NWF Final.docx](#)

---

Attached please find comments from the Alliance for the Great Lakes and National Wildlife Federation on Michigan's Draft Water Strategy. Thank you for the opportunity to submit these comments. We appreciate your consideration.

Best,  
Molly

Molly M. Flanagan | Vice President, Policy | [mflanagan@greatlakes.org](mailto:mflanagan@greatlakes.org)  
Alliance for the Great Lakes | [www.greatlakes.org](http://www.greatlakes.org)  
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Protect Your Lakes at <http://takeaction.greatlakes.org/subscribe>



**From:** [Matt's Hotmail](#)  
**To:** [mi-waterstrategy](#)  
**Subject:** Comments on Michigan's Water Strategy  
**Date:** Monday, August 24, 2015 8:44:45 AM

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Thank you for the thoughtful, inclusive draft report. I found the information contained in the report useful to understanding what a comprehensive strategy should entail. One element that I found specifically lacking was a means to address plant based invasive species. The report cited Aquatic Invasive Species (zebra mussels for example) and Wetlands Management (riparian management) but did not specifically call out a plan to address Phragmites. As a lakefront homeowner in the Thumb, I would very much like to see a plan to eliminate Phragmites completely. The impact of this invasive species to the waterfront is significant and entirely negative.

Potential solutions (in the spirit of offering suggestions in addition to highlight the problem) might include:

- Require treatment/removal by responsible land/home owner
- Coordinated state level activities to remove Phragmites
- Community level (municipality) activities to remove Phragmites

We actively manage Phragmites on our lakefront properly (generally in accordance with guidelines the MIDEQ has provided). There is both a cost and a benefit to our investment. However, each lakefront property owner has the leeway to leave their shoreline untreated for Phragmites. The lack of a coordinated approach to management (removal) of the plant has in my opinion a negative effect that is felt all, not just by the unengaged lakefront property owners. I understand and am in full support of natural transition zones from land to water, but the ecosystem has been severely disrupted by the introduction of the Phragmites.

Thank you for including my feedback in the study.

Matt Davis

## Comments On:

### Michigan Office of Great Lakes'

#### Sustaining Michigan's Water (30 year plan)

I am drafting these remarks as the Water Resource Technician in the Environmental and Planning department for the Lac Vieux Desert Band of Chippewa (LVD). These comments shall not be considered as consultation with LVD, and may not be considered as the opinion of the LVD Tribal Council.

- Tribal consultation and collaboration with LVD needs to be addressed, and maybe the other federally recognized tribes. Being employed in my current position for more than three years, I had little to no knowledge until a MTEG meeting in June when the draft was available for previewing, the State of Michigan was preparing this position document. Development of Government-to-Government relationships is vital to the planning and implementation of action to restore, preserve, and protect the aquatic ecosystems the tribal nations honor, respect, and are dependent on for their way of life.
- *Table 2 Goal 1#1:* Consider adding a review, re-evaluation and revision of the Aquatic Resource list as it pertains to threatened and endangered species. Specifically, the status of wild rice (all species) in the state of Michigan. This resource was one present throughout the state (i.e. Tawas and Houghton Lakes). The LVD tribe has encountered many hardships with their Wild Rice Restoration project which was started in the late 1980's, and recently the other tribes in Michigan have initiated Wild Rice Restoration projects. The project has remained a priority project and the successful restored sites are in dire need of minimal protection and enforcement. *Under the Implementation Metric:* by 2020, the ecological separation of the Great Lakes Basin from the Mississippi River Basin is a concern. A portion of the LVD properties, and an initial site of the Wild Rice Restoration project is in the headwaters of the Wisconsin River watershed which is part of the Mississippi Basin. Additionally, the tribe in partnership with other stakeholders are jointly addressing both aquatic and terrestrial

invasive species and the decline of walleye populations in Lake Lac Vieux Desert.

- *Table 2 Goal 1#3:* Could the research and solutions consider seeking answers to the reemergence of Wild Rice beds in Saginaw Bay? This could assist with the answers to its original disappearance for several decades.
- *Table 2 Goal 1#5:* Consider measures to reduce phosphorus levels in all waters which have the designation of being impaired, or put them at risk of producing HAB's. With the exploration of potential mining in the western part of the Upper Peninsula, consider setting sulfate levels in water and setting sulfite levels in the sediment. This would be a proactive approach to preserving the established rice beds which are currently in jeopardy for various other reasons.
- *Table 2 Goal 1#11:* The tribe is currently working with the stakeholder in the turning over of a repaired dam, to reestablish a previous wild rice bed which may have sustained damage with the lowering of the flooding to do the repairs. Other stakeholders have offered support for the restoration/enhancement of the wild rice bed. This could be done at other sites.
- *Table 2 Goal 2#4:* There should be more preventative measures regarding chemical and oil disasters, more oversight and inspections on infrastructure which are exceeding its life expectancy (i.e. line 5 under the bridge). It's an excellent idea to do emergency planning and preparation in the absence of the ability to demand upgrading and maintenance on the aging infrastructure. Many current and ongoing practices need to be addressed as they are identified as the threat clean water.

Overall, this is a great start to bring awareness to the fact our water is in need of healing. The LVD tribe has been in the process of developing relationships with stakeholders to implement many of the recommendations within the document.

These are the immediate concerns or thought I have, by no means complete.

Roger LaBine

Water Resource Technician

Lac Vieux Desert Band of Lake Superior Chippewa

**From:** [Tom Rayburn](#)  
**To:** [mi-waterstrategy](#)  
**Cc:** [James H. I. Weakley](#); [Glen Nekvasil](#)  
**Subject:** Comments on the 4 June 2015 "Sustaining Michigan's Water Heritage" Strategy Document  
**Date:** Tuesday, July 21, 2015 3:53:25 PM  
**Attachments:** [Sustaining Michigan-Lake Carriers Association Review-21 July 2015.docx](#)

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Ms. Finnell,

Please find attached the comments from the Lake Carriers' Association's (LCA's) review of the 4 June 2015 draft "Sustaining Michigan's Water Heritage, a Strategy for the Next Generation". We greatly appreciate the opportunity to review and comment on this important document. Overall, we found it well written, comprehensive, detailed, thoughtfully presented, and implementable. LCA did have some comments related to commercial shipping, the supporting infrastructure, investment priorities, and related discussions on policy.

If you have any questions or require further clarification on our comments, please contact us at your convenience.

Regards,

Thomas Rayburn  
Director of Environmental and Regulatory Affairs  
Lake Carriers' Association  
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**From:** [Rippke, Molly \(DEQ\)](#)  
**To:** [mi-waterstrategy](#)  
**Subject:** Comments on Water Strategy  
**Date:** Wednesday, June 10, 2015 10:39:21 AM

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Clearly, our theme of “Pure Michigan” relies on clean water, and clean beaches are important to our citizens and visitors. However, in 2013, the MDEQ estimated that 48 percent of the rivers and streams exceed the Total Body Contact Recreation (swimming) designated use and 20 percent of monitored beaches have had closures due to bacterial pollution. Keeping the people of Michigan and our visitors safe while recreating in Michigan’s waters is an MDEQ priority. To help attain the goal of enhancing recreational waters and tie together the efforts that Michigan continues to expend on reducing *E. coli* contamination of surface waters, the MDEQ has made it a priority to develop a statewide pathogen (*E. coli*) Total Maximum Daily Load (TMDL) for all waters in Michigan that are not swimmable due to bacteria. The TMDL is a document required by the Federal Clean Water Act that will define the sources of *E. coli*, and provide a plan to limit bacterial pollution from point and nonpoint sources.

Goal 1 – In addition to the recommendations listed, I would making it a priority to **reduce agricultural runoff into our lakes and streams by limiting or regulating manure and fertilizer application near surface water.** While focusing on Lake Erie makes sense because of recent issues there with algae, it would be proactive of us to focus on reducing nutrients to all waters. Maybe rephrasing the recommendation in goal 1 to say “Achieve phosphorus reduction loading to the Great Lakes, including a 40% reduction in the western Lake Erie Basin”.

Goal 2 and 4- Goal 4 is to create water trails to support water-based recreation and Goal 2 is to ensure clean and safe waters. I am very happy to see the sanitary code listed here! This will be very helpful for making progress on our statewide *E. coli* TMDL.

The success of achieving both of these goals rely heavily on reducing bacterial pollution of our rivers, streams and even “drains”.

While expanding beach monitoring is a helpful and good thing, it will not entirely address the sources of bacterial pollution. If the DEQ wishes to increase the use of our rivers through the creation of water trails, reducing bacterial pollution to the rivers should be a priority (see my comment above about Goal #1).

One of the measures of success in Goal 4 is to have 90% of all Michiganders have access to a swimmable and fishable water body. **We currently estimate that about half of our rivers don’t meet the swimmable standard, so we should use some caution in encouraging people to recreate in them, particularly following rain events. For example, the Grand River does not meet the swimmable standard following rain. Only 20% of Michigans streams and rivers have been assessed fully for bacteria, we have little to no *E. coli* data for lakes that have no beach. Without this data, we cannot determine if a water body is swimmable. I would recommend adding increased *E. coli* monitoring of rivers and inland lakes as a key recommendation for Goal 4.** The very same equipment that will be used for beach monitoring, can also serve this purpose. Water Quality Monitoring funding mentioned as part of Goal 7, could also be directed to serve this recreationally and economically valuable purpose.

Goal 9: Increasing environmental stewardship.

Our beaches that are closed due to bacteria are often polluted because of inland activities that affect our rivers, which then flow to the beaches and lakes. I believe it is important to recognize that pollution minimization activities that occur very far from beaches, still can have an effect on them. It often seems that even in the DEQ, we focus on beaches (because we love them and they are visible and economically valuable), but often forget about the rivers. Consider the Grand River, for example, which outlets near Grand Haven beach. The Grand River flows through Jackson, Lansing, Portland, and Grand Rapids and vast rural/agricultural areas before it pours into Lake Michigan near the beach, which is often closed due to high bacteria. During wet weather events, agricultural and other nonpoint source pollution, as well as combined sewer overflows from Lansing, travel all the way down to that beach. I would recommend that part of our educational campaign for goal 9 should be to increase awareness of the connections between our actions at home (far from the beach) and the quality of water downstream. "Agricultural Drains" are often thought of only as a way to flush out water and even sewage, while the water and pollutants in them flows all the way to our precious great lakes beaches.

Thanks for allowing me to comment,  
Molly Rippke

Molly Rippke  
Senior Aquatic Biologist  
Department of Environmental Quality, Water Resources Division  
Phone: 517-284-5547

# Ottawa County Road Commission

14110 Lakeshore Drive  
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August 26, 2015

Mr. Jon Allan  
Director  
Office of the Great Lakes  
DEQ  
P.O. Box 30473-7973  
Lansing, Michigan 48909

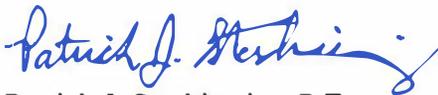
Re: Sustaining Michigan Water Heritage, A Strategy for the Next Generation

Dear Jon:

Attached please find my comments to Michigan's Water Strategy. I am very pleased that the Office of the Great Lakes has taken on this strategic planning effort and I think you have done a wonderful job in leading the OGL. It was a difficult task to balance all of the competing voices for how to shape the Water Strategy. While I may not agree with everything in this report, I do agree with the need for all of us to work together to find common ground and to protect and sustain Michigan's most valuable resource; water.

The implementation of the Water Strategy will require financial support from the State and its residents. If there is anything that I can do to lend a voice of support, please feel free to contact me.

Sincerely,



Patrick J. Staskiewicz, P.E.  
Public Utilities Director

Attachment

**Page 13. *Achieve a 40% phosphorus reduction in the western Lake Erie basin.***

I believe this is a good goal that should help in addressing toxic algal blooms in Lake Erie, but there must be a combination of point and non-point reductions for this to be fair and effective. In other watersheds, the MDEQ has only implemented point source solutions despite evidence that the problem is more widespread.

**Page 23. *Develop and implement a uniform statewide sanitary code that is flexible and provides standards for site suitability based on risk.***

I like this long overdue recommendation and support all of the On-Site Wastewater Systems recommendations!

**Page 37. *Establish voluntary water efficiency targets for all major water sectors to reduce water use impacts and costs.***

The Water Use Advisory Council provided recommendations for many water conservation and efficiency issues. I am pleased that many of these have been incorporated into the Water Strategy. However, one important recommendation, WC 5.1: *Michigan should adopt state-specific goals and objectives for its Water Conservation and Efficiency Program*, appears to be missing. Perhaps the recommendation on page 37 for establishing voluntary water efficiency targets was intended to address this deficiency, but it's not apparent based on the description. The Compact requires States to establish water conservation and efficiency goals and the current goals are generic and need to be tailored to the State of Michigan.

**Page 42. *Water's cost is determined by volume-based pricing that allows the collection of revenues to pay for infrastructure and operations used to deliver water. Under this scenario, there is often a lower per unit, usually gallons, fee on water for higher volume users and amounts.***

While I agree that a tiered water rate has been used by some utilities, I think using the word "often" overstates the use of tiered pricing.

**Page 44. *Evaluate current community practices regarding providing water to financially distressed customers to ensure all citizens have affordable access to water for drinking and sanitation.***

While I agree that society as a whole should support the less fortunate and provide financial assistance to those in need, I don't believe that the water or sewer utility is the mechanism to achieve this goal. The State already has programs and support staff that provide assistance to the poor through tax breaks and direct financial assistance. If there is a need to expand this assistance to include utilities bills, then the State should pursue this goal. A water utility is set up to charge the actual cost to treat, transport and maintain the water facilities and all users pay rates and charges based on these actual costs. We should not establish rates based on the ability to pay or the whole utility rate structure will collapse.

**Page 44. *...nonpoint source discharge elimination standard (NPDES) permit;***

This should be National Pollutant Discharge Elimination System as stated on page 76.

**Page 46. Figure 2. Michigan – Statewide Enterprise for Stormwater, Drinking Water and Wastewater Management.**

A line needs to be added from the private debt service expenditures back to the private market bonds to show repayment of the bonds, just as it is shown to service the payments to the revolving funds.

I'm not sure if asset management needs its own box for expenditures. The labor to create and manage the plan will be covered under a utility's operation and maintenance budget and the recommended improvements coming out of the asset management plan will be included in a utility's capital expenditures or operation and maintenance budget, depending on the size of the asset.

**Page 54. Retain full authority under the Clean Water Act to continue to manage Michigan's own water resources.**

In addition to the Clean Water Act, the Safe Drinking Water Act and the Clean Air Act are other important Federal acts impacting the management of Michigan's water resources. Perhaps this goal should be restated to be a broad recommendation to "retain primacy over all federal regulations impacting water (Clean Water Act, Safe Drinking Water Act, Clean Air Act, etc.) to continue to manage Michigan's own water resources." However, the State needs to step up and support the MDEQ and other agencies and provide the funding needed for primacy from the general fund and not continue the practice of funding regulatory oversight through fees.

**Page 58. Water Strategy Implementation Plan**

The majority of the goals have the MDEQ as the lead actor. Given the MDEQ's dwindling budget, I am concerned with their capacity to implement the plan. I think Goal 6.5 should be moved up or the goal should be split into a short and long term funding strategy.

**From:** [Robert Whitesides](#)  
**To:** [mi-waterstrategy](#)  
**Subject:** Comments  
**Date:** Friday, August 28, 2015 4:23:52 PM  
**Attachments:** [GreatLakes Commons report - final-Mar2011.pdf](#)  
[Water is an economic good-How to use prices to promote equit.pdf](#)

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These comments are mine own and do not reflect the official or unofficial views of the Kalamazoo River Watershed Council or others.

While the press release announcing the release of the Strategy draft includes a reference to "Establishing a durable water fund to achieve water strategy goals including water infrastructure management, the mechanism for achieving this goal is missing from the draft.

I believe it is disingenuous to discard "volumetric surcharge" as an option prior to the intensive examination of alternatives demanded by the circumstances of diminished state and federal general fund balances and the political inaction on environmental and resource matters at the state and federal level. It is also disingenuous to prejudice the examination of fee structures with a priori comments on "culture and history", while in almost all other areas it is largely conceded that major education and dare I say propaganda campaigns are necessary to change the "culture".

"Given that Michigan's citizens and businesses withdraw more than 4.2 trillion gallons per year, equivalent to the amount of precipitation that falls on the U.S. per day, even a tiny surcharge or access charge would add up quickly. The economic logic may make sense in the abstract, but it does not currently fit the culture and history of water and water use in the state.

Conversely, some argued that adding a price to water, even as an access charge versus a price on water per se, would commodify the resource, when it has historically been a public good or a public trust resource. Maintaining the ability to manage and ensure the sustainability of the water resources of Michigan and the Great Lakes is of utmost value to the state and the region, and even though a revenue stream could be created from a volume or access charge on water, the values potentially compromised under this scenario are too great to lose. However, there is still a compelling and growing need for investments in water and water infrastructure and for administrative and programmatic support in order for the state to meet its long-term vision for healthy, functional systems and prosperity.

To address the gap between actual investment need and public perception of that need, Michigan should launch a public education campaign to improve residents' understanding of the economic, environmental and social benefits of clean water, linking the investments necessary to achieve the benefits. If the public wants clean beaches and good water quality – and they say they do – public support of water infrastructure investments is critical. While we do not seek to facilitate a volumetric surcharge on water access, if that is something the public would ultimately support, then it would add to the options for funding long-term infrastructure and desired outcomes."

The survey conducted by the consultant identified how critically citizens are willing to consider new approaches, and not have them discarded out of hand:

"Newly proposed outcomes that received the most votes focused on funding and stewardship of the resource."

It is certain that a new paradigm must be built on pricing fees for participating in the exploitation of

the common resource under the reasonable use doctrine. I believe greater emphasis could be placed on the common resource nature of water, as outlined in the Great Lakes Commons report attached and other similar documents. I also believe that Michigan can advance the theory and application of regulation of common resources by advancing the pricing for water allocation in the form of user fees. This would avoid the problem of commodification that is usually associated with any discussion of pricing. The Water Policy paper "Water is an economic good: How to use prices to promote equity, efficiency, and sustainability" could form the basis for the final advance to non-commodity based fees. Certainly Michigan's universities and NGOs should have the competence to collaboratively determine the necessary next step.

Lastly, I am concerned by the leading nature of questions used in the consultant's survey which largely eliminated any innovative responses, and the limited representation in the Water Cabinet, which does not include a resource economist.

Best Regards,

Robert Whitesides

**From:** [Charlotte Jameson](#)  
**To:** [mi-waterstrategy](#)  
**Subject:** Comments: "Sustaining Michigan Water Heritage, A Strategy for the Next Generation"  
**Date:** Friday, August 28, 2015 4:22:08 PM  
**Attachments:** [WaterStrategy\\_Petition.pdf](#)  
[MLCV Comments Water Strategy.pdf](#)

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Please find attached general written comments from the Michigan League of Conservation Voters as well as a public comments, in the form of a petition, on behalf of over fourteen hundred Michigan LCV members across the state.

We thank the Office of the Great Lakes staff for their work on the draft water strategy and look forward to the final version.

I am available at your convenience for any questions or concerns.

Best,  
Charlotte

--

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Follow us on [Twitter](#) and [Facebook](#)

**From:** [Aimee LaLonde-Norman](#)  
**To:** [mi-waterstrategy](#)  
**Subject:** Comments: MI Draft Water Strategy  
**Date:** Friday, August 28, 2015 10:31:26 AM  
**Attachments:** [FOTR WaterStrategy Comments.pdf](#)

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Good Morning,

Attached please find our comments on the Draft Water Strategy. Thank you for taking the time to meet with residents, organizations, and community leaders throughout this process and for considering our comments in the final draft. And, thank you for your time and thoughtfulness in developing the Strategy.

Sincerely,  
Aimee

**Aimee LaLonde-Norman**  
Executive Director  
Friends of the Rouge  
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Dearborn, MI 48128  
Direct: 313.792.9627  
Fax: 313.593.0231

*The mission of Friends of the Rouge is to promote restoration and stewardship of the Rouge River ecosystem through education, citizen involvement and other collaborative efforts, for the purpose of improving the quality of life for the people, plants, and animals of the watershed.*

**From:** [Alice Jennings](#)  
**To:** [mi-waterstrategy](#); [Alice Jennings](#)  
**Subject:** DEQ-MI Water Strategy  
**Date:** Saturday, August 29, 2015 9:08:30 AM  
**Attachments:** [MI Legislature - Hearing on Water Affordability\(3\).docx](#)

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Please find input from Detroit on Michigan's 30 year water strategy. Thank you, Alice Jennings

Sent by [Outlook](#) for Android