2010 State of Michigan Great Lakes Restoration Initiative Proposals Submitted to USEPA

Focus Area	Project Title	Project Description	Amount	Contact Info
Accountability, Education, Monitoring, Evaluation, Communication, and Partnerships	A Regional Conservation Practice Planning & Reporting System	Ohio and Minnesota use an Internet-based watershed data system and associated GIS to track nonpoint source programs. We propose to implement this data system in Michigan and Indiana. This will produce significant savings in the planning, coordination, implementation, and reporting of these programs, and result in four Great Lakes states planning, mapping, and tracking nonpoint source reduction programs with the same software. The use of a common data system will enhance standardization, collaboration, and data sharing between Great Lakes states, the EPA, and other partners.	$494,000	Bob Pigg MDA 517- 373-6893
Accountability, Education, Monitoring, Evaluation, Communication, and Partnerships	Downscaling climate prediction for Michigan and the Great Lakes	The University of Wisconsin-Madison and the Michigan Department of Natural Resources and Environment (MDNRE) will work in collaboration to 1) downscale global climate predictions for Michigan and 2) to predict future Great Lakes levels. Predictions will be used to better plan conservation investments in the Great Lakes in the future.	$328,048	Christopher L. Hoving MDNRE 517-373-3337
Accountability, Education, Monitoring, Evaluation, Communication, and Partnerships	Great Lakes Connections Project: Environmental Education	This project will update the Michigan Environmental Education and Curriculum Support and provide materials and Great Lakes-oriented professional development for 1,000 teachers. The units on Energy Resources, Air Quality, Water Quality, Land-use, and Ecosystems and Biodiversity will be updated to align units with Michigan's content expectations; update connections to Great Lakes sustainability; repurpose materials for the new 3rd and 4th Michigan/Great Lakes Region requirement; and provide strategies to adapt materials for outdoor education.	$245,528	Tom Occhipinti MDNRE 517-373-2379
Accountability, Education, Monitoring, Evaluation, Communication, and Partnerships	Enhancing Michigan contributions to the EPA SOLEC process	This project will support improvements to near-shore data collection capabilities of Michigan DNRE Great Lakes research stations; to similarly support collaborative efforts of Michigan Department of Natural Resources Wildlife Division and Michigan Natural Features Inventory in enhancing the collection of SOLEC wildlife indicator data in wetlands adjacent to Great Lakes nearshore zones; to identify data gaps and opportunities to improve long-term fisheries and wildlife assessment programs; to provide personnel necessary to support these enhanced data collection, data management, network development, and interagency collaboration efforts; and to support (through travel, video conference, publication) better coordination of State of the Lakes Ecosystem Conference (SOLEC) and Great Lakes Fishery Commission/Lake Committee reporting and Objectives processes, including "State-of-the-Lake" reports of each group.	$326,666	David F. Clapp MDNRE 231- 547-2915
Accountability, Education, Monitoring, Evaluation, Communication, and Partnerships	Linking Observing systems to fisheries and water assessments	Our proposal has several goals: to install components of an observing system in tributary and near-shore Michigan waters of the Great Lakes; To support improvements to data collection capabilities of Michigan Great Lakes research stations; To provide personnel necessary to support these enhanced collection and collaboration efforts; To link existing data sets with data obtained from the observing system, improving our understanding of mechanisms influencing fish and water quality; and To improve delivery of information to the Great Lakes environmental management community and the public.	$1,743,136	David F. Clapp MDNRE 231- 547-2915
Habitat/Wildlife Protection and Restoration	Portage Creek Habitat Restoration – Upper Reach	This project will restore habitat in an industrialized section of Portage Creek, a primary tributary in the Kalamazoo River Area of Concern, by removing the deteriorating cement channel walls currently in place and removing contaminated fill material from the upland floodplain area. The project will implement a natural stream design and provide floodplain with gentle slopes vegetated with native species. The project will significantly restore habitat for fish and benthic organisms and address the three habitat related beneficial use impairments leading to delisting the Area of Concern. The project will also eliminate the physical hazard of the cement walls and increase property values in this urban stretch of Portage Creek, supporting the reuse of brownfields and creation of sustainable jobs in the community. This proposal addresses the Upper Reach of the project area and complements a separate proposal submitted for the Lower Reach.	$1,496,389	Mark DuCharme MDNRE 269-567-3529
Habitat/Wildlife Protection and Restoration	Pte Mouillee Bad Creek Unit Coastal Wetlands Restoration	This project will restore, resurface or raise elevations of 1.0 mile of dike within the Bad Creek unit to create coastal wetland habitat. This project will restore water level management capability to 71 acres of coastal wetlands and provide critical stopover habitat for migratory birds and the ability to control invasive plants. Ecological benefits on a local, state, and national scale are expected.	$164,124	Joe Robison MDNRE 734-379-9692
Habitat/Wildlife Protection and Restoration	River Raisin Wetland Enhancement and Habitat Evaluation	Repair dikes and install water control for 310 acres of marsh at Sterling State Park. Control phragmites (Phragmites australis) in north River Raisin delta wetlands on approximately 1,100 acres of public and private lands (10 partners) for 5 years. Collect baseline data and monitor wetland communities and key species.	$1,350,000	Ray Fahlsing MDNRE 517-335-4823
Habitat/Wildlife Protection and Restoration	Torch Lake AOC: Benthic Habitat Evaluation and Restoration	Degradation of Benthos a Beneficial Use Impairment at the Torch Lake Area of Concern results from waste disposal of the copper mining industry. This project will characterize the spatial distribution of the benthos and determine the sources of toxicants to the surface sediments preventing colonization by a benthic community. Surveys of benthic macroinvertebrates, sediment microbial community, and measurements of physical and chemical properties of the sediments will be co-collected. Data will be used to quantify metal migration pathways to the lake and develop cleanup alternatives.	$1,497,215	Scott Cornelius MDNRE 517-373-7369

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Habitat/Wildlife Protection and Restoration	Torch Lake AOC: Vegetative Stabilization of Source Areas	This study identifies bacteria and plant species that grow well in the highly toxic metal concentrations found in the aquatic and terrestrial stamp sands and Superfund caps at the Torch Lake Area of Concern. Heavy metal resistant, growth promoting bacteria and fast-growing/metal resistant plants will be identified and methods developed for producing a sustainable vegetative cover on stamp sand areas. The covers will stabilize the toxic stamp sands preventing erosion into the lake. This will help address the Degradation of Benthos and allow for removal of this Beneficial Use Impairment.	$1,499,535	Scott Cornelius MDNRE 517-373-7367
Habitat/Wildlife Protection and Restoration	Upper Portage Creek Portage Creek Habitat Restoration – Lower Reach	This project will restore habitat in an industrialized section of Portage Creek, a primary tributary in the Kalamazoo River Area of Concern, by removing the deteriorating cement channel walls currently in place and removing contaminated fill material from the upland floodplain area. The project will implement a natural stream design and provide floodplain with gentle slopes vegetated with native species. The project will significantly restore habitat for fish and benthic organisms and address the three habitat related beneficial use impairments leading to delisting the Area of Concern. The project will also eliminate the physical hazard of the cement walls and increase property values in this urban stretch of Portage Creek, supporting the reuse of brownfields and creation of sustainable jobs in the community. This proposal addresses the Lower Reach of the project area and complements a separate proposal submitted for the Upper Reach.	$1,496,389	Mark DuCharme MDNRE 269-567-3529
Habitat/Wildlife Protection and Restoration	William C. Sterling State Park Marsh and Prairie Restoration	This project will re-create approximately 25 acres of emergent and submergent Great Lakes marsh and 25 acres of lake plain prairie at Sterling State Park. Marsh will be created through placement of roughly 250,000 cubic yards of clean fill into a deep water lagoon that was historically Great Lakes marsh. Lake plain prairie restoration will be initiated at the current location of mounds of fill that are being returned to the historic grade.	$1,500,000	Ray Fahlsing MDNRE 517-335-4823
Invasive Species	Mounting a Response to New Aquatic Invaders	Develop and implement a Rapid Response Program in Michigan, building on Michigan's efforts to control invasive species. This will result in the eradication and control of 8 to 10 high threat invasive species that impact the health of the Great Lakes. This Rapid Response Program will help direct future resources for invasive species control to the most cost-effective, strategic, and highest threat locations.	$1,021,572	Susan Tangora MDNRE 517-241-1153
NonPoint Source/Nearshore Health	BeachGuard-Sanitary Survey & Notification Enhancements	BeachGuard is a data reporting system that provides real-time beach monitoring data to the public. The purpose of this project is to enhance the utility of BeachGuard by adding a sanitary survey database to the system and enhancing the notification capabilities. The beach sanitary survey database will use consistent formats that researchers and managers will use to conduct small and large scale data analyses. Beach sanitary survey data will also be available in real-time to the public. BeachGuard is a licensed product that can be purchased. However, the additional features being added to BeachGuard will be available to others at no cost.	$100,000	Shannon Briggs MDNRE 517-335-1214
NonPoint Source/Nearshore Health	Black Creek Sedimentation and Phosphorus Reductions	Black Creek, located in the Mona Lake Watershed, is not supporting designated uses and has a Total Maximum Daily Load to address impaired biota due to sedimentation. The 319 approved Mona Lake Watershed Management Plan identifies the construction of a 102-acre flow-through wetland in the Black Creek sub watershed as its highest priority best management practice. The constructed wetland is estimated to capture 1,005 pounds of phosphorus per year and 6 tons of total suspended solids per year. These pollutant load reductions will improve water quality, fish and wildlife habitat and increase public recreation opportunities.	$999,657	Dana Strouse MDNRE 616-356-0261
NonPoint Source/Nearshore Health	Building Beach Manager's Capacity for Using Rapid Tools	Rapid quantitative polymerase chain reaction (qPCR) methods are ready for use to provide timely information to protect recreational water users from waterborne pathogens. However, local health departments and beach managers currently lack the equipment and training to implement these new rapid tools. This project aims to bring rapid tools to public health laboratories for beach monitoring through a training and technical assistance program with a strong emphasis on quality assurance/quality control and standardized data interpretation. This project will also produce a "How to" Manual for qPCR methods for monitoring fecal pollution of beaches to be used nationwide in future applications.	$228,337	Shannon Briggs MDNRE 517-335-1214
NonPoint Source/Nearshore Health	Davis Creek Total Maximum Daily Load	Davis Creek, which discharges to the Kalamazoo River Area of Concern, is scheduled for development of an Escherichia coli total maximum daily load due to impairment of the total and partial body contact recreation uses. The Kalamazoo River is not currently impaired due to Escherichia coli and implementation of the total maximum daily load will ensure Davis Creek does not contribute to any future use impairments in the area of concern. The MDNRE, in collaboration with local stakeholders, will develop and submit to the United States Environmental Protection Agency an approvable Escherichia coli total maximum daily load for Davis Creek in 2012.	$123,530	Brenda Sayles MDNRE 517- 335-4198
NonPoint Source/Nearshore Health	Filamentous Green Algae & Microbes of Great Lakes Shores	The MDNRE, in partnership with Michigan State University and Eastern Michigan University, proposes to conduct a two-year comprehensive assessment of algal conditions, and associated microbial activity, along the Michigan Great Lakes shore. The proposed project has three primary objectives: 1) determine the geographic extent and intensity of filamentous green algae and pathogenic bacteria on Michigan shores; 2) refine relationships among filamentous green algae, pathogenic bacteria, and nutrient concentrations; and 3) identify sources/causes of nuisance filamentous algal conditions.	$571,081	Gary Kohlhepp MDNRE 517-335-1289

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NonPoint Source/Nearshore Health	Healthier Great Lakes Beaches through Improved Communication	The MDNRE in collaboration with Michigan State University will provide the following products to improve communication of beach monitoring to the public: 1. Videos demonstrating qPCR beach monitoring methods for laboratory technicians and outlining the function and importance of the test to a general audience. 2. Workshops and online materials will improve communication between journalists and beach managers, providing better communication of nearshore health issues to the public. 3. A nonprofit environmental news service will dedicate sustained, in-depth coverage to exploring trends in nearshore health, causes and consequences.	$103,337	Shannon Briggs MDNRE 517-335-1214
NonPoint Source/Nearshore Health	Integrated Beach Sanitary Surveys Using QPCR Tools	Information using molecular tools will be integrated into Michigan beach sanitary surveys along with investigation of the transport of target DNA signals for multiple Great Lakes beaches. These data will be collected with the help of local health departments. This research will compare the performance of the molecular methods with conventional tests, to produce an approach/protocol to use these assays and/or target organisms in routine and annual sanitary surveys, and will aid in current surveys to identify sources of microbial contamination influencing recreational water quality.	$258,374	Shannon Briggs MDNRE 517-335-1214
NonPoint Source/Nearshore Health	Intensive Planning & Monitoring To Support LaMP Priorities	The MDNRE proposes to enhance its participation in regional planning, monitoring, and reporting activities in support of Lakewide Management Plan priorities for Lakes Erie, Huron, Michigan, and Superior. Because 2010 is an intensive monitoring year for Lake Michigan, we propose to enhance the assessment of tributaries in 2010 to better measure nutrient inputs to Lake Michigan and its Areas of Concern. Samples will be collected during base-flow and high-flow using grab and automated sample techniques.	$531,576	Gary Kohlhepp MDNRE 517-335-1289
NonPoint Source/Nearshore Health	Michigan Beaches-Bay County Health Department	The MDNRE in collaboration with the Bay County Health Department will monitor 5 high priority beaches located on Saginaw Bay. This proposal will expand the frequency and duration of beach monitoring efforts, and increase the number of beaches regularly monitored with beach sanitary surveys to reduce bacterial contamination. This project will also implement rapid methods to monitor beaches and develop a regression-based model. These combined efforts will reduce human health risks at high priority beaches by improving monitoring, investigating sources of bacterial contamination, and potentially eliminating identified sources.	$135,025	Shannon Briggs MDNRE 517-335-1214
NonPoint Source/Nearshore Health	Michigan Beaches-Chippewa County Health Department	The MDNRE in collaboration with the Chippewa County Health Department will conduct sanitary surveys and monitor 4 high priority beaches more frequently and initiate monitoring with sanitary surveys at 6 beaches located on Lake Superior and the St. Marys River. This project will also use rapid methods to monitor high priority beaches and develop a regression-based model. These combined efforts will reduce human health risks at high priority beaches by improving monitoring, investigating sources of bacterial contamination, and potentially eliminating identified sources.	$230,025	Shannon Briggs MDNRE 517-335-1214
NonPoint Source/Nearshore Health	Michigan Beaches-Developing & Integrating Models	Beach managers will purchase and install instruments that will be used to develop a regression-based beach model (e.g., Virtual Beach). Information and data will be integrated with deterministic models from the Great Lakes Coastal Forecasting System (assistance provided by David Rockwell at the University of Michigan) and hydrodynamic models (assistance provided by Dr. David Schwab of National Oceanic Atmospheric Administration). The final product will be an integration of several models to produce a model that will forecast concentrations of fecal indicator bacteria at a beach in advance of 60 hours. This project will also evaluate a regional application for this model.	$278,777	Shannon Briggs MDNRE 517-335-1214
NonPoint Source/Nearshore Health	Michigan Beaches-Health Department of Northwest MI	The MDNRE in collaboration with Health Department of Northwest Michigan will monitor 31 public beaches along the Lake Michigan coastline in Antrim, Charlevoix, and Emmet Counties. This proposal will expand the frequency and duration of beach monitoring efforts, increase the number of beaches regularly monitored with beach sanitary surveys to reduce bacterial contamination, and will begin using rapid methods to monitor their beaches. This project will reduce human health risks at high priority beaches by improving monitoring, investigating sources of bacterial contamination, and eliminating identified sources.	$150,405	Shannon Briggs MDNRE 517-335-1214
NonPoint Source/Nearshore Health	Michigan Beaches-Implementing Rapid Methods at Regional Labs	One university and four local health department laboratories will purchase equipment to implement rapid methods for fecal indicator analysis that will produce results in less than 4 hours. The use of rapid test methods will allow local beach managers to determine whether water quality conditions are safe for swimming at 20 Great Lakes beaches on Lakes Superior, Michigan, and Huron; Saginaw Bay, Grand Traverse Bay, St. Marys River, and Lake St. Clair in a timely manner. Swimmers will be better protected with quicker notification of bacterial contamination and tourism will be protected from unnecessary closings or delays in reopening beaches. Key terms: rapid tests, qPCR, IMS-ATP, beaches.	$228,337	Shannon Briggs MDNRE 517-335-1214

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NonPoint Source/Nearshore Health	Michigan Beaches-Macomb County Health Department	The MDNRE in collaboration with the Macomb County Health Department will monitor 2 high priority beaches located on Lake St. Clair. This proposal will increase the frequency of beach monitoring and increase the number of beaches monitored with beach sanitary surveys to reduce bacterial contamination. This project will also use rapid methods to monitor beaches (contingent upon funding for equipment) and will all monitoring data in the development of a regression-based model. These combined efforts will reduce human health risks at high priority beaches by improving monitoring and investigating sources of bacterial contamination.	$162,874	Shannon Briggs MDNRE 517-335-1214
NonPoint Source/Nearshore Health	Michigan Beaches-St Clair County Health Department	The MDNRE in collaboration with the St. Clair County Health Department will monitor 15 public beaches along the Lake Huron coastline and St. Clair River. This proposal will expand the frequency and duration of beach monitoring efforts, increase the number of beaches regularly monitored with beach sanitary surveys to reduce bacterial contamination, and will begin using rapid methods to monitor beaches. This project will reduce human health risks at high priority beaches by improving monitoring, investigating sources of bacterial contamination, and potentially eliminating identified sources.	$176,413	Shannon Briggs MDNRE 517-335-1214
NonPoint Source/Nearshore Health	Michigan -Expanded Lake Huron Beach Testing-Source Tracking	The MDNRE in collaboration with 4 local agencies, proposes to expand the frequency and duration of beach monitoring efforts and by increasing the number of beaches regularly monitored with beach sanitary surveys to reduce bacterial contamination at beaches. This project will reduce human health risks at high priority beaches by improving monitoring, investigating sources of bacterial contamination, and potentially eliminating identified sources.	$254,025	Shannon Briggs MDNRE 517-335-1214
NonPoint Source/Nearshore Health	Michigan -Expanded Lake Michigan Beach Testing-Source Tracking	The MDNRE in collaboration with 6 local agencies proposes to expand the frequency and duration of beach monitoring efforts and increase the number of beaches regularly monitored with beach sanitary surveys to reduce bacterial contamination. One of the local agencies will also begin using rapid methods to monitor their beaches. This project will reduce human health risks at high priority beaches by improving monitoring, investigating sources of bacterial contamination, and eliminating identified sources.	$155,025	Shannon Briggs MDNRE 517-335-1214
NonPoint Source/Nearshore Health	Michigan -Expanded Lake St. Clair Erie Beach Testing-Source Tracking	The MDNRE in collaboration with 2 local agencies propose to expand the frequency and duration of beach monitoring efforts and increase the number of beaches regularly monitored with beach sanitary surveys. This project will therefore reduce bacterial contamination at high priority beaches and reduce human health risks by improving monitoring, enhancing the investigation of sources of bacterial contamination, and potentially eliminating identified sources.	$171,025	Shannon Briggs MDNRE 517-335-1214
NonPoint Source/Nearshore Health	Michigan -Expanded Lake Superior Beach Testing-Source Tracking	The MDNRE in collaboration with 4 local agencies, proposes to expand the frequency and duration of beach monitoring efforts and by increasing the number of beaches regularly monitored with beach sanitary surveys to reduce bacterial contamination at beaches. This project will reduce human health risks at high priority beaches by improving monitoring, investigating sources of bacterial contamination, and potentially eliminating identified sources.	$258,009	Shannon Briggs MDNRE 517-335-1214
NonPoint Source/Nearshore Health	Michigan-Ottawa County Health Department	The MDNRE in collaboration with the Ottawa County Health Department will monitor 2 high priority beaches located on Lake Michigan. This proposal will expand the frequency and duration of beach monitoring efforts with beach sanitary surveys to reduce bacterial contamination. This project will also implement rapid methods to monitor their beaches and develop a regression-based model. These combined efforts will reduce human health risks at high priority beaches by improving monitoring, investigating sources of bacterial contamination, and potentially eliminating identified sources.	$97,025	Shannon Briggs MDNRE 517-335-1214
NonPoint Source/Nearshore Health	Michigan-Restoring Three Arenac County Beaches	The MDNRE in collaboration with the Central Michigan District Health Department will monitor 3 high priority beaches located on Saginaw Bay. This proposal will expand the frequency and duration of beach monitoring efforts and increase the number of beaches regularly monitored with beach sanitary surveys to reduce bacterial contamination. These combined efforts will reduce human health risks at high priority beaches by improving monitoring, investigating sources of bacterial contamination, and potentially eliminating identified sources.	$250,000	Shannon Briggs MDNRE 517-335-1214
NonPoint Source/Nearshore Health	Michigan-Watershed Center-Bryant Park Remediation	The MDNRE in collaboration with the Watershed Center propose to implement a storm water infiltration system with additional storm water management efforts at Bryant Park to reduce bacterial contamination at the beach, with the ultimate goal of delisting the beach from the State's Impaired Water's list. This project will reduce human health risks at this heavily used swimming beach by taking measures to eliminate the source of bacterial contamination to reduce the number of pathogen indicator organisms to levels below established criteria.	$267,775	Shannon Briggs MDNRE 517-335-1214
NonPoint Source/Nearshore Health	National Coastal Survey - Michigan Enhancements	The MDNRE proposes to enhance the nearshore monitoring to be conducted under the 2010 National Coastal Survey. The proposed enhancement consists of three components: 1) sample collection and analysis at six targeted sampling locations, in addition to the 107 probabilistic sites; 2) analysis of two additional parameters at selected sites; and 3) sample collection and analysis at a subset of the 107 sites in 2011, to measure year-to-year variability and determine an appropriate design for future Great Lakes nearshore monitoring within Michigan's jurisdiction.	$174,659	Gary Kohlhepp MDNRE 517-335-1289

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NonPoint Source/Nearshore Health	River Raisin Nitrate TMDL Reduction Project	The River Raisin is one of the top priority impaired watersheds targeted by the MDNRE for restoration by 2017. Implementation of the nitrate Total Maximum Daily Load is the highest priority restoration focus. The impaired designated use is public water supply. In addition, there is an E. coli Total Maximum Daily Load in the same river reach. This project will target known agricultural sources of nitrogen, E. coli and phosphorus through a physical inventory, education, improved nutrient management practices and targeted monitoring to assess effectiveness.	$813,859	Janna Sebald MDNRE 517-780-7908
NonPoint Source/Nearshore Health	Targeted Efforts for Repairing Saginaw Bay Watershed Health	This project will implement targeted proactive changes delivered through the Michigan Agriculture Environmental Assurance Program to increase the use of Agriculture Best Management Practices to significantly reduce sedimentation and nutrient loss to tributaries and nearshore waters of the Saginaw Bay, which has over 13,466 farms and over 2.7 million acres of cropland for conservation practices. Expected 5-year outcomes include preventing 190,000 tons of sediment, 262 tons of phosphorus, and 420 tons of nitrogen from entering Great Lakes tributaries, and 1,400 acres of wetlands restored.	$1,000,000	Jack Knorek MDA 517-335-2874
NonPoint Source/Nearshore Health	Targeted Efforts for Repairing SE Lake Michigan Health	This project will implement targeted proactive changes delivered through the Michigan Agriculture Environmental Assurance Program (MAEAP) to increase the use of agricultural Best Management Practices to reduce sedimentation and nutrient loss to tributaries and near-shore waters of SE Lake Michigan, which has a significant concentration of agriculture to enable or enhance practice implementation. Expected 5-year outcomes include preventing 190,000 tons of sediment, 262 tons of phosphorus, and 420 tons of nitrogen from entering Great Lakes tributaries, and 1,400 acres of wetlands restored.	$1,000,000	Jack Knorek MDA 517-335-2874
NonPoint Source/Nearshore Health	Targeted Efforts for Repairing W Lake Erie Watershed Health	This project will implement proactive changes delivered through the Michigan Agriculture Environmental Assurance Program (MAEAP) to increase the use of Best Management Practices to significantly reduce sedimentation and nutrient loss to tributaries and near-shore waters in the Western Lake Erie watershed, which have a significant concentration of agriculture to enable or enhance targeted BMP implementation. Outcomes include preventing 76,000 tons of sediment, 105 tons of phosphorus, and 168 tons of nitrogen from entering Lake Erie tributaries, and 440 acres of wetlands restored.	$540,000	Jack Knorek MDA 517-335-2874
NonPoint Source/Nearshore Health	Nonpoint Source Education Targeting Residential Audiences	This project will develop and launch a dynamic and interactive public, online environmental stewardship training program designed for the urban, suburban and rural residents of the Great Lakes. The website will contain targeted, audience-specific education modules addressing nonpoint source pollutants including those present in soil, water and air. The site will teach each resident how they can make simple behavioral changes in adopting watershed best management practices to significantly reduce pollutants that degrade water quality and natural habitats	$399,146	Jack Knorek MDA 517-335-2874
Toxic Substances and Areas of Concern	Enhanced Michigan Fish Contaminant Monitoring and Advisory Program Project	The Michigan Department of Community Health will enhance the Michigan Fish Contaminant Monitoring and Consumption Advisory Program by expanding fish monitoring, and by incorporating the best available science and the health benefits of eating fish into the advisory process. Partnerships with Wayne State University and with local community groups in urban areas such as Detroit will be formed to develop effective tools to communicate the state-wide and community-specific fish consumption advisories. Michigan families can use the fish consumption advisories to make informed decisions about where to catch fish for their tables and will enjoy improved health through safe fish consumption.	$411,232	Linda Dykema MDCH 517-335-8566
Toxic Substances and Areas of Concern	Fish Consumption Advisory Education for Health Care Providers	The Michigan Department of Community Health will develop on-line education for health care providers covering fish consumption advisories, preventive health education, and clinical management of patients with chemical exposure history. Training for various medical disciplines will be provided including physicians, physician assistants, nurse educators, and nutritionists. Complimentary patient educational materials will be developed and distributed to health care providers who complete the course. Patients will be enabled to make informed decisions about safe fish consumption and enjoy improved health.	$273,958	Linda Dykema MDCH 517-335-8566
Toxic Substances and Areas of Concern	Green Chemistry Technical Assistance	This project will focus on advancing pollution prevention through implementation of green chemistry practices via free, non-regulatory technical assistance. A technical assistance program will be developed to provide green chemistry assessments to businesses in partnership with the National Pollution Prevention Roundtable. Expertise in green chemistry assessments will be sought and education and outreach will be necessary to reach the focused customers. It is supported by Michigan Executive Directive 2006-6, a green chemistry action plan, and the Michigan Green Chemistry Program.	$558,569	Rich Alexander MDNRE 989-705-3433
Toxic Substances and Areas of Concern	Kalamazoo River Dam Removal Feasibility Study	Dam removal feasibility study to develop a scope of work and approach at Otsego City and Otsego Township dam sites on the Kalamazoo River. For both sites, complete a Preliminary Design for dam removal, including design plans, schedule and cost estimate. Dam removal is expected to address beneficial use impairments to fish and wildlife populations and their habitat. Dam removal would proceed in parallel with sediment remediation performed by others in the former impoundments.	$361, 956	John Lerg MDNRE 269-685-6851 ext 147

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Toxic Substances and Areas of Concern	Clean Sweep: Expand Pesticide Collection/Add Pharmaceuticals	This project expands the Michigan Pesticide Clean Sweep Program statewide and uses established infrastructure to expand services for collection/disposal of pharmaceuticals from agricultural and residential sources. To ensure success, marketing materials to increase program participation will be produced and distributed. This project includes an updated pesticide collection and tracking database; addition of up to five regional collection facilities throughout the state; and supplemental funding for reimbursement dollars to participating Clean Sweep facilities.	$475,530	Abby Eaton MDA 517-241-3933
Toxic Substances and Areas of Concern	Pollution Prevention & Toxics Reduction in the GL, Implementation of Mercury Strategies in MI	Michigan has actively developed state and regional mercury strategies to identify, reduce and eliminate mercury use and releases. Michigan, surrounded by the Great Lakes, proposes to implement components of these strategies to reduce uses and sources of mercury and thus reduce loadings to the Great Lakes and inland lakes by adopting a variety of activities. This project will also increase mercury awareness within industry and the general public and create sustainable programs that will reduce a wide variety of sources and the associated public health risks long after grant closure.	$856,544	Rich Alexander MDNRE 989-705-3433
Toxic Substances and Areas of Concern	Pollution Prevention & Toxics Reduction in the GL, MI Household Hazardous Waste (HHW) Collection Expansion	The project will provide grants to communities to expand the network of household hazardous waste collection programs operating in Michigan, and it will develop a consistent, statewide education campaign to provide citizens with information about 1) being responsible consumers and purchasing products to minimize contamination of the Great Lakes, 2) the importance of using household hazardous waste collection programs, and 3) how they can find a program that will properly dispose of their household hazardous waste. This will protect the Great Lakes from hazardous wastes, such as mercury, endocrine disrupters and pesticides.	$1,500,000	Rich Alexander MDNRE 989-705-3433
Toxic Substances and Areas of Concern	Portage Creek Toxic Substance Source Reduction – Lower Reach	This project will restore habitat in an industrialized section of Portage Creek, a primary tributary in the Kalamazoo River Area of Concern, by removing deteriorating cement channel walls and toxic substance contaminated fill material from the upland floodplain area. The project will implement a natural stream design and provide floodplain with gentle slopes vegetated with native species. The project will significantly restore habitat for fish and benthic organisms and address the three habitat-related beneficial use impairments leading to delisting the Area of Concern. The project will also eliminate the physical hazard of the cement walls and increase property values in this urban stretch of Portage Creek, supporting the reuse of brownfields and creation of sustainable jobs in the community. This proposal addresses the Lower Reach of the project area and complements a separate proposal submitted for the Upper Reach.	$1,701,417	Mark DuCharme MDNRE 269-567-3529
Toxic Substances and Areas of Concern	Portage Creek Toxic Substance Source Reduction – Upper Reach	This project will restore habitat in an industrialized section of Portage Creek, a primary tributary in the Kalamazoo River Area of Concern, by removing deteriorating cement channel walls and toxic substance contaminated fill material from the upland floodplain area. The project will implement a natural stream design and provide floodplain with gentle slopes vegetated with native species. The project will significantly restore habitat for fish and benthic organisms and address the three habitat-related beneficial use impairments leading to delisting the Area of Concern. The project will also eliminate the physical hazard of the cement walls and increase property values in this urban stretch of Portage Creek, supporting the reuse of brownfields and creation of sustainable jobs in the community. This proposal addresses the Upper Reach of the project area and complements a separate proposal submitted for the Lower Reach.	$1,645,945	Mark DuCharme MDNRE 269-567-3529
Toxic Substances and Areas of Concern	Review of Statewide Assessment of Three BUIs in MI AOCs	Across Michigan's 14 Areas of Concern, the Aesthetics, Dredging and Beach Closings Beneficial Use Impairments (BUIs) have the greatest potential for restoration during the next five years. Michigan is seeking funding to support one employee for three years to focus on development and implementation of monitoring protocols, data assessment and document preparation to facilitate removing these BUIs. The strategies and mechanisms instituted will likely result in several immediate BUI removals and will set the stage for the restoration of additional beneficial uses in the years following.	$500,497	Richard Hobrla MDNRE 517-335-4173
Toxic Substances and Areas of Concern	Torch Lake AOC: PCB Source Identification and Remediation	Identify and quantify all sources of Polychlorinated Biphenyls or PCBs that contribute to Fish Consumption Advisory, a Beneficial Use Impairment for the Torch Lake Area of Concern and develop a source control strategy to facilitate the delisting of this Beneficial Use Impairment. Focus will be on conducting extensive literature reviews, collecting data and analysis to determine the location of source areas. Determination of which media (e.g. groundwater, surface water, soils, sediment, biota) is contributing to the exposure pathway and the resulting bioaccumulation in fish tissue.	$1,999,759	Scott Cornelius MDNRE 517-373-7368
NonPoint Source/Nearshore Health	Storm Water Management and Shoreline Restoration BMPs	Design and implement various storm water management and erosion control best management practices at various waterways facilities (many of these locations are located within Great Lakes Areas of Concern) located along the Great Lakes and connecting tributaries on State of Michigan lands within a three year period. This includes such techniques as use of pervious pavements, rain gardens, bioswales, and restoration of shoreline through soil bioengineering to improve water quality, aquatic habitat, and elimination or reduction of upland produced toxins to water bodies	$734,914	Jordan Byelich MDNRE 517-241-1533
Total Funding Request by the State of Michigan through EPA -Great Lakes Restoration Initiative Request for Proposals			**$33,479,262**	