



## **MICHIGAN GEOLOGICAL SURVEY at Western Michigan University**

**John A. Yellich, Director**

**May 1, 2014**

### **Presentation to Senate Natural Resources, Environment & Great Lakes Committee**



Michigan Geological Survey (MGS) began the process of re-invention on October 11, 2011, when Public Act 167 transferred the agency to Western Michigan University. The Mission Statement of the MGS is to serve as the pre-eminent source of natural resource geological information and environmental matters for the State of Michigan, the client. Geological survey functions have not been fully functional for more than 30 years due to lack of funding. John A. Yellich was hired as MGS Director on October 2, 2013. The following week Yellich was formally introduced to DEQ Director Dan Wyant, who presented a number of Michigan issues confronting the State departments including the DEQ. A high priority issue identified was a scientific issue associated with agriculture, the second highest grossing economy that requires crop irrigation in many areas and the use of the Water Withdrawal Assessment Tool, all interrelated to groundwater, the highest economic valued resource in Michigan. The DEQ Director presented the challenge to the MGS to work within the system and identify a solution for the assessment of this natural resource affecting all State departments.

The MGS has the technical geologic skills to research water related issues and has identified potential solutions to the growing dilemma of responsible water resource quantification that is critical to economic growth in Michigan. This effort is supported by the scientific strength of the MGS and WMU's Geosciences Department's 50-year history of research and support for hydrogeology, groundwater, minerals, aggregates, and energy resources, the reasons for WMU receiving the MGS function. Investing now in MGS programs can fund implementation of a successful water resource assessment and production program which will provide one of the highest returns on investment (ROI) that could be made for the State. Investing in this essential work by the MGS will require significant changes in the non-funding mechanisms that have been in place for more than 30 years.

By moving geological knowledge to the forefront of societal issues of this earth of water, mineral, oil, gas and land management, the State can foster new wealth and generate a favorable ROI in an environmentally sustainable way to benefit all our citizens for generations to come.

Through collaboration by all Michigan Departments and the MGS, we can bring solid scientific expertise and education to stakeholders in business and industry who are our clients. Supported by immediate funding mechanisms for MGS and other State Departments, we can bring functional improvements in water resource data acquisition, the WWAT as a screening tool and continue to evaluate the oil, gas and land resource management for all the natural resources of the State.

**MICHIGAN GEOLOGICAL SURVEY at Western Michigan University**

**John A. Yellich, Director**

**May 1, 2014**

**Presentation to Senate Natural Resources, Environment & Great Lakes Committee**

**SUMMARY OF MICHIGAN NATURAL RESOURCE TALKING POINTS**

**WHAT ARE THE MICHIGAN'S PRIMARY NATURAL RESOURCES?**

**WATER**

**MINERALS**

**OIL AND GAS**

**LAND AND ASSOCIATED PRODUCTIVE RESOURCES**

**WHAT ARE THE MOST IMPORTANT ECONOMIC DEVELOPMENT ISSUES IN MICHIGAN TODAY?**

**WATER**

**AGRICULTURE**

**NATURAL RESOURCES**

**WHO IS RESPONSIBLE FOR CONTROLLING/REGULATING THE RESOURCES (STATE AGENCIES)?**

**DEQ**

**DNR**

**AGRICULTURE**

**WHO IS TASKED TO IDENTIFY, QUANTIFY AND ASSESS THE NATURAL RESOURCES OF MICHIGAN?**

**MICHIGAN GEOLOGICAL SURVEY**

**THE CURRENT DISFUNCTIONAL ISSUES ARE:**

**LIMITED UNDERSTANDING OF THE NATURAL RESOURCES**

**IMPROPER OR NO QUANTIFICATION OF THE RESOURCES**

**NEED FOR A PARADIGM CHANGE IN THE FUNDING OF THESE OPERATIONS**

**THE RESULTS:**

**RELUCTANCE TO CHANGE THE CURRENT OPERATING PROCESSES WILL CAUSE FAILURE IN**

**REALIZING A FUTURE ROI FOR THE NATURAL RESOURCES OF MICHIGAN**