Today there are approximately 400 municipal wastewater treatment plants in our state. Collectively, those who work in those plants are responsible for more than 1.3 billion gallons of wastewater daily. That’s an incredible daily achievement. It benefits millions of us in Michigan. But we need to raise awareness of this accomplishment and tell others about it if we are to attract more young men and women to the wastewater treatment profession. Take time to:

• Download and review the MWEA WRRF documents. The documents are available online at:
  http://www.mi-wea.org/wrrf_grant.php
• Change the name of your facility to a WRRF
• Download and start filling out the “Utility of the Future – Today” Application – take the steps necessary to be able to provide evidence that you are a UOF.
• Establish the right culture
• Offer tours
• Get involved in community events
• Obtain a copy of WEF “Energy Roadmap”
• Focus on beneficial use of solids, if possible

We invite you to take time to read and learn more. After you do, I think you will agree that the future we envision and the potential we have to make that vision a reality by working together, is indeed, awesome.

Brian Hannon, P.E.
Past President
Pete Cavagnaro, P.E.
WRRF Committee Chair

Published by the Michigan Water Environment Association 2017.
For additional information please contact us at (517) 641-7377.

Michigan Water Environment Association
PO Box 397
Bath, MI 48808
Email: mwea@mi-wea.org
In 2013, the National Association of Clean Water Agencies (NACWA), Water Environment Federation (WEF), and the Water Environment Research Foundation (now Water Environment and Reuse Foundation (WE&RF)) released the Water Resources Utility of the Future… Blueprint for Action. The document was prepared in response to unprecedented challenges faced by the wastewater industry and the need to change traditional ways of thinking to meet these challenges.

Water Resources Utilities of the Future (UOTF) produce clean water, protect the Great Lakes, recover nutrients (like phosphorus and nitrogen), generate energy, utilize green infrastructure, and contribute to the sustainability of local communities.

A successful transformation to the UOTF approach will achieve beneficial outcomes for environmental, social and economic improvements, commonly referred to as the triple bottom line. This will be accomplished without the relaxation of water quality standards or treatment while moving Michigan to better water quality overall.

The Nutrient-Energy-Water (N-E-W) Paradigm

The Water Resources Utility of the Future focuses on the potential resources that may be recovered rather than the source or raw material from which those resources are recovered.

In June of 2015, Ed McCormick of Oakland, California, then president of the Water Environment Federation (WEF), spoke at the opening session of the annual conference of the Michigan Water Environment Association (MWEA). Mr. McCormick’s presentation on the Water Resource Utility of the Future included a vision for improved energy, nutrient and solids recycling and recovery at wastewater treatment plants throughout the country.

This vision sparked an impassioned interest in Mr. William “Bill” Creal, then Chief of the Water Resources Division (WRD) of the Michigan Department of Environmental Quality (MDEQ), regarding the opportunities these concepts provide for communities in Michigan. Later that year, Mr. Creal proposed, with the support of the Governor’s office and the head of DEQ, to develop recycling metrics for the state’s wastewater treatment plants. WRD leadership invited the Michigan Water Environmental Association (MWEA) to review and comment on draft metrics.

The next step was formation of a joint MDEQ/MWEA task force to discuss the opportunities. These discussions led to MWEA submitting a grant proposal to MDEQ. After review, the grant proposal was eventually approved in January 2016 to develop and explore ideas to assist in launching a program to promote recycling at the state’s treatment facilities.

The following tasks were established to help reach these objectives.

- Recap of Michigan’s Water Resource Recovery Leadership Summit - The summit took place April 8, 2016 and was universally considered a resounding success.

Companion documents include:

- Michigan’s Wastewater Treatment Plants Recycling Metrics
- Michigan Wastewater Treatment Plants Energy Survey and Estimate of Energy Baseline.

In 2013, the National Association of Clean Water Agencies (NACWA), Water Environment Federation (WEF), and the Water Environment Research Foundation (now Water Environment and Reuse Foundation (WE&RF)) released the Water Resources Utility of the Future... Blueprint for Action. The document was prepared in response to unprecedented challenges faced by the wastewater industry and the need to change traditional ways of thinking to meet these challenges.

Water Resources Utilities of the Future (UOTF) produce clean water, protect the Great Lakes, recover nutrients (like phosphorus and nitrogen), generate energy, utilize green infrastructure, and contribute to the sustainability of local communities.

A successful transformation to the UOTF approach will achieve beneficial outcomes for environmental, social and economic improvements, commonly referred to as the triple bottom line. This will be accomplished without the relaxation of water quality standards or treatment while moving Michigan to better water quality overall.

The Nutrient-Energy-Water (N-E-W) Paradigm

The Water Resources Utility of the Future focuses on the potential resources that may be recovered rather than the source or raw material from which those resources are recovered.

In June of 2015, Ed McCormick of Oakland, California, then president of the Water Environment Federation (WEF), spoke at the opening session of the annual conference of the Michigan Water Environment Association (MWEA). Mr. McCormick’s presentation on the Water Resource Utility of the Future included a vision for improved energy, nutrient and solids recycling and recovery at wastewater treatment plants throughout the country.

This vision sparked an impassioned interest in Mr. William “Bill” Creal, then Chief of the Water Resources Division (WRD) of the Michigan Department of Environmental Quality (MDEQ), regarding the opportunities these concepts provide for communities in Michigan. Later that year, Mr. Creal proposed, with the support of the Governor’s office and the head of DEQ, to develop recycling metrics for the state’s wastewater treatment plants. WRD leadership invited the Michigan Water Environmental Association (MWEA) to review and comment on draft metrics.

The next step was formation of a joint MDEQ/MWEA task force to discuss the opportunities. These discussions led to MWEA submitting a grant proposal to MDEQ. After review, the grant proposal was eventually approved in January 2016 to develop and explore ideas to assist in launching a program to promote recycling at the state’s treatment facilities.

The following tasks were established to help reach these objectives.

- Recap of Michigan’s Water Resource Recovery Leadership Summit - The summit took place April 8, 2016 and was universally considered a resounding success.

Companion documents include:

- Michigan’s Wastewater Treatment Plants Recycling Metrics
- Michigan Wastewater Treatment Plants Energy Survey and Estimate of Energy Baseline.

The reader will probably note reference to Water Resources Recovery Facility (WRRF) instead of Water Resources Utility of the Future (UOTF). The term WRRF will be used in this document to represent the same concept as the term UOTF.
Today there are approximately 400 municipal wastewater treatment plants in our state. Collectively, those who work in those plants are responsible for more than 1.3 billion gallons of wastewater daily. That’s an incredible daily achievement. It benefits millions of us in Michigan. But we need to raise awareness of this accomplishment and tell others about it if we are to attract more young men and women to the wastewater treatment profession. Take time to:

• Download and review the MWEA WRRF documents. The documents are available online at: [http://www.mi-wea.org/wrrf_grant.php](http://www.mi-wea.org/wrrf_grant.php)
• Change the name of your facility to a WRRF
• Download and start filling out the “Utility of the Future – Today” Application – take the steps necessary to be able to provide evidence that you are a UOF.
• Establish the right culture
• Offer tours
• Get involved in community events
• Obtain a copy of WEF “Energy Roadmap”
• Focus on beneficial use of solids, if possible

We invite you to take time to read and learn more. After you do, I think you will agree that the future we envision and the potential we have to make that vision a reality by working together, is indeed, awesome.

Brian Hannon, P.E.
Past President
Pete Cavagnaro, P.E.
WRRF Committee Chair

Published by the Michigan Water Environment Association 2017.
For additional information please contact us at (517) 641-7377.
Michigan Water Environment Association
PO Box 397
Bath, MI 48808
Email: mwea@mi-wea.org