

DOWNRIVER UTILITY WASTEWATER AUTHORITY SECOND YEAR IN REVIEW

CALENDAR YEAR 2020



INTRODUCTION

DUWA's Year 1 Report documented the initial work by DUWA to turn over the system from Wayne County and address numerous challenges that were discovered. This Year 2 Report continues the process of communicating the highlights of the work to effectively manage the system. Year 1 was primarily a year of learning about the system, developing good working relationships amongst all the stakeholders, and reacting to a number of unexpected challenges. Year 2 emerged as the year when the benefits of having the right individuals and teams in place began to be demonstrated. This Year 2 Report also addresses the upcoming challenges identified in the Year 1 Report, highlights administrative and operational accomplishments, and again concludes with future (new) upcoming challenges.



DUWA MEMBER COMMUNITY

City of Allen Park
City of Belleville
Township of Brownstown
City of Dearborn Heights
City of Ecorse
City of Lincoln Park
City of River Rouge
City of Riverview
City of Romulus
City of Southgate
City of Taylor
Township of Van Buren
City of Wyandotte

PRIMARY COMMISSIONER

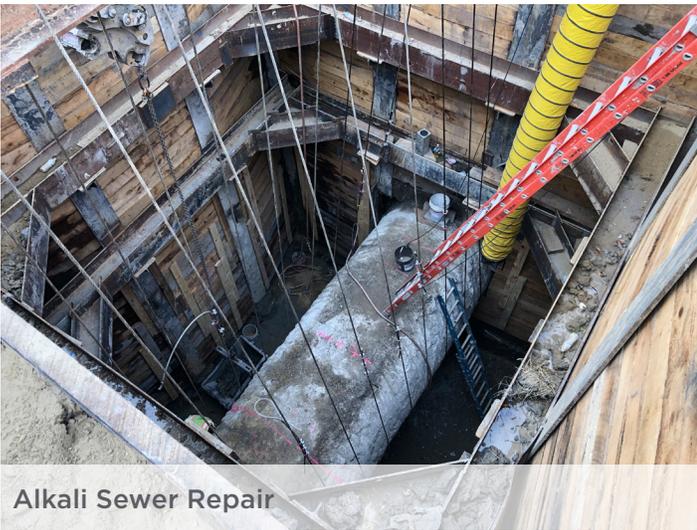
Gail McLeod, Mayor
Kerreen Conley, Mayor
Bill Turner, DPW Director
John Selmi, DPW Director
Richard Marsh, City Administrator
John Zech, Interim City Manager
Michael Bowdler, Mayor
Doug Drysdale, City Manager
Leroy Burcroff, Mayor
Joseph Kuspa, Mayor
Rick Sollars, Mayor
Kevin McNamara, Township Supervisor
Todd Drysdale, City Administrator

ALTERNATE COMMISSIONER

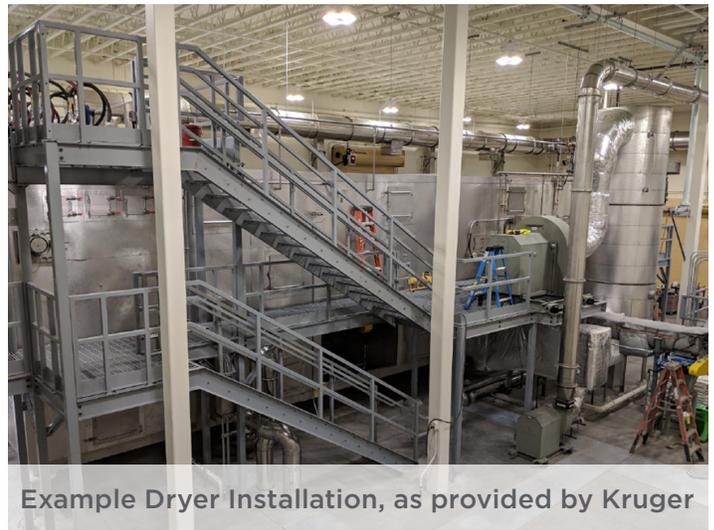
Pamela Sych, Council Member
Rick Rutherford, DPW Director
Andy Linko, Township Supervisor
Dan Paletko, Mayor
Dave Flatten, Former Interim City Administrator
Lisa Griggs, Director of Finance & Operations
Peggy Madden, City Attorney
Dean Workman, Council Member
Roberto Scappaticci, DPW Director
Dustin Lent, City Administrator
Keith Boc, DPW Director
Jim Taylor, DPW Director
Greg Mayhew, City Engineer

ADDRESSING YEAR 1'S (CY2019) CHALLENGES

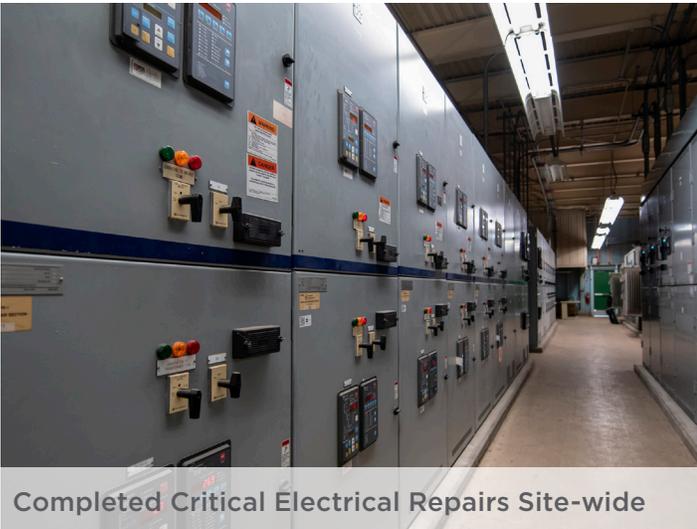
On the heels of a unique system transfer, DUWA faced its upcoming challenges head on. DUWA's Board, Committees, and Consultants worked together to tackle several major projects to ensure the system's long term success. DUWA advanced on a nearly \$20M Biosolids Dryer Facility via progressive Design Build delivery method, continued to work with its local member communities to reduce basement back-up vulnerability, created a 5-year capital program plan and advanced on many deferred maintenance items and improvements via its small capital program. DUWA along with its local member communities advanced on these challenges all while dealing with the COVID-19 pandemic. DUWA and Veolia, DUWA's Contract Operator, maintained its essential services without interruption. Due to the pandemic, there was reduced ability to connect with its retail customers. However, DUWA found opportunity in strengthening its financial performance. Recent credit rating evaluations showed that DUWA has created a solid history of financial performance. Only the uncertainty of the potential COVID impacts nationwide held back a rating increase.



Alkali Sewer Repair



Example Dryer Installation, as provided by Kruger



Completed Critical Electrical Repairs Site-wide



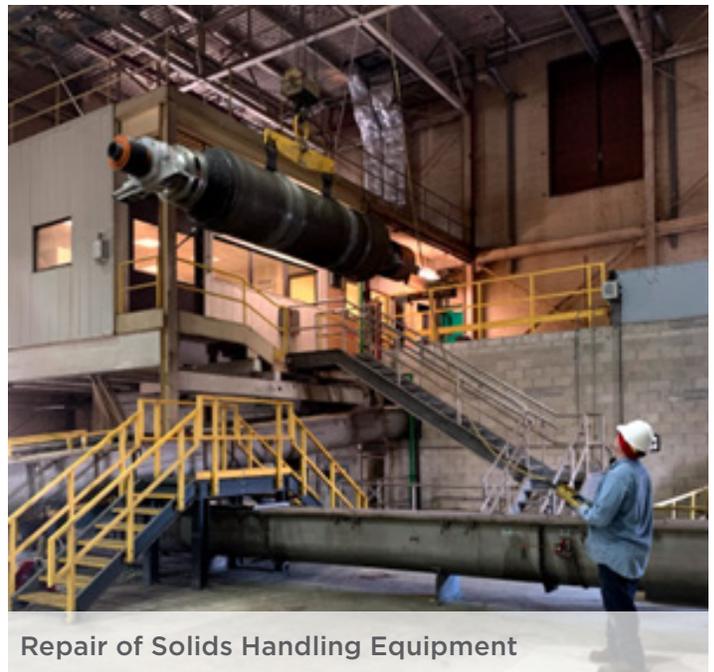
Emergency Electrical Repair at Influent Pumping Station

SECOND YEAR MAJOR HIGHLIGHTS

1. As of the end of December 2020, the DWTF has achieved 25 consecutive months of NPDES permit compliance.
2. Accomplished another year of good financial performance while meeting the 'rate neutral' goal established during system transition planning.
3. Advanced on biosolids dryer project to save System ~\$810k/yr (annualized) once implemented
 - Progressive Design Build project delivery to compress schedule and implement as expeditiously as possible
 - To gain design-build contractor participation on the project, DUWA self-secured the major equipment from the vendor directly
 - Unanimous Board support for project
 - Secured a low-interest financing through the EPA's Water Infrastructure Finance and Innovation Act (WIFIA). DUWA is the first in the State of Michigan to secure this loan and also the first in the program's history to secure financing with system operations being completed by a third-party operator
4. Established a perpetual small cap budget of \$2 million per year for repair and replacement projects. The intent is to maintain this budget as an annual threshold with added inflation for future years. Current projects show small and medium capital projects could be funded from this budget and thus mitigating need for loans for future, known medium sized projects. This has helped alleviate concerns about funding issues as deferred maintenance problems were uncovered and solutions were proposed.



Former Location of Belt Filter Presses; Future Site of Dryers



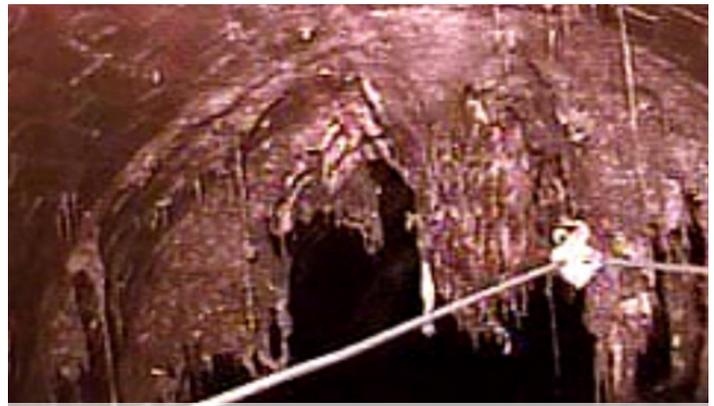
Repair of Solids Handling Equipment



Maintenance of Disinfection System

SECOND YEAR MAJOR HIGHLIGHTS - CONTINUED

5. Commenced critical repairs and other projects, including:
 - Repair of a portion of the interceptor along Alkali Avenue in Wyandotte. The need for repair of this interceptor was identified by Wayne County several years ago, but the work had been deferred.
 - Critical roofing repairs for aging building at the WWTP.
 - Medium voltage electrical repair and testing throughout the WWTP.
 - Standing up a new Supervisory Control and Data Acquisition system that is separate from the shared one with Wayne County.
6. Communities worked together to establish a plan for consistent, self-reported Non-Residential User fee reporting. Proudly, all communities are now reporting this user fee.
7. Implemented new wet weather operational protocols that significantly reduced the occurrence of blending. Preliminary results have shown that the goal established in the NPDES permit of reducing blending events to 4-6 per year may already have been achieved, if the last 2 years are representative. This has allowed DUWA to request removing some of the identified improvements, which may save approximately \$400,000, if approved by EGLE.
8. Handled COVID-19 pandemic issues without significant problems. Veolia maintained staffing levels per contract and safely managed outside engineering and construction contractor access to keep all planned improvements on schedule.
9. Operations Team managed the reduced phosphorous limit at the Wastewater Treatment Facility without issue, despite significant spike in loading due to a suspected illicit discharge.



Alkali Sewer Condition Before Repair



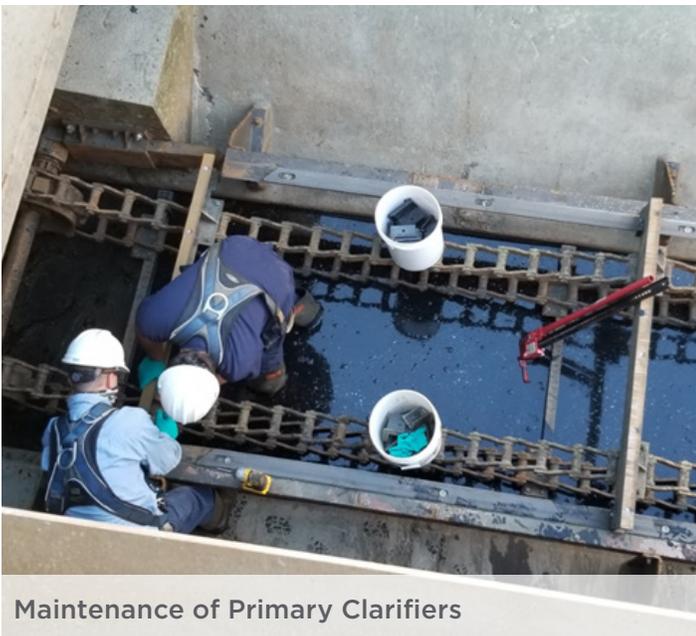
New Alkali Sewer Bypass Chamber



Veolia's Team Maintained Essential Services During COVID Pandemic

SECOND YEAR MAJOR HIGHLIGHTS - CONTINUED

10. Inspected an additional 10% of the collection system. Sewer inspection work continues to be prioritized towards anticipated 'worst case areas' to avoid another issue such as the historic Romulus sink hole. In general, there was no areas of major concerns. An area of moderate infiltration was identified is being considered for a 2021 repair. The interceptor condition validates the "due diligence" work completed as part of the system transfer.
11. Agreement reached with SWRDDD on split of electrical usage costs and continued emergency relief for the DUWA system during large rain events. The emergency relief is critical to avoid basement back-ups.
12. Improved real-time communication during large rain events so that the communities understand how the regional system is performing.
13. Eliminated off-site spare part storage, which reduces system expenses by over \$50k per year, while improving the efficiency of having spare parts on-site.
14. Per the Definitive Transfer Agreement, which was approved by all the communities, the existing rate method remains in effect for 5 years from the date of transfer. A rate methodology process update was started to allow sufficient time for consideration of alternatives and transitioning to a new methodology by the 5-year milestone.
15. Established good communication between OHM Advisors as DUWA's System Manager and Veolia Water of North America, as DUWA's Contract Operator, during normal operations and emergencies. This has led to improved communications with the communities on required rehabilitation/ replacement projects and has led to timely decision-making, avoiding negative consequences of system failures.
16. Critical perpetual major preventive maintenance continues on Primary and Secondary clarifiers and is demonstrated by consistent process performance.



Maintenance of Primary Clarifiers



Maintenance of Secondary Clarifiers

AWARDS AND OTHER ACCOMPLISHMENTS

- DUWA applied for and received the maximum Southeast Michigan Council of Government's grant of \$30k for refinement of DUWA's geographic information system database.
- Received the American Public Works Association, Michigan level (state) award for 'Project of the Year - Government Cooperation' category associated with the 'Successful Transfer of Downriver Sewage Disposal System'
- Submitted for American Council of Engineering Companies of Michigan's 'Project of the Year - Special Category' and was recently notified of receipt of a merit award in its category.



Awarded \$30,000 Grant for Refinement of DUWA's GIS database



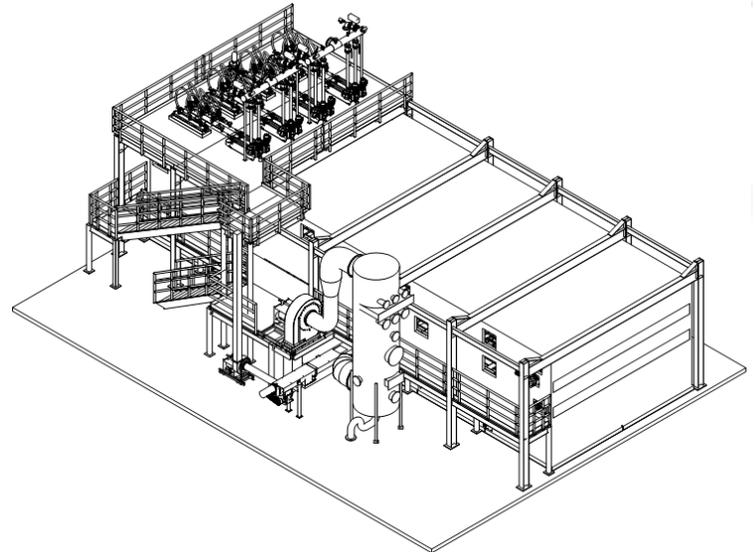
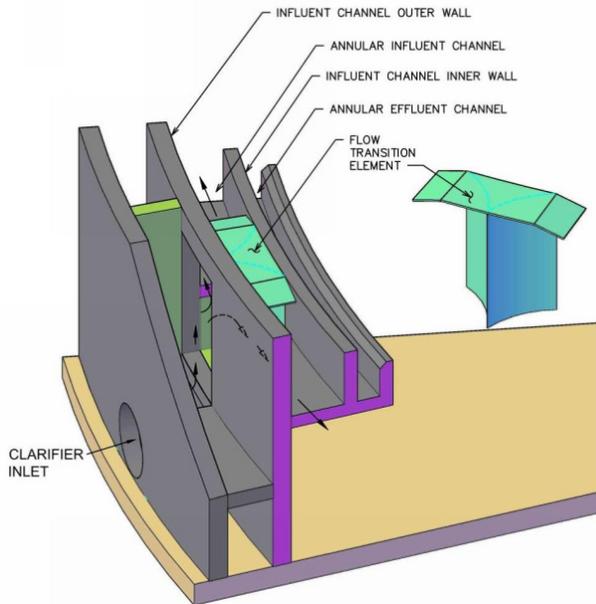
**Project of the Year
Government Cooperation Category**



**Project of the Year
Merit Award
Special Category**

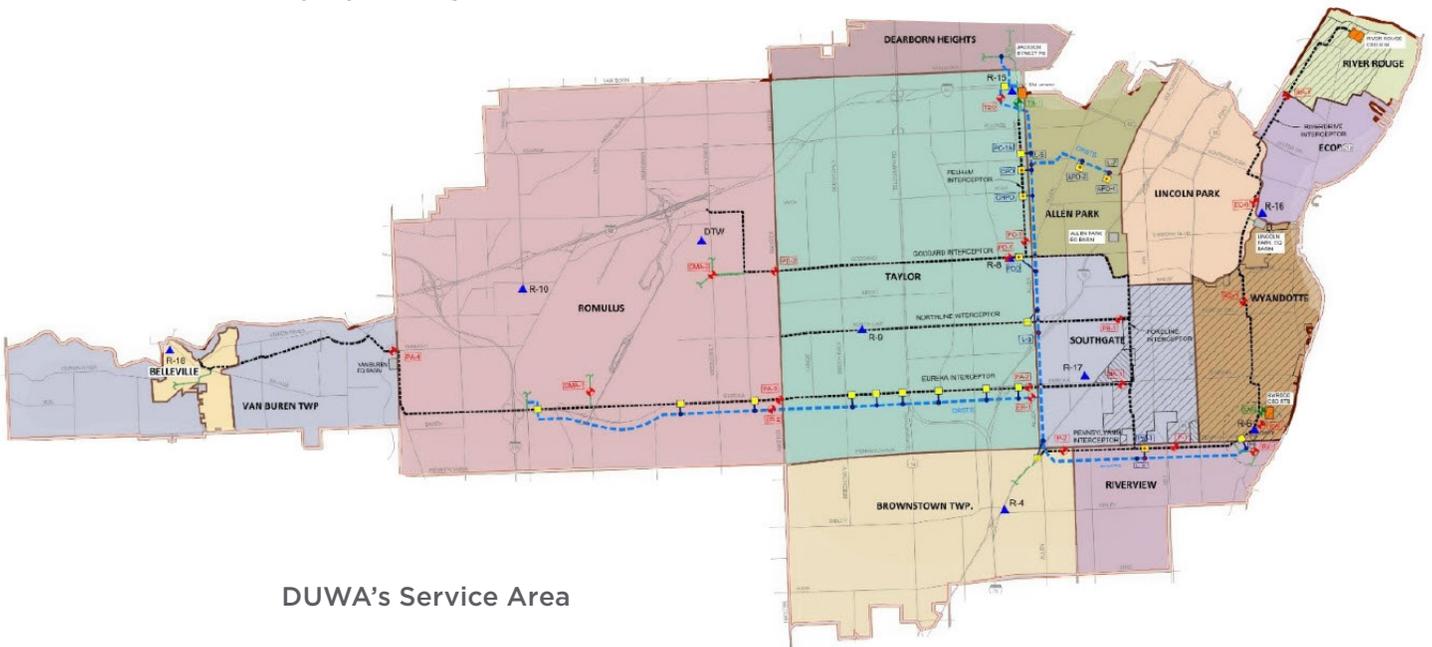
UPCOMING CHALLENGES

- NPDES Permit Renewal
- PFAS/PFOS minimization and desire to assign local limits
- Continued progress on blending reduction efforts, including capital upgrades
- Successful implementation of the Biosolids Dryer Facility in early 2022, while overcoming logistical, constructability issues – tight space & MOPO



Dryer Schematic as prepared by Kruger

Clarifier Improvement Schematic for Blending Reduction Efforts, as prepared by HRC/ASI



DUWA's Service Area