



DELCORA
2015 Annual Report



A Message from Robert Willert, Executive Director, DELCORA

As DELCORA wraps up 45 years of service to Delaware and Chester counties, I am pleased and gratified to present DELCORA's 2015 Annual Report, which highlights the significant successes we have enjoyed over the year and the new challenges the Authority will meet as we move forward.

The acquisition of The Preserve at Chadds Ford and The Springhill Farm wastewater treatment systems in Chester County are great examples of our successful growth initiative in DELCORA's western service area. It is a benefit for these communities, too, because DELCORA has the expertise and financial wherewithal required to provide this vital community service cost-effectively, reliably, and with full regulatory compliance into the future. As an example of this type of win-win relationship, an earlier

agreement to construct, own and operate the new Edgmont Township sewer system – substantially completed in 2015 – is a real boon to the Authority and the community.

We also saw phenomenal growth of the Authority's hauled waste business – with \$4.3 million in revenue in 2015 – through a prudent approach that ensures that we can continue to provide the reliable service that has made DELCORA the region's leading hauled waste facility while we continue to improve the Western Regional Treatment Plant (WRTP).

These are only two of the highlights of the first-year milestone in the 2015 Strategic Plan to achieve meaningful long-term operational improvements and growth. For example, the Authority has already begun implementing steps in our revised emergency management plan and warehouse inventory system, as well as improving outreach and marketing.

We are also proud of the Authority's successful 2015 bond issue and the stability of our strong Aa3 Moody's credit rating, which is a tribute to DELCORA's prudent financial management and substantial reserves. This position gives us the resources we need for essential capital projects, including the incinerator pollution control upgrade project at the WRTP – at \$11.4 million, the largest capital project funded by the 2015 bond issue. This upgrade will ensure that the Authority continues to provide environmentally responsible, cost-effective wastewater management services. In fact, we have received positive comments from environmental regulators for getting ahead of the curve on this issue.

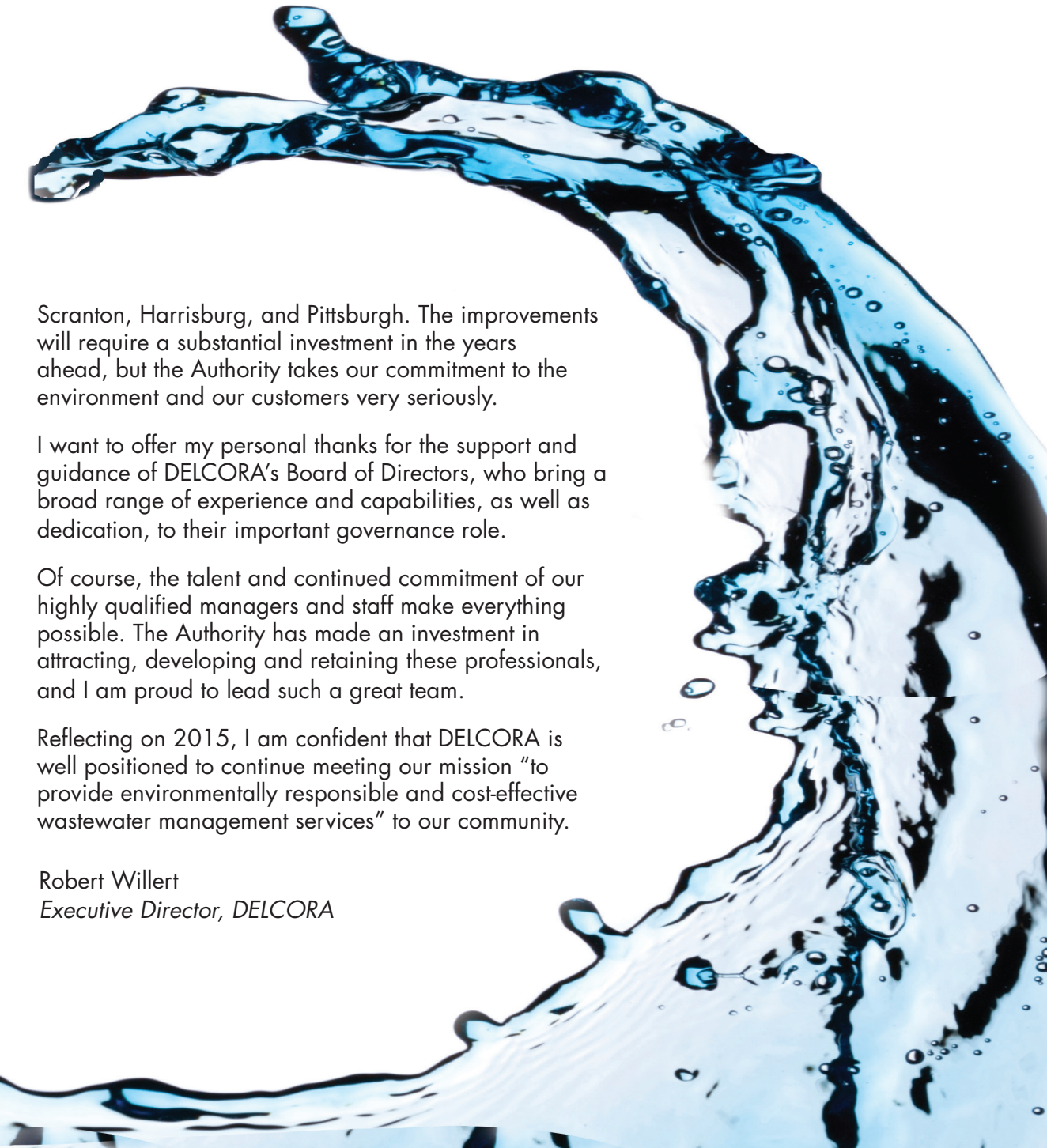
Of course, 2015 has not been without challenges, in particular, the initiation of work to update the Long Term Control Plan (LTCP) for controlling and reducing discharges from the combined sewer system in the City of Chester. DELCORA entered into a Consent Decree with the United

States Environmental Protection Agency (EPA) and the Pennsylvania Department of Environmental Protection (PADEP) to establish a schedule for implementation of Long Term Control Plan Update (LTCPU) to achieve full compliance with the Clean Water Act and the regulations and clean Streams Law and regulations.

The LTCP consists of three major steps, which include system characterization, development and evaluation of alternatives, and the selection and implementation of the controls. This approach will recognize the site-specific nature of Combined Sewer Overflows (CSOs) and their impacts on receiving water bodies in order to identify and select CSO controls that are technically feasible, meet the EPA's affordability criteria, and are consistent with the CSO Control Policy.

Nationwide, water utilities, including DELCORA, find themselves under increasing pressure as they confront a new set of complex environmental, demographic and financial challenges while also trying to meet expanded customer expectations for a safe and affordable water supply; the collection and high level treatment of wastewater and stormwater; flood protection and clean, attractive, fishable, swimmable rivers and streams.

It is an issue that is not just nationally, but hits very close to home in many urban communities in Pennsylvania, including Philadelphia, Williamsport,



Scranton, Harrisburg, and Pittsburgh. The improvements will require a substantial investment in the years ahead, but the Authority takes our commitment to the environment and our customers very seriously.

I want to offer my personal thanks for the support and guidance of DELCORA's Board of Directors, who bring a broad range of experience and capabilities, as well as dedication, to their important governance role.

Of course, the talent and continued commitment of our highly qualified managers and staff make everything possible. The Authority has made an investment in attracting, developing and retaining these professionals, and I am proud to lead such a great team.

Reflecting on 2015, I am confident that DELCORA is well positioned to continue meeting our mission "to provide environmentally responsible and cost-effective wastewater management services" to our community.

Robert Willert
Executive Director, DELCORA



A Milestone in the DELCORA 2015-19 Strategic Plan

In 2015, DELCORA management-employee teams made progress on specific initiatives toward the realization of significant goals in our five-year strategic plan, which will enable the Authority to achieve meaningful operational improvements and growth in its service areas.

As laid out in the DELCORA 2015-19 Strategic Plan, the Authority is committed to achieving four major goals: to remain in the 1st Quartile ranking in expenses in the National Association of Clean Water Agencies (NACWA), implement a comprehensive Asset Management Program, publish a formal Disaster Preparation & Recovery Plan, and increase opportunities for acquisitions and operations in Western Delaware County and Chester County.

To achieve these four major goals within the next five years, the plan identified objectives, initiatives, and the teams responsible for the completion of these initiatives. Here is a look at our progress in 2015 on some of the specific initiatives outlined in the plan.

Grow revenues. The five-year Strategic Plan calls for continuing growth, especially in Western Delaware County and Chester County, through additional acquisitions, contracts, new products and customer outreach. In 2015, DELCORA successfully concluded the acquisition of the Preserve at Chadds Ford system located in Pocopson Township. The Springhill Farm system is anticipated to become part of the DELCORA system in 2016 pending the signing of final agreements. The trucked waste business has grown significantly in 2015, setting new all-time records for gallons delivered (204.9 million gallons) and revenue (\$4.37 million). DELCORA also launched a new website in 2015 as part of its outreach to ratepayers, customers, and the wider community.

Improve bond rating. In association with DELCORA’s 2015 bond issue, Moody’s affirmed DELCORA’s very strong “Aa3” credit rating and assigned a “Stable Outlook” based on the Authority’s substantial liquidity and strong financial metrics, while acknowledging the Authority’s potential to incur debt associated with revision of its long-term control plan. Within the timeframe of the Strategic Plan, DELCORA anticipates the start of an initiative to improve the Authority’s bond rating.

Improve expense management for maintenance, materials, and supplies. Examining key areas targeted for improved expense management in the five-year plan, DELCORA has already improved documentation, tracking and charges for contractors’ use of the Authority’s equipment; reduced emergency generator rental expenses for the Western Regional Treatment Plant (WRTP) and pump stations with the purchase of a mobile unit; and planned for implementation of an improvement to reduce the cost of the sludge aeration process.

Update human resources succession and personnel development strategy. DELCORA recognizes that the growth and operational goals outlined in the five-year Strategic Plan depend on an updated strategy for the effective recruitment of highly qualified personnel, ongoing training and development, retention, and succession throughout the organization. In 2015, DELCORA’s executive director and H.R. team have performed a comprehensive assessment of all departmental needs and have allocated personnel in a manner that enables each department to function more efficiently. Both group and individual

training needs are being assessed on an as-needed basis and training is being provided at a group level as well as individually where appropriate.

Improve Environmental Laboratory performance. The DELCORA Environmental Laboratory staff completed the testing of new analytical methods to measure the concentration of nutrients in treated wastewater that can contribute to the eutrophication, or “aging” process, of water bodies. The lab applied for accreditation of the new nitrate, phosphorus and total Kjeldahl nitrogen methods to the Pennsylvania Department of Environmental Protection’s Laboratory Accreditation Program. The DELCORA Environmental Laboratory has been accredited since 2007 under the program, which evaluates and accredits environmental laboratories to ensure that they meet state and federal regulations to help protect the environment and assure human health, safety, and welfare.

Engage industrial users to improve pretreatment. Based on extensive research into wastewater industry best practices, DELCORA’s Pretreatment staff drafted a plan for a new Industrial User Public Outreach Initiative, which is intended to encourage compliance and improve efficiency.

Enhance disaster preparation and recovery planning. Working with a consultant specializing in disaster planning and recovery solutions, a DELCORA team has begun a risk assessment of the Western Regional Treatment Plant (WRTP), administration building and remote facilities. This initiative is intended to ensure that DELCORA can continue to reliably

fulfill its mission should an event occur with a serious impact on its workforce, assets and/or operations.

Ensure IT infrastructure longevity, security, and maintenance. Working with an IT consultant, DELCORA has prepared a “roadmap” that identifies future hardware platforms and software applications, including cloud-based applications, to mitigate the risk of obsolescence. The team is also researching options for data backup and real-time cloud applications to improve IT security and system maintenance.

Assist municipalities in addressing inflow and infiltration (I&I) issues. Across the country, municipalities grapple with the effects of I&I: the inflow and infiltration of storm water and/or groundwater into their sanitary sewer systems, for example, through cracked pipes, leaky manholes, or improperly connected storm drains, down spouts and sump pumps. Not only can I&I cause sanitary sewer overflows and backups, it also results in increased wastewater treatment costs, which are passed on to ratepayers. To provide municipalities in DELCORA’s service area with data and assistance in addressing this issue, DELCORA engaged a consultant that completed a study based on data from five years of meter readings weather parameters. The results will be presented to the individual municipalities.

Employees throughout DELCORA continue to lead and contribute to these initiatives and broader goals as their investment in the future of wastewater treatment for Delaware County and the region.



Trucked Waste Business Has Another Record-Breaking Year

DELCORA develops a new account with Waste Management, Inc., a leading provider of environmental solutions in North America.

DELCORA's trucked waste business had another record-breaking year in 2015 with \$4.37 million in revenue, surpassing both the Authority's annual goal and its 2014 revenue of \$3.7 million. *The chart on page 19 shows the revenue growth since 2008.*

Much of the success of the business in 2015 can be attributed to DELCORA's ongoing business development initiative, which resulted in a new account with Waste Management, Inc. (WM).

A leading provider of integrated environmental solutions services in North America, WM estimates that it serves more than 21 million customers — including municipalities, construction sites, healthcare facilities, and commercial buildings — through its network of recycling facilities, transfer stations and landfills.

Last year, DELCORA began receiving trucked waste from WM contract haulers in Pennsylvania, Delaware, and Virginia.

Indeed, since the inception of the Trucked Waste Receiving Program, DELCORA has emerged as the premier Southeastern Pennsylvania disposal facility, leading the industry in environmental compliance, pricing, and turnaround time. The Authority's seasoned staff of both compliance and operations personnel provide superior customer support and work to facilitate the success of our customers.

The business has grown thanks to an efficient receiving facility at the WRTP, which resembles the fuel islands at a giant truck stop. Haulers can pull in a truck of any size, from a small six-wheel tank truck to a tractor-trailer. They connect a 4-inch quick-connect hose, open a valve and unload — in about 7 minutes or less — and drive straight out.

The received waste goes from the collection manifold to a pump station, which delivers it to the head of the plant. A separate grease acceptance area enables haulers to unload by gravity, which is the most efficient means of unloading this material.

Last year the receiving facility at the Western Regional Treatment

Plant (WRTP) averaged 631,487 gallons a day, of which approximately 511,487 gallons were processed through the plant and the remainder went directly to solids handling.

Marketing and outreach efforts are key to growing the hauled waste business. These efforts include exhibits at key water and water-environment conferences in the tri-state area, special events for principals at hauling companies, and perks for drivers, including a lounge area.

In late 2015, the Authority launched the DELCORA Trucked Waste Facebook page. Over the years, haulers have grown to "like" us; now, there is a new way for them to show it.



Edgmont Crum Creek Sewer Project is Substantially Completed



The Edgmont Crum Creek Sewer Project was funded by a bond secured by DELCORA, which will be repaid by Edgmont Township sewer users over the life of the system. It will generate a projected \$1.2 million in annual revenue.

Public sewer system connecting eastern Edgmont community with DELCORA's Western Regional Treatment Plant to generate a projected \$1.2 million in annual revenue.

The implementation of a public sewer system to serve eastern Edgmont neared completion with installation of new sanitary sewer pipe and force main, completion of construction and testing of three pump stations, and installation and testing of equipment in the main pump station that will transmit real-time operating data to DELCORA's Supervisory Control and Data Acquisition (SCADA) system.

The collection system will use approximately 38,000 feet of Edgmont's existing sewer pipe. In 2015 (phase two of the project), approximately 14,000 feet of new sanitary sewer pipe and 10,000 feet of new force main were installed (approximately 95% completed). The new and existing piping will convey the flow from Edgmont residents to the three new pump stations.

Prepared to receive flow from Crum Creek District.

When the project is fully commissioned and operational in early 2016, Bridle Pump Station will convey flow from the northern sections of the Crum Creek District, and Dream Valley Pump Station will convey flow from the southern section. The flow from these pump stations will be sent to the main pump station, Runnymede Pump Station. From here, it will be conveyed through the Gradyville Road Force Main (completed in phase one, 2014) to the Central Delaware County Authority (CDCA) receptor, which is located in Marple Township. The CDCA will convey the flow to DELCORA's Central Delaware Pump Station, which will send it to DELCORA's Western Regional Treatment Plant for treatment. Runnymede Pump Station is equipped for continuous transmission of operating data from the collection system to DELCORA's SCADA system, which is used for data gathering and process control. In 2015, the pump stations were fully constructed and tested, and the data transmission equipment was installed and tested.

Sensitive to the community.

Both in the design and execution of the project, DELCORA has been sensitive to the community. During the Authority's meetings with township officials, there was discussion of residents' concerns and requests, which DELCORA accommodated whenever it was feasible. For example, generators were moved so that they would be less visible,

stone facade was added to the above-ground structures, site fencing was changed from chain link fencing to black metal picket fencing, and additional landscape material was added to the sites.

An important expansion in DELCORA's service area.

The new public wastewater collection system will serve a community of about 1,000 equivalent dwelling units, or EDUs, in the Crum Creek District of eastern Edgmont. The total flow from these users is expected to average 350,000 gallons per day of mostly residential wastewater. This project marks an important expansion of DELCORA's service area into new areas of Delaware County, as DELCORA will construct, maintain and operate this system under its agreement with Edgmont Township.

Projected annual revenue of \$1.2 million.

The Edgmont Crum Creek Sewer Project was funded by a bond secured by DELCORA, which will be repaid by Edgmont Township sewer users over the life of the system. The Commonwealth of Pennsylvania also provided an "H2O grant" to provide single- or multi-year grants to municipalities or municipal authorities to assist with the construction of drinking water, sanitary sewer and storm sewer projects. An agreement to construct, own and operate the Edgmont Township sewer system will generate approximately \$1.2 million per year in revenue.



Ramping Up to Full Capacity

Incinerator upgrade project – at \$11.4 million, the largest capital project funded by the 2015 bond issue – will reduce fuel demand, improve emissions, reduce furnace maintenance, and comply with revised environmental standards.

In 2015, DELCORA substantially completed a project to upgrade the control system and increase capacity for the ash conveyance system of the two sludge incinerators at the Western Regional Treatment Plant (WRTP). Work also commenced on a significant upgrade of each incinerator's air pollution control system, comprising a Multi-Venturi scrubber, wet electrostatic precipitator and a post-scrubber afterburner with regenerative thermal oxidizer with heat- energy recovery.

In combination, these major upgrades will enable the Authority to fully utilize the permitted capacity and operational flexibility of its two incinerators, using less fuel to incinerate organic matter and more efficiently conveying the ash to the plant's two storage silos prior to disposal. The Authority also will be prepared to meet

the US Environmental Protection Agency's (EPA) 2016 Maximum Achievable Control Technology (MACT) standards, which are designed to reduce levels of air emissions.

The Benefits of the Scrubber/ Afterburner Project

In the mid-1990s, DELCORA converted the top two hearths of each incinerator to function as an afterburner in order to comply with increasingly stringent environmental regulations of hydrocarbons and volatile organic compounds in smokestack emissions. At that time, the plant's necessary capacity was 30 dry tons a day, so this was a cost-effective solution.

Increasing Capacity, Achieving Compliance and Improving Efficiency

The scrubber/afterburner project, which began in 2015, comprises installation of a Multi-Venturi scrubber and wet electrostatic precipitator (WESP) and a post-scrubber afterburner with regenerative thermal oxidizer (RTO) heat recovery for each incinerator.

The Venturi scrubber and WESP effectively reduce the volume of moisture, acid, particulate, metals, and gas that are generated by the sludge incineration process. The new scrubbers will enable the treatment plant to meet the EPA's 2016 MACT standards for removal of sulfur-oxygen compounds in final stack emissions.

The post-scrubber afterburner is a combination afterburner/heat exchanger vessel located outside the incinerator building. Heat recovery for an RTO can operate with up to 98 percent thermal efficiency, which will reduce consumption of natural gas by up to 80 percent compared with conventional afterburner technology. RTOs also have higher total hydrocarbon (THC) and carbon monoxide (CO) destruction efficiencies.

Other benefits of the system include: approximately 90-percent reduction in particulate emissions; reduced temperature related-stress on furnace internals, which will reduce furnace maintenance; consideration of furnace capacity increase without inordinate increases in fuel demand; and an improved position with future regulatory requirements.

The installation of the new system will allow the plant to restore the use of all eight hearths in each incinerator, enabling each incinerator to operate at its full capacity of 55 tons per day (TPD). This will help the plant to meet the increased capacity requirements to process incoming hauled waste as well as additional flow from the Chester-Ridley Creek Pump Station.

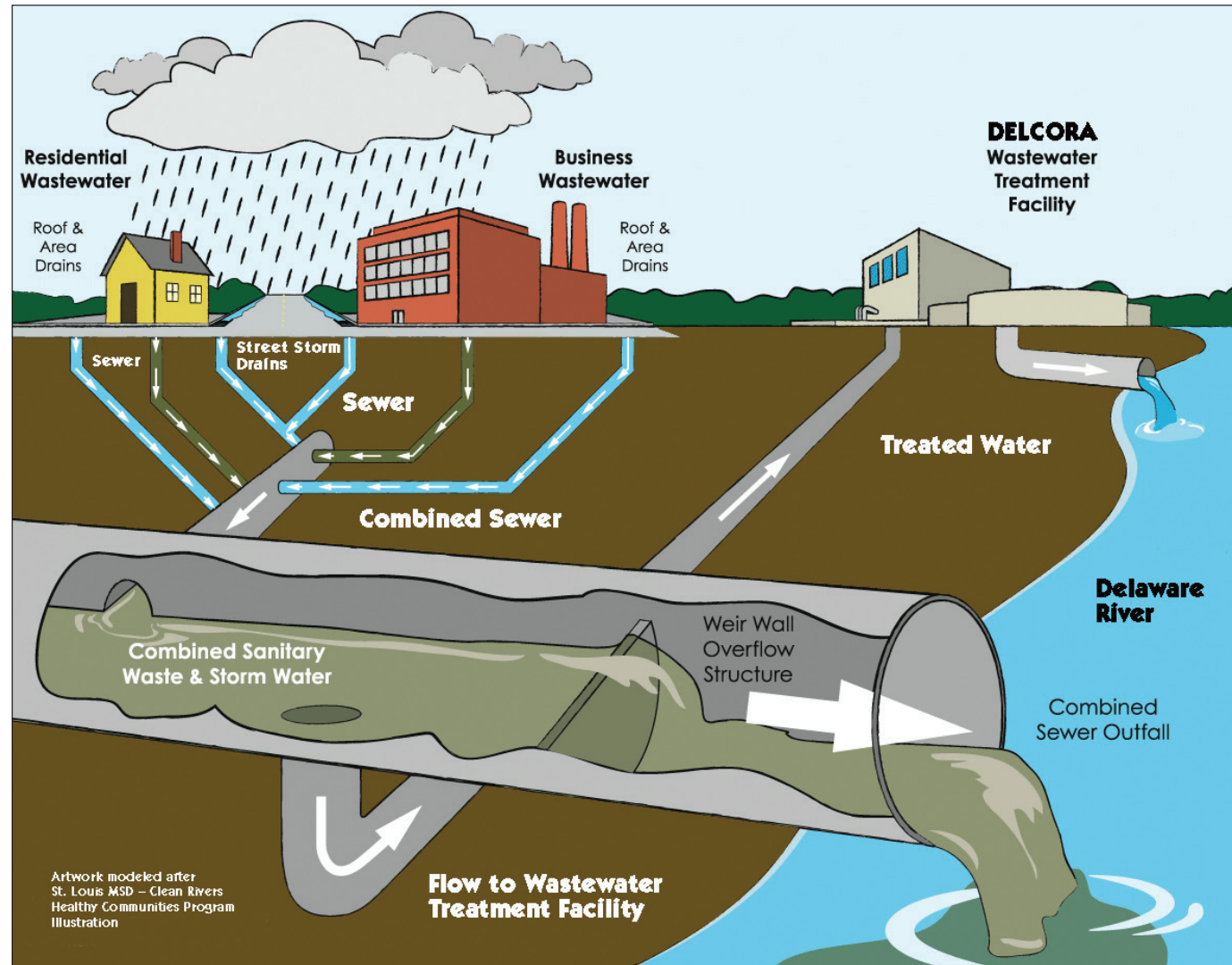
As of the end of 2015, the scrubber/afterburner project is approximately 60-percent completed. Incinerator #2 is scheduled to be taken off-line in late May of 2016 to complete the scrubber/afterburner project.

Belt Filter Press #4 increases dewatering capacity for sludge incineration and hauling.

In 2015, DELCORA installed a fourth belt filter press (BFP4) to ensure that the supply of dewatered sludge will continue to meet the plant's combined capacity requirements for incineration and hauling sludge to a compost facility. A reversing screw conveyor system was placed into service in December 2014, allowing the flexibility for dewatered sludge to be conveyed to an incinerator or hauled to a compost facility when an incinerator is offline for current and future upgrade projects, maintenance or repairs.

All engineering and contract specifications for BFP4 were prepared in-house. In an effort to maintain parts inventory, standardization and continuity of maintenance, DELCORA required that BFP4 be the same make and model of equipment as the plant's existing three belt filter presses. The design-build turnkey project was the most cost-effective approach, enabling completion in a timely, efficient manner in the operating plant. Belt Filter Press #4 was online in early 2015. It was completed at a project cost of \$550,000.

DELCORA Begins Work on Updating the Long Term Control Plan



Under an agreement with the EPA and DEP, the Long Term Control Plan will involve improvements to the combined sewer system in the City of Chester. The diagram to the left depicts a typical combined sewer system.

In August 2015, the Delaware County Regional Water Quality Control Authority (DELCORA) announced that it had entered into a settlement agreement with the United States Environmental Protection Agency (EPA) and Pennsylvania Department of Environmental Protection (DEP) to make improvements to the combined sewer system in the City of Chester to address issues related to the discharges of the system during rain events.

Under the agreement between DELCORA, the EPA and DEP, DELCORA has until February 2019 to update its Long Term Control Plan (LTCP) for controlling and reducing discharges from the combined sewer system in the City of Chester. The plan must then be implemented by August of 2035. DELCORA also paid a \$1.375 million civil penalty to the regulatory agencies as part of the agreement.

DELCORA has brought on a team of experts to help develop the updated LTCP, including an engineering firm specifically experienced in the area of LTCPs and a municipal financial service firm to help develop a rate model for customers to fund the needed improvements.

As of the end of 2015, DELCORA had met the deadlines for completion of the following steps, including submittal of documentation to EPA and DEP:

- **A Public Participation Plan**, which will inform and solicit input to the Authority's updated LTCP from stakeholders, including the public, customer communities and regulatory agencies
- **A Hydrologic and Hydraulic Model** of all areas that are tributary to or that influence flow to the entire wastewater collection and transmission system, the combined sewer system, and the Western Regional Treatment Plant
- **The Typical Year Rainfall Record Report**, based on a statistical evaluation and analysis of the 100-year rainfall record.

In 2015, the Authority also began work on development of the Financial Capabilities Assessment, which is an initial step toward determining the cost of the updated LTCP. The final determination of the cost of the plan will be made when development of the plan is completed.

By the end of 2016, DELCORA will have invested in excess of \$1.5 million to complete a portion of the initial steps that are required for development of the Authority's updated LTCP.

DELCORA inherited Chester's antiquated system in 1971 when it took over the operations and maintenance of wastewater collection, conveyance, and treatment from the City. The system was constructed in the early 1900s and the combined sewer system – which includes one pipe that combines both sanitary sewage and stormwater – was a typical engineering practice in urban areas at that time.

When DELCORA assumed control of the system, discharges from the system were in compliance with the agency's permits. While discharges from the system are still permitted today, as new technologies and practices in sanitary and stormwater treatment have developed, regulatory agencies have become more stringent in the application of the Clean Water Act as it relates to combined sewer systems. This has led to regulatory agencies having entered into agreements and issuing civil penalties for combined sewer systems in many urban communities in Pennsylvania and across the country, including Philadelphia, Williamsport, Scranton, Harrisburg and Pittsburgh.

Currently, the City of Philadelphia is in the process of implementing a \$2 billion updated LTCP following its agreement with the EPA and DEP. DELCORA is contributing \$178 million over the next 15 years for improvements made as part of Philadelphia's updated LTCP since flow from DELCORA's Eastern Region is pumped to the City's system.

DELCORA takes its commitment to our environment and customers very seriously. In 1999, the Authority implemented its initial LTCP. Over the next 10 years, DELCORA invested \$5 million in infrastructure improvements to the combined sewer system in Chester to address the issues of discharges during rain events.

This investment included upgrades to regulators, which control the flow and discharge of combined sanitary sewage and stormwater during rain events. DELCORA also paid the City of Chester \$750,000 to make improvements to stormwater inlets on city streets that help reduce trash and debris from flowing into the combined sewer system. This debris can lead to blockages in the system, pollute receiving streams, and cause the unnecessary discharge of wastewater from the system.

Additionally, the Authority has worked to reduce combined wastewater flows by requiring that new projects separate sanitary sewage and stormwater by diverting stormwater to a stormwater collection system that is distinct from the combined sewer system that exists throughout most of Chester.



2015 Bond Issue Generates Proceeds of \$39 Million

Moody's reaffirmed DELCORA's 'Aa3' credit rating; proceeds will fund significant capital improvements.

On July 22, 2015, DELCORA successfully settled its Series of 2015 Bonds in the principal amount of \$36,205,000. The bonds had an overall yield of 3.704146 percent. The bonds were sold with approximately \$2,684,215 of net original issue premium, which when combined with other available sources resulted in total available proceeds of approximately \$39 million.

Moody's affirmed DELCORA's 'Aa3' credit rating. In association with DELCORA's 2015 bond issue, Moody's affirmed DELCORA's very strong "Aa3" credit rating and assigned a "Stable Outlook" based on the Authority's substantial liquidity and strong financial metrics, while acknowledging the Authority's potential to incur debt associated with revision of its long-term control plan.

Acting on favorable market conditions had interest rate advantages.

DELCORA had accelerated the pricing of the bonds by one day (July 7) to take advantage of favorable interest rate conditions and strong investor demand due to certain economic events occurring in Europe. As a

result, the Authority was able to mitigate interest rate risk and lock in interest rate improvements. After the pricing of the bonds, there were sudden increases in long-term interest rates due to the apparent resolution of the Greek debt crisis in Europe.

Proceeds of the bonds will fund the significant capital improvements.

These projects include upgrades of the Western Regional Treatment Plant (WRTP), Rose Valley Sewage Treatment Plant, and Eastern Service Area.

- WRTP projects include the incinerator secondary combustion chamber and wet scrubber – at \$11.4 million, the largest capital project funded by the 2015 bond issue – as well as improvements to electrical substations, utility water and the solids handling system.
- The Rose Valley upgrade involves construction of a new pump station and force main to convey wastewater to the WRTP.
- Improvements in the Eastern Service Area include DELCORA's three major pumping stations and wastewater conveyance system.

Building a Highly Qualified, Dedicated Team One Person at a Time

Retaining, developing and promoting DELCORA employees

Given the high costs of replacing an employee (between \$2,000 and \$20,000 per person, according to recent studies), DELCORA has made an investment in selecting and retaining highly qualified employees:

- offering competitive compensation and benefits packages based on periodic municipal and private-sector salary surveys.
- developing employees' professional and leadership skills through training and mentoring
- and, whenever possible, promoting from within.

As a result, DELCORA is a sought-after employer. Moreover, it is not unusual to find employees who have had careers with the Authority for 35 or more years – far surpassing the 20-year mark for a fully vested retirement plan.

DELCORA employees are not only skilled professionals, they are also positive, proactive, hard-working team players. DELCORA encourages independent thought, initiative, engagement, and "ownership" of the Authority's mission.

As evidence of this commitment, employees throughout DELCORA have been called upon to lead and contribute to achieving the goals laid out in the 2015 Five-Year Strategic Plan. They have stepped up to the challenge, participating in 16 multi-disciplinary teams charged with meeting departmental objectives by completing specific initiatives by quarter and year.

Just as DELCORA has made an investment in the future of their employees' careers, this is their investment in the future of wastewater treatment for Delaware County and the region.



The DELCORA Board of Directors



**DELCORA's Executive Director Bob Willert
pictured with Senior Staff**

Key Rating Drivers

FLOW

DELCORA sent an average of 23.15 million gallons per day (MGD) in 2015 to the Philadelphia Water Department's Treatment Plant. Flow at DELCORA's Western Regional Treatment Plant was 33.54 MGD.

SERVICE AREA

The socioeconomic profile of the base customer is quite strong. Delaware County's population is more than 560,000, and income levels in the county are above average. The median family income of the county's residents is equal to 126% of the US median, and per capita income is 118% of the US median. The county's size and economic diversity are a strength.

Although the Authority recently underwent some revenue pressures from the loss of industrial usage, namely from a Sunoco Inc. property, the current revenue composition is mostly residential and stable.

DEBT

The Authority has roughly \$113 million of outstanding debt. This includes \$8.3 million of state revolving fund loans through the Pennsylvania Infrastructure Investment Authority (PennVest), which are on parity with the bonds and bound by the same covenants. The debt is equal to a moderate 2.4 times revenues.

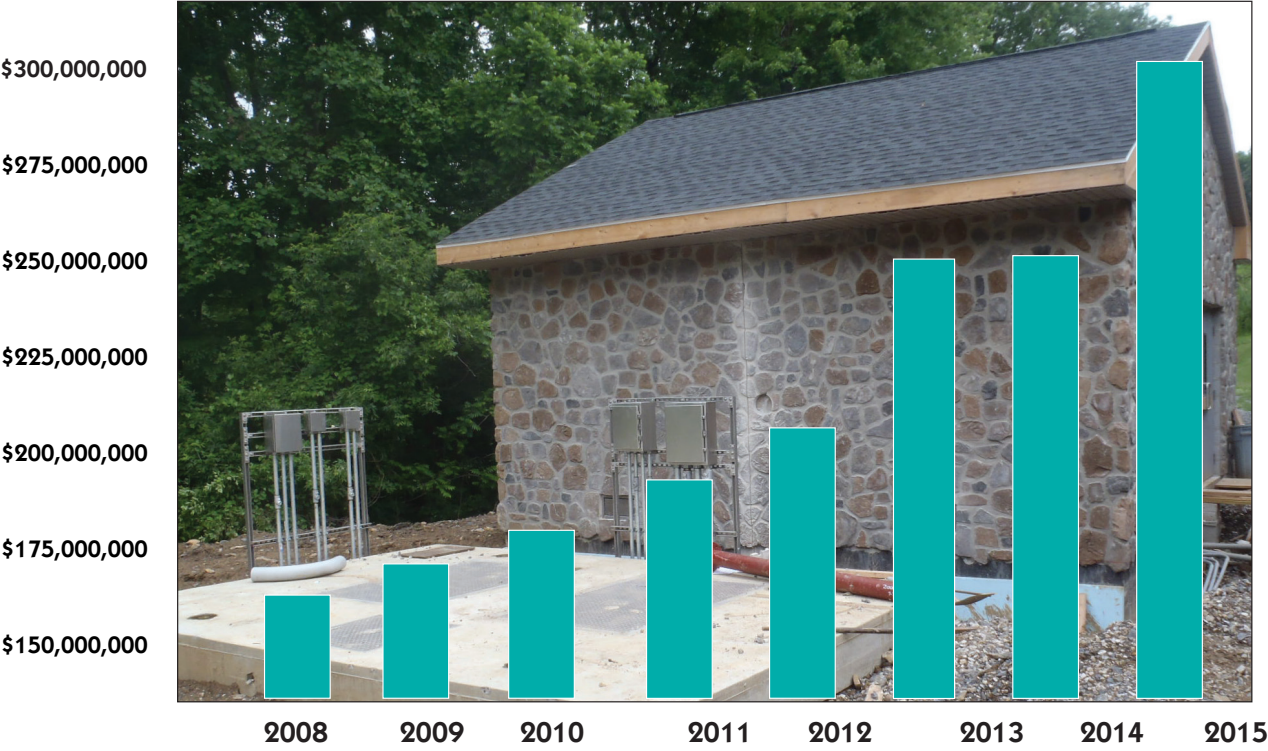
All of the system's debt is fixed-rate and amortizes over the long-term.

The Authority is not exposed to any derivative agreements.

DELCORA has entered into a consent decree with the US Environmental Protection Agency and PA DEP over overflows in the City of Chester. DELCORA is unable to estimate the costs of this settlement; however, such agreements typically require significant debt to achieve compliance.

The Authority's debt burden and capital funding requirements are likely to increase in future years because of its exposure to two consent decrees, one directly for the infrastructure of the City of Chester, and the other indirectly for the Philadelphia Water and Sewer Enterprise.

Total Assets 2008 - 2015



Statement of Revenues, Expenses and Changes in Retained Earnings

	Year Ending 12-31-15	Year Ending 12-31-14
Operating Revenues	\$ 53,305,788	\$ 43,752,347
Operating Expenses	\$ 44,211,986	\$ 40,445,871
Operating Income	\$ 9,093,800	\$ 3,306,476
Non Operating Revenue (Expenses)	(\$ 3,061,499)	\$ 2,882,033
Increase in Net Assets	\$ 6,032,301	\$ 6,188,509
Capital Contributions	\$ 2,392,191	\$0
Net Assets – Beginning	\$152,137,904	\$149,861,513
Net Assets – Ending	\$160,562,396	\$156,050,022

DELCORA sent an average of 23.15 million gallons per day (MGD) in 2015 to the Philadelphia Water Department’s Treatment Plant. Flow at DELCORA’s Western Regional Treatment Plant was 33.54 MGD.

In 2015, revenue from the trucked waste receiving business reached \$4,377,766, an increase of \$977,766 (22.3%) over the 2015 budget, and an increase of \$669,789 (18.1%) over the prior year. Revenue has consistently increased annually from a level of approximately \$300,000 in 2004 to the present level. (See the chart on page 19 and the article on pages 6-7 for additional information.)

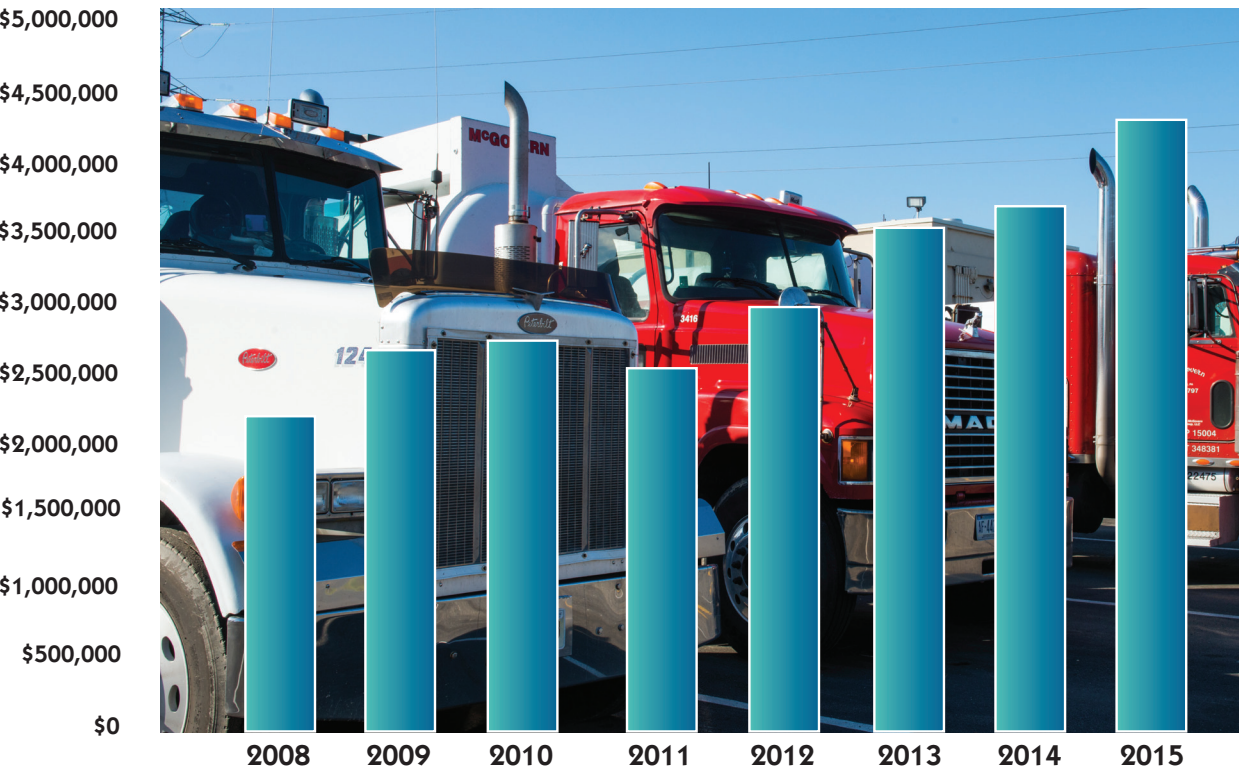
Net cash flow from operations increased by \$1,193,078 to \$14,650,900 in 2015 from 2014.

Condensed Balance Sheet

	Year Ending 12-31-15	Year Ending 12-31-14
Current Assets	\$108,403,801	\$ 81,355,558
PP&E (net)	\$182,422,188	\$163,200,336
All Other Assets	\$ 12,209,893	\$ 8,024,402
Total Assets	\$301,035,882	\$252,580,296
Current Liabilities	\$ 11,928,026	\$ 12,774,958
Long Term Debt	\$128,545,480	\$ 83,753,316
Net Assets	\$160,562,398	\$156,050,022
Total Liabilities and Net Assets	\$301,035,882	\$252,580,296

The condensed statements are for the years ending 12-31-14 and 12-31-15. Complete statements are on file at the Authority’s office at 100 East 5th Street, Chester, PA 19013, or can be accessed at www.delcora.org.

Trucked Waste 2008 - 2015





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