ALLEGHENY COUNTY SANITARY AUTHORITY

ANNUAL REPORT

AS OF DECEMBER 31, 2018

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ALCOSAN is one of the region’s premier environmental and public health organizations, treating wastewater for 83 Allegheny County communities, including the city of Pittsburgh. The authority enhances the community’s quality of life and safety. ALCOSAN’s 59-acre treatment plant processes up to 250 million gallons of wastewater daily and is one of the largest such facilities in the Ohio River Valley.

This report was prepared by ALCOSAN staff and produced by the authority’s Communications Department.

Editor: Susan Mannella
Designer: Michael Anthony
Most of us can remember our high school graduation ceremony, a celebration that recognized years of hard work and growth. It wasn’t just an ending, though. The event also sent us forward on a path, whether toward a job or additional studies, that would require more diligence, more attention and increasing levels of responsibility and expertise.

That’s how those of us at ALCOSAN feel with the advancement of a revised federal Consent Decree and Clean Water Plan. We have accomplished so much to reach this point and, once it is finalized, we will take on the far-reaching and long-term tasks that will ensure cleaner rivers and a healthier environment for our region for generations to come.

Every division at ALCOSAN has played a role in preparing the Clean Water Plan, and they all have a part in bringing it to fruition. In addition, we have created a new division, Governmental Affairs, to ensure good relations between ALCOSAN and its state and federal elected representatives and the agencies whose work intersects with ours. Also, ALCOSAN’s Procurement Department has created a process for thoroughly vetting all contracts and negotiating the best prices for projects both large and small.

Our plant is expanding, our responsibility for sewer lines and related structures is increasing and our staff is growing to meet those challenges. Our ratepayers, who are funding this work, deserve the best that technology, research and training can provide, and that is what drives ALCOSAN’s efforts.

I hope you can sense our excitement for the future as you read through this annual, department-by-department summary of what occurred during 2018, as we look forward to implementing plans that will run through 2036. If you are seeking more information, you can find details and updates at alcosan.org.
2018 BOARD OF DIRECTORS

Incorporated under the Pennsylvania Municipal Authorities Act in 1946, ALCOSAN is governed by a seven-member board of directors - three appointed by the mayor of Pittsburgh, three appointed by the county executive, and one joint city-county appointee - with each serving a five-year term.

Chair: Sylvia C. Wilson
Board Member
Pittsburgh Board of Education

Vice-Chair: Gregory Jones
Executive Director
Economic Development South

Secretary: Harry Readshaw
PA House of Representatives
District 36

Treasurer: Jack Shea
President Emeritus
Allegheny-Fayette Labor Council

Gregory Jones resigned from the ALCOSAN board of directors on October 25. Greg was appointed in May 2014 and was instrumental in developing ALCOSAN’s Clean Water Assistance Fund, launched in 2017 to help low-income families pay their sewage bills.

Corey O’Connor
Council Member
City of Pittsburgh

Brenda Smith
Executive Director
Nine Mile Run Watershed Assn.

John K. Weinstein
Treasurer
Allegheny County
The mission of the Finance and Administration Division is the implementation and maintenance of sound fiscal policies, competent customer service and safeguarding of the assets of the authority including funds, personnel and the physical plant.

This division includes responsibility for management information systems, customer service and billing, purchasing, accounting, human resources, safety and security.

ALCOSAN is ideally positioned for the challenges that lie ahead because of the preparation undertaken by the division.

First and foremost, ALCOSAN is in excellent fiscal health. During 2018, the division saw continued improvement in the authority’s bond ratings. Standard and Poor’s registered an upgrade for ALCOSAN from A to A+, a move that drew in more institutional investors. Our rating with the other major agency, Moody’s, also went up.

Bond funds pay for capital expenditures including the major components of the Clean Water Plan. ALCOSAN’s strong financial position allowed it to eliminate the need for bond insurance on the 2018 Sewer Revenue Bond Series resulting in savings of over $500,000.

The four-year rate structure that was set in 2017 remains sufficient to cover ALCOSAN operations and debt service payments, so no additional increases were necessary. Beginning in January 2018, the average residential customer who uses 12,000 gallons of water per quarter was charged $419 by
ALCOSAN. That 7.5 percent increase will be followed by increases of seven percent each in 2019, 2020 and 2021, when the cost to the average customer will be $513. Going forward, ALCOSAN estimates that single-digit rate increases should be sufficient for the next two decades.

Interest in ALCOSAN’s Clean Water Assistance Fund, established in 2017, continues to increase, and the authority’s healthy financial picture allowed it to increase the quarterly payments to homeowners to $32. More than twice as many households took advantage of the fund to help pay their bills in 2018 – 1,828 individuals from 67 of the 83 municipalities in the service area. In 2017, 859 homeowners participated in the program.

ALCOSAN’s strong financial position also allowed the authority to provide $6 million more for its Green Revitalization of Our Waterways program that aids municipalities.

The division’s Human Resources Department is key to recruiting, training and promoting employees who will be tasked with implementing the Clean Water Plan.

The authority’s payroll increased to 416 full-time employees by the end of 2018. The authority continues to offer training programs for trade positions and to expand its employee wellness program.

A new labor agreement with the Utility Workers of America Local 433 was reached that is retroactive to 2018, which contributes to stability in the workforce.
ALCOSAN operates under federal, state and local regulations, and it is the responsibility of the Environmental Compliance Division to ensure that permit requirements are met, the byproducts of wastewater treatment are either reused or disposed of properly, and industries under its jurisdiction are inspected.

Significant advances were made in 2018. First and foremost, division leaders were key participants in negotiating toward an updated Consent Decree and Clean Water Plan. The division provided technical and legal oversight in those talks so that the agreements will meet the needs of ALCOSAN, its municipal customers and the larger population of Allegheny County and Western Pennsylvania.

At year’s end, the 20-year improvement and expansion plan was before federal regulators, having cleared numerous hurdles to reach that point. A signed agreement is anticipated in 2019. ALCOSAN operates under many permits that regulate land application of byproducts of wastewater treatment, landfill use and discharges to the air and to the Ohio River. These include a National Pollutant Discharge Elimination System (NPDES) permit.

ALCOSAN had been operating under an expired NPDES permit. The Clean Water Act prohibits
anyone from discharging pollutants into a water source unless they have an NPDES permit. The permit limits what can be discharged, monitoring and reporting requirements, and other provisions to maintain the quality of the water, in ALCOSAN’s case, the Ohio River to which it discharges treated wastewater.

In 2018, ALCOSAN received a renewed NPDES permit to replace one that had expired in 2012. The lack of a permit did not mean ALCOSAN operated illegally. Quite the contrary. It operated under terms of its previous permit, but that meant ALCOSAN’s ability to apply for future plant upgrade permits was delayed.

Delays in permitting are not uncommon, but it is rare for the Environmental Protection Agency and the Pennsylvania Department of Environmental Protection to issue a permit while agencies are engaged in negotiations on a federal Consent Decree. That is why the Environmental Compliance Division is so pleased to have the new NPDES permit in place and in effect.

The third significant development for the division was the decision to undertake an assessment of the facilities that house ALCOSAN’s Laboratory and its Industrial Waste departments. These operations, part of the Environmental Compliance Division, are in need of updating and, because of the expansion of other portions of the treatment plant, it is anticipated that a new structure outside of the plant will be needed.

In addition to aggressive in-plant recycling and beneficial reuse programs, the division coordinates the authority’s participation in the Green Workplace Challenge and is recognized annually by the Pennsylvania Resource Council for outstanding waste diversion rates at the ALCOSAN Open House.
The Engineering and Construction Division is responsible for engineering planning, design and project management, administering public bidding procedures, maintaining all engineering and construction-related records, and providing technical assistance for compliance with local regulations. The work of the division involves the use of consulting engineering firms for projects within the ALCOSAN system.

ALCOSAN cleared a major hurdle in planning for the plant expansion plan in 2018. All of the necessary permits were filed, an enormous undertaking that fills hundreds of pages of documentation and takes thousands of work hours to produce.

The Sewage Facilities Act 537 plan, which spells out all of the details of the plant expansion, was unanimously approved by Pittsburgh City Council and signed by Mayor Bill Peduto in June and approved by the Pennsylvania Department of Environmental Protection in December. A joint permit with the state Department of Environmental Protection and the Army Corps of Engineers was submitted for building a new outfall for treated water into the Ohio River as well as a new river wall where the plant abuts the Ohio.

In November, engineering design packages were secured for projects at the north end of the plant, under and beyond the McKees Rocks Bridge. That work includes two new clarification tanks, a new chlorine contact tank, a new return activated sludge pump station and a chemical storage building for our disinfection processes. In December, notices to proceed were issued for the design of an electrical distribution plan to upgrade electrical

Demolition of the old Operations & Maintenance facility will provide the footprint for expansion of the plant’s pumping, headworks and primary treatment capacity.
components and conduits necessary for the plant expansion and a temporary disinfection system design that will be used for approximately four years while the north end facilities are under construction.

With 2018, the period of planning for the plant expansion gave way to a period of the detailed design phase with construction anticipated to take place from 2019 to 2027.

A construction management firm was retained to assist with all of the design and construction packages associated with the plant expansion.

Engineers from the division continue to oversee major projects including the restoration of ALCOSAN’s incinerator chimney, demolition of the former operations building and garage, diversion structures in the regional collection system, installation of flow meters and an access platform at the main pump station, repairs to the Operations and Maintenance building, and plans for a new Laboratory and Industrial Waste Department building.

All relevant employees were trained on the use of the E-Builder software program, necessary for managing the work under the Clean Water Plan. It is more efficient than using paper forms, speeds up the process of obtaining necessary approvals and provides effective workflow monitoring.
The work of ALCOSAN’s Operations and Maintenance Division is a 24/7 responsibility. The employees of the division ensure that the ongoing process of treating wastewater runs smoothly through full compliance with all permits. They maintain all of the buildings, structures, machinery, equipment and vehicle fleet of the 59-acre plant, regional conveyance system and auxiliary buildings.

Two very visible projects were undertaken inside the plant gates during 2018 that affected operations and maintenance.

As part of the broader Clean Water Plan, the space where ALCOSAN’s original operations and maintenance building and garage sat is needed for plant expansion, so that facility had to come down, and come down it did. In just 10 days in the fall, the structure was torn down, salvageable pieces were carted away and what remained was crushed and removed. The space was dormant at year’s end, but it will be site of a new headworks facility and operator control room.

Another project inside the plant was refurbishing of ALCOSAN’s 300-foot incinerator chimney. The work included glazing all of the brick on the 60-year-old structure, replacing 56,000 linear feet of mortar and applying a waterproof coating.

Operationally, the biggest impact came in the form of record rainfall in the region. The treatment plant processed 78.8 billion gallons of wastewater and stormwater in 2018, approximately 5.5 billion gallons more than a year earlier and 8 billion gallons more than the past five-year average.

The heavy rains forced the collection system into overflow condition 1,870 hours during the year, while the treatment
PROJECTS INITIALLY SUBMITTED VIA LETTER OF INTEREST FOR CONSIDERATION IN THE PROGRAM’S 2016 CYCLE

PROJECTS ADVANCED BY INVITATION TO SUBMIT FORMAL APPLICATIONS TO ALCOSAN

FORMAL PROJECT APPLICATIONS SUBMITTED AND EVALUATED BY ALCOSAN STAFF FOR INCLUSION IN THE GROW GRANT PROGRAM

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PLANT OPERATIONS BY THE NUMBERS

<table>
<thead>
<tr>
<th>TREATMENT PLANT PERFORMANCE</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL Volume of Wastewater Treated</td>
<td>78.8 billion gallons</td>
</tr>
<tr>
<td>Average Daily Flow</td>
<td>216 million gallons/day</td>
</tr>
<tr>
<td>Solid Waste Removed</td>
<td>77.7 million pounds</td>
</tr>
<tr>
<td>Dewatered Sludge Incinerated</td>
<td>21,385 dry tons</td>
</tr>
<tr>
<td>Dewatered Sludge Land-Applied</td>
<td>9,509 dry tons</td>
</tr>
<tr>
<td>Dewatered Sludge Landfilled</td>
<td>7,634 dry tons</td>
</tr>
<tr>
<td>Effluent Water Recycled for Internal Use</td>
<td>2.73 billion gallons</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RESOURCES CONSUMED</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pebble Lime</td>
<td>3,132 tons</td>
</tr>
<tr>
<td>Polymer</td>
<td>791,080 pounds</td>
</tr>
<tr>
<td>Sodium Hypochlorite</td>
<td>1,366,455 gallons</td>
</tr>
<tr>
<td>Caustic Soda</td>
<td>421,280 pounds</td>
</tr>
<tr>
<td>Sulfuric Acid</td>
<td>84,140 pounds</td>
</tr>
<tr>
<td>Hydrochloric Acid</td>
<td>27,000 pounds</td>
</tr>
<tr>
<td>Sodium Bisulfate</td>
<td>26,018 gallons</td>
</tr>
<tr>
<td>#2 Heating Oil</td>
<td>159,618 gallons</td>
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</table>

<table>
<thead>
<tr>
<th>UTILITY COSTS</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>$5.2 million</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>$711,030</td>
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<tr>
<td>Public Water</td>
<td>$1,302,499</td>
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</tbody>
</table>

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plant was treating at full capacity. This was 2.3 times as many hours as 2017. In all, system overflows occurred in part or all of 154 days.

The record rain wasn’t all bad news. It slightly reduced overall treatment plant electricity consumption because the increased oxygen in the water reduced the need for adding oxygen by mechanical means to sustain the population of secondary treatment micro-organisms.

The higher flows did result in a 10 percent increase in disinfectant chemicals needed to treat the increased flows prior to discharge into the Ohio River.

There were eight minor to moderate river flooding events during 2018, which was more than occurred in any single year in the past decade. Those conditions affected not only the Monongahela Parking Wharf and some underpasses in the city of Pittsburgh, they also adversely affected the collection system and treatment plant with an infusion of mud, silt and other debris that had to be removed. The increased stormwater runoff contributed to an increase in sediment deposits collected and removed in the plant -- 2.7 million pounds of material, 20 percent more than in previous years.
The fundamental mission of ALCOSAN’s Regional Conveyance Division is the management, operation and maintenance of the interceptor systems and sewer service provided to its 83 municipal customers and development of plans and policies for compliance with regulations related to combined sewer overflows and sanitary sewer overflows.

That work will expand significantly under the Clean Water Plan.

In 2011, a regional panel recommended that ALCOSAN add to the 90 miles of sewers it owns and maintains by taking ownership and responsibility for others that are at least 10 inches in diameter and carry flow from more than one municipality. In 2015, ALCOSAN undertook a detailed, closed-circuit television examination of the system. During 2018, the authority held dozens of meetings with its member communities to review defects that were identified in those inspections and to discuss the administrative process for moving forward.

In 2019, ALCOSAN will make its best effort with municipalities to take ownership of 200 miles of sewers as well as four pump stations, four equalization basins to regulate the flow of water, and 80 diversion structures to redirect the flow as necessary.

In addition to that major undertaking, the Regional Conveyance Division has continued its Green Revitalization of Our Waterways (GROW) program that started in 2016. In 2018, ALCOSAN offered
17 municipalities and authorities 18 matching grants worth a total of more than $4 million. That figure is in addition to $18 million offered for 62 projects during 2017.

One project already completed includes a 585-foot bioswale along Centre Avenue in the Hill District, which became fully operational in June. Another example is a sewer separation project in Green Tree that was nearing completion in 2018 and is expected to keep 23 million gallons of stormwater per year out of the treatment system.

As the year came to an end, ALCOSAN began meeting with municipalities to offer assistance in developing projects for more robust GROW projects.

The division also continued technical core sampling as part of the planning effort that is expected to include underground storage tunnels to control sewer overflows.

All of those initiatives moved forward while the division continued to its regular work of inspecting, maintaining and repairing the ALCOSAN system outside its plant gates. In the process of doing so, crews discovered a severe emergency with a regulator on the Allegheny River below 55th Street in Lawrenceville.

The facility was gradually sinking, evidence of a foundation failure and susceptible to river water intrusion. ALCOSAN started bypass pumping and engaged a construction firm to demolish the old regulator and install a new one. The river water management project was extensive and involved driving a 10-foot diameter casing 40 feet deep to bedrock to create a new drop shaft.
The mission of the Communications Division is to educate and inform the public about the work that ALCOSAN performs in its 83 member municipalities. As ALCOSAN’s Clean Water Plan moves forward, the public must be up to date on what we are doing and why. To that end, ALCOSAN ramped up its outreach to the community in multiple ways in 2018.

Our most visible effort continued to be the Three Rivers Proud campaign, which included billboards, radio, newspaper and online advertising. A website, 3riversproud.com, contains information about ALCOSAN in general and the Clean Water Plan in particular.

Division employees staffed more than 90 community events, carrying our message to events both large – the Three Rivers Regatta, for example – to smaller community festivals and fairs. Frequently, our mascot, Frankie the Fish, joined in.

ALCOSAN’s annual Open House, held each September, drew 2,032 people to our North Side plant, where they took tours, joined in activities, watched demonstrations and enjoyed lunch – 1,150 hamburgers, 520 veggie burgers and 1,680 hotdogs, to be precise.

Staff from the Scholastic Outreach and Education Department visit schools throughout the service area all year long. These certified teachers taught classroom lessons designed for students from pre-kindergarten through high school, reaching more than 20,000 students in nearly 400 sites. In addition, they led plant tours and held workshops for high school students interested in trade careers and for educators seeking certification credits. They also conduct ALCOSAN’s popular Summer Science and Clean Water Academy programs as well as mentoring, internship and job shadowing opportunities.
The Communication Division publishes a weekly employee newsletter, a newsletter for students who participate in after-school programs and a host of internal and external fact sheets, flyers and documents about ALCOSAN’s progress. Additionally, division employees led a variety of internal fund-raising efforts, collecting thousands of dollars for the United Way, Cribs for Kids, Tickets for Kids, the KDKA Turkey Fund and more.

The Governmental Affairs Division was created in May of 2018 to meet a long-time need of the authority to expand communications and provide dedicated and professional support to ALCOSAN’s partners in government on the municipal, county, state and federal levels. The division also works with foundations and business and community groups.

Governmental Affairs staff works with a wide variety of officials. On the federal level, this includes local congressional representatives and senators, the Army Corps of Engineers and other agencies. On the state and county levels, it includes representatives from the governor’s office, legislature and numerous state departments, the Allegheny County Executive and other appointed and elected countywide officers as well as those from ALCOSAN’s 83 customer municipalities.

During 2018, members of the team attended and provided input during a dozen meetings on ALCOSAN’s regionalization process and its Green Revitalization of Our Waterways program, which involved more than 50 municipalities. The staff is also involved on a regular basis with Three Rivers Wet Weather, CONNECT, the Allegheny County Boroughs Association, the Allegheny League of Municipalities, Councils of Governments and numerous foundations and advocacy groups.

In addition, the division gives presentations to individual municipalities and serves as their key contact at ALCOSAN. In particular, the division’s Municipal Relations and Outreach Department produces a quarterly newsletter for them, arranges for promotional material for ALCOSAN’s Clean Water Assistance Fund for homeowners and provides pet waste stations in municipal parks to reduce contamination of area waterways.

As more work on the Clean Water Plan is undertaken outside ALCOSAN’s plant gates, this division’s role as a liaison to the municipalities will become even more robust.
The mission of ALCOSAN’s Procurement Office is to oversee the procurement of professional services and ensure the integrity of the services necessary to implement the Clean Water Plan and maintain plant operations. The office also documents all supporting paperwork, provides electronic and hard copy of data, and assists project managers with contractual concerns.

ALCOSAN’s procurement staff has established a detailed procedure for acquiring services and documenting the process. It starts with a request for qualifications, prepared and advertised by ALCOSAN procurement and technical staff. A team of staff technical experts analyzes the responses to an advertised request, and a short list of qualified candidates is invited to submit proposals. The team then evaluates submitted proposals and gives final recommendations to ALCOSAN’s Board of Directors.

After the board has approved a given proposer, the procurement office assists the technical staff in negotiating a contract value. If it exceeds what ALCOSAN had anticipated, a firm must justify the difference. If it cannot and a price cannot be agreed upon, negotiations are undertaken with the next ranked company. Procurement staff goes over every negotiated professional service contract with a fine-toothed comb to ensure that ALCOSAN, on behalf of its ratepayers and municipal customers, will get what it needs, when it needs it and how it needs it.

After a contract is awarded, a file is developed of all relevant documentation and the data is entered into the ALCOSAN Project Management Information System. Procurement staff trains the project staff on the uses of the system and responds to any questions a project manager may have. The procurement staff also provides post-award support such as managing invoices, modifications and claims.

In 2018, 18 highly technical contracts were awarded, many of them worth millions of dollars each. The process is a public one, with all requests for qualifications and advertisements for contract submissions appearing under the “Business Opportunities” section of alcosan.org. The website also contains information about ALCOSAN’s commitment to hiring firms that are owned and led by racial minorities, women and service-disabled veterans.
In our opinion, the summary financial statements of the Authority as of and for the years ended December 31, 2018 and 2017 referred to above are consistent, in all material respects, with the audited financial statements from which they have been derived, on the accrual basis of accounting.

Change in Accounting Principle
As described in Note 2 to the financial statements, the Authority adopted Governmental Accounting Standards Board (GASB) Statement No. 75, “Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions” which requires the Authority to record its net OPEB liability and related items in the financial statements. Our opinion is not modified with respect to that matter.

Maher Duessel
Pittsburgh, Pennsylvania
March 20, 2018
### Financial Statement

**CONDENSED STATEMENTS OF NET POSITION**

DECEMBER 31, 2018 AND 2017

<table>
<thead>
<tr>
<th>Assets</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and cash equivalents</td>
<td>$142,482,220</td>
<td>$119,248,255</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>57,957,072</td>
<td>57,423,069</td>
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<tr>
<td>Restricted/designated cash and investments</td>
<td>251,851,090</td>
<td>100,289,509</td>
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<tr>
<td>Property, plant, and equipment, net</td>
<td>622,343,318</td>
<td>608,600,195</td>
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<tr>
<td>Other</td>
<td>16,449,810</td>
<td>12,904,742</td>
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<tr>
<td><strong>Total Assets</strong></td>
<td><strong>1,091,083,510</strong></td>
<td><strong>898,465,770</strong></td>
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<table>
<thead>
<tr>
<th>Deferred Outflows of Resources</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Related to pensions</td>
<td>17,633,917</td>
<td>21,247,515</td>
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<tr>
<td>Related to other post-employment benefits</td>
<td>932,894</td>
<td>8,074,203</td>
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<tr>
<td>Refunding adjustment</td>
<td>7,077,328</td>
<td></td>
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<tr>
<td><strong>Total Deferred Outflows of Resources</strong></td>
<td><strong>25,644,139</strong></td>
<td><strong>29,321,718</strong></td>
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<table>
<thead>
<tr>
<th>Assets</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable and accrued expenses</td>
<td>$18,391,741</td>
<td>$18,002,007</td>
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<tr>
<td>Net pension liability</td>
<td>16,421,705</td>
<td>16,421,705</td>
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<tr>
<td>Other post-employment benefits</td>
<td>13,297,158</td>
<td>6,199,726</td>
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<tr>
<td>Sewer revenue bonds</td>
<td>760,422,500</td>
<td>621,682,220</td>
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<tr>
<td><strong>Total Liabilities</strong></td>
<td><strong>798,233,271</strong></td>
<td><strong>662,305,658</strong></td>
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<thead>
<tr>
<th>Deferred Inflows of Resources</th>
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<tbody>
<tr>
<td>Related to pensions</td>
<td>12,389,471</td>
<td>2,935,957</td>
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<tr>
<td><strong>Net Position</strong></td>
<td><strong>306,104,907</strong></td>
<td><strong>262,545,873</strong></td>
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<table>
<thead>
<tr>
<th>Assets</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Liabilities, Deferred Inflows of Resources, and Net Position</td>
<td><strong>$1,116,727,649</strong></td>
<td><strong>$927,787,488</strong></td>
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</tbody>
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### CONDENSED STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

YEARS ENDED DECEMBER 31, 2018 AND 2017

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Revenues</td>
<td>$169,724,327</td>
<td>$170,182,173</td>
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<tr>
<td>Operating Expenses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sewer treatment operations</td>
<td>56,687,332</td>
<td>52,409,889</td>
</tr>
<tr>
<td>Administrative and other</td>
<td>21,941,716</td>
<td>21,990,218</td>
</tr>
<tr>
<td>Total operating expenses before depreciation</td>
<td>78,629,048</td>
<td>74,400,107</td>
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<tr>
<td>Depreciation</td>
<td>23,071,589</td>
<td>22,426,718</td>
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<tr>
<td>Operating Income</td>
<td>68,023,690</td>
<td>73,355,348</td>
</tr>
<tr>
<td>Non-Operating Revenues</td>
<td>3,127,451</td>
<td>1,096,517</td>
</tr>
<tr>
<td>Non-Operating Expenses</td>
<td>(22,216,741)</td>
<td>(25,434,608)</td>
</tr>
<tr>
<td>Change in Net Position</td>
<td>48,934,400</td>
<td>49,017,257</td>
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<tr>
<td>Net Position:</td>
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<tr>
<td>Beginning of year</td>
<td>257,170,507</td>
<td>213,528,616</td>
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<tr>
<td>End of year</td>
<td>$306,104,907</td>
<td>$262,545,873</td>
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</table>

### Operating Revenues and Expenses
Operating revenues are primarily fees received from users to cover the total operating expenses associated with the services provided by the Authority.

### Non-Operating Revenues and Expenses
Non-operating revenues are primarily received from interest earned on cash and investments. Non-operating expenses are primarily interest paid on bonds and pension and other post-employment benefit adjustments.

### Independent Audit
Section 8 of the Municipality Authority Act of 1945 requires an annual audit by independent certified public accountants. The accounting firm of Maher Duessel, Certified Public Accountants, was selected by the Authority's Board of Directors. The audit was performed without any limitations as to scope and resulted in an unqualified opinion being rendered. A copy of the audit report is available for inspection online and at the Authority's administrative offices.

#### Closing Remarks
This report provides a snapshot of the financial position and activity of the Authority. Management has taken significant measures over the past several years to maintain and improve both the financial condition and operational efficiency of the Authority while maintaining competitive user rates.
This map of the ALCOSAN service area shows the color-coded planning basins used in formulating the Clean Water Plan to address wet weather overflows.

Customer Municipalities

Aspinwall Borough  North Braddock Borough
Avalon Borough  North Fayette Township*
Baldwin Borough*  North Huntingdon Twp.*
Baldwin Township  North Versailles Township
Bellevue Borough  O’ Hara Township
Ben Avon Borough  Oakdale Borough
Ben Avon Heights Borough  Ohio Township*
Bethel Park*  Penn Hills*
Blawnox Borough  Penn Township*
Braddock Borough  Peters Township*
Braddock Hills Borough  Pitcairn Borough
Brentwood Borough  Pittsburgh, City of
Bridgeville Borough  Pleasant Hills Borough*
Carnegie Borough  Plum Borough*
Castle Shannon Borough  Rankin Borough
Chalfant Borough  Reserve Township
Churchill Borough  Robinson Township*
Collier Township*  Ross Township
Crafton Borough  Rosslyn Farms Borough
Dormont Borough  Scott Township
East McKeesport Borough*  Shaler Township
East Pittsburgh Borough  Sharpsburg Borough
Edgewood Borough  South Fayette Township
Emsworth Borough  Stowe Township
Etna Borough  Swissvale Borough
Forest Hills Borough  Thornburg Borough
Fox Chapel Borough*  Trafford Borough
Franklin Park Borough*  Turtle Creek Borough
Green Tree Borough  Upper St. Clair Township
Heidelberg Borough  Verona Borough*
Homestead Borough  Wall Borough
Indiana Township*  West Homestead Borough
Wexford*  West Mifflin Borough*
Ingram Borough  West View Borough
Kennedy Township  Whitaker Borough
Kilbuck Township  Whitehall Borough
McCandless Township*  Wilkins Township
McDonald Borough  Wilkinsburg Borough
McKees Rocks Borough  Wilmerding Borough
Millvale Borough  *Communities not served in
Monroeville  their entirety
Mt. Lebanon  Mt. Oliver Borough
Munhall Borough  Neville Township
North Braddock Borough  Stowe Township
North Fayette Township*  Swissvale Borough
North Huntingdon Twp.*  Thornburg Borough
North Versailles Township  Trafford Borough
O’ Hara Township  Turtle Creek Borough
Oakdale Borough  Upper St. Clair Township
Ohio Township*  Verona Borough*
Penn Hills*  Wall Borough
Penn Township*  West Homestead Borough
Peters Township*  West Mifflin Borough*
Pitcairn Borough  West View Borough
Pittsburgh, City of  Whitaker Borough
Pleasant Hills Borough*  Whitehall Borough
Plum Borough*  Wilkins Township
Rankin Borough  Wilkinsburg Borough
Reserve Township  Wilmerding Borough
Robinson Township*  *Communities not served in
Ross Township  their entirety
Rosslyn Farms Borough  Stowe Township
Scott Township  Swissvale Borough
Shaler Township  Thornburg Borough
Sharpsburg Borough  Trafford Borough
South Fayette Township  Turtle Creek Borough
Stowe Township  Upper St. Clair Township
Swissvale Borough  Verona Borough*
Thornburg Borough  Wall Borough
Trafford Borough  West Homestead Borough
Turtle Creek Borough  West Mifflin Borough*
Upper St. Clair Township  West View Borough
Verona Borough*  Whitaker Borough
Wall Borough  Whitehall Borough
West Homestead Borough  Wilkins Township
West Mifflin Borough*  Wilkinsburg Borough
West View Borough  Wilmerding Borough
*Communities not served in their entirety