

# NORTHEAST OHIO REGIONAL SEWER DISTRICT

## ANNUAL REPORT





*The mission of the Northeast Ohio Regional Sewer District is to enhance public health and welfare through the efficient, cost-effective conveyance and treatment of wastewater. This is accomplished by an organization dedicated to professionalism, fairness and consistency, that anticipates and responds to the changing environmental needs of the community.*

JANET ABDALLAH • DAVID ADAMANT • CYNTHIA ADAMS • MICHAEL ADAMS • BOB ADKINS • LARRY ADLOFF • NEWLAND AGBENOWOSI • FREELON ALEXANDER • PRESTON ALEXANDER • GINA ALICEA • CHARLES ALLEN • RICHARD ALLISON • FRANK ANGERKO • MIGUEL ANDINO • BRIAN ANDREWS • JONATHAN ANIELSKI • WAYNE ANIELSKI • MARK APPEL • KEVIN ARTH • JOHN ATKINS • DENISE AUGUSTINE • JOHN AUGUSTINE • GEORGE AULT • LEA AUSTIN • JEAN BACH • GEORGE BABEJ • BETH BADZIK • ALFRED BALEWSKI • EDUARDAS BALTOUCHIS • LEONARD BALYER • JOSEPH BARBERIC • NURU BARKARI • BRUCE BARRETT • ROBERT BARSIC • JOHN BARTONE • PERRY BATTAGLIA • LILLIE BATTLE • ROBERT BATTLE • WILL BAYLIS • ALFREDERIC BEAMAN JR. • TOM BECKA • RICHARD BELCHER • RUSSELL BELL • DANIEL BENEDICT • LYDELL BENSON • ERNEST BERTOR • LEON BEY • MICHAEL BILEK • ROBERT BIRCH • HERMAN BISHOP • JOSEPH BITONDI • NANCY BLACK • ANTHONY BLANC • TONY BLANKENSHIP • RAYMOND BLEWITT • RICHARD BLUEMEL • LARRY BLI • MARGERY BOHNE • SANDRA BOING • JOHN BONNELL • ROBERT BONNETT • FRANK BOORE JR. • PATRICIA BOONE • KARL BOOTH • MICHAEL BOROWIAK • JEFFREY BORUSZEWICZ • GEORGEY BOSS • MICHAEL BOTTESCH • CHARLES BOYD JR. • JACQUELINE BRACKETT • SHAWN BRANDENWIE • JEFFREY BREITMOS • ROSALYN BREWER • JOSEPH BRILLA • BRUCE BROA • CURTIS BROWN • FRED BROWN • JOSEPH BROWN • ROSENE BROWN • SAMUEL BROWN • WADIEDLINE BROWN • WILLIAM BROWN • FIORE BUCCI • KENNETH BURNS • BEVERLY BURTON • DAVID BUTCHER • LEE CAGE • JAMES CAHILL • JAMES CALE • JOSEPH CANDER • JOSE CARABALLO • MARINA CARAFA • RALPH CAREY • BILLIE CARLIN • WILLIAM CARRUTH • ATEMUS CARTER • PHILIP CARESO • NOLAN CARVER • ANTHONY CASAVECCHIA JR. • VICTOR CASCIATO • THOMAS CECULSKI • RICHARD CHAMBERS JR. • JAMES CHAYA • MICHAEL CHEETHAM • CAMERON CHEN • FRANK CHILINSKI • WILLIAM CHIMIELEWSKI • JOSEPH CHINN • DANNY CHISHOLM • MARK CHONKO • LAWRENCE CINADR • MARK CITRIGLIA • KENNETH CLANCY • HAYNE CLEVELAND JR. • LARRY CLIFFORD • JAMES CLIPPER • JACQUELINE COATS • SIMMON COBBINS JR. • DONALD COBES • RICHARD COCKRELL • CHARLES COFIELD • SHAWN COLLINS • CARMEN COMBER • HOWARD COMES • RICHARD CONNELLY • RENATO CONTIPELLI • JOHN COOPER • WILLIAM CORBETT • ROSALINA CORENO • HELEN CORNUOFE • EDWARD COSKI • DONALD COWLING • CLAYTON COX • STEPHEN CREA • MICHAEL CRENSHAW • RUTH CROFT • ANTHONY CRYTZER • FRANK CUFFARO • KIMBERLY CUMMINGS • MARIAN CUNNINGHAM • AGOSTINO CUNYNERA • ROBERT CYAROVSKY • MICHAEL CYRUS • RONALD CZERSKI • MICHAEL DADANTE • THOMAS DANIK • SYLVESTER DANKO • TEDDY DAVID • ELLIOTT DAVIS • MARK DAVIS • MYRNA DAYTON • SAM DEANGELO • LEWIS DEBEVEC JR. • BRENDA DEJESUS • ROSEMARIE DEJOHN • POLLY DELANGE • DAVID DEMARCO • WILLIAM DENIHAN • DALE DENNIS • VERNON DENNIS • KLEMENS DERBIN • TRISHA DEROSA • ERIC DESILETS • TIMOTHY DOBRIANSKY • RONALD DOMBROWSKI • ROBERT DOMINAI • TERRY DONELON • RICHARD DOREFELD • DENNIS DREHER • BRIGID DUNLAP • JOHN DURKANSKI • ALLAN DYNES • LAWRENCE EDER • MARTIN EGAN • LESTER EHRLIARD • LOWELL EISNAUGLE • DENNY EMRISKO • DONNA EPPELE • JOSEPH ERIATEC • ESPERANZA ESPINOSA • LORENA ESPINOZA • GARY ESSES • MARK EVANS • JOHN EVERHART • SARA FAGNILLI • SHEILA FANTROY • RONALD FARINE • JOHN FAZIO • JAMES FELDKIRCHER • DIANA FERRIS • MICHAEL FIALA • KAREN FILINA • ROBERT FIRST • THOMAS FITZMAURICE • TERESA FIONNORY • MICHAEL FLYNN • FRANK FOLEY • KENNETH FORD • ROSE FORD • JOHN FOREMAN • DUANE FORTE • LORI FRANKLIN • GARY FRANZ • EDWARD FRINGER • BRIAN FUSCO • FRANK GAGLIONE • EDWARD GAIDA • STEVEN GALISH • FRANCIS GALLAGHER JR. • WILLIAM GALLITZ • MARY GARAPIC • LA VERNE GASDICK • KAZIMIERZ GIEJA • LARRY GEMBICKI • GERALD GERHARD • WILLIAM GERRICK • DENNIS GHANA • LAWRENCE GIBBONS • EARL GIBBS • WENDELL GIBBS • ERNEST GIBSON • BOBBY GILLESPIE • RAYMOND GIRCZYK • ANDREW GLADYS • GREGORY GLOVER • MARIO GONZALEZ • ROBERT GOODE • ROBERT GORSICA • ROBERT GOW • RENSSELL GRABE • DEANNA GRABOWSKI • DEBRA GRACE • THERESA GRAFE • JOHN GRAVES • DANIEL GRAY • CHERYL GREEN • SHERRY GREEN • FRANCIS GREENLAND • DORIAN GREENWOOD • BENJAMIN GRIGGS • KELLY GRISWOLD • JEROME GRISZCZYNSKI • DAVID GUARNERA • ROBERT GULFOYLE • LARRY GUK • ROBERT GULAN • ORA GUNN • HARRY GUNVALSEN • LAWRENCE GURGOI • THOMAS GUSTIN • MILTON HALL • EDWARD HALLER • DONALD HAMILTON • ROBERT HANDLOVICS • RAYMOND HANNIKMAN • GEOFFREY HANSON • ALPHERT HARDY • FRED HARRIS • ALFRED HARRISON • WILLIAM HARRISON • RONALD HARTER • LAURA HARTON • ROBERT HASMAN • ARLENE HASQUIN • EVA HAYANI • MARIA HAVENHILL • RICKY HAYNES • WILLIAM HAZEL • RONALD HEBERBRAND • JOE HENDERSON • RONALD HENLEY • EUGENE HENRY • MARK HILL • MATTHEW HILL • JUDITH HIMES • BENJAMIN HITCHINGS • LUTRILLA HOBBS • DAVID HOBSON • DARRELL HOLLEY • FRANK HOMICK • MICHAEL HOKRIAN JR. • TERRY HORN SR. • SCOTT HORVATH • CLYDE HOLDSTHILL • DOUGLAS HOVEN • SAVANNAH HOWARD • SHARON HOWARD • MICHAEL HRICIK JR. • MARK HRUSOVSKY • PAULETTA HUBBARD • DANIEL HUDSON • JEFFREY HUMMEL • JEFFREY HUMPAI • CALVIN HUNT JR. • CRYSTAL HUNTER • JEFFREY HURLEY • NICK IAROCCHI • FRANK INTIHAR • MONIR ISKANDAR • JERRY ISKOWITZ • ROBERT IVANS • DUANE JACKSON • ELLIS JACKSON • DAYNOR JAMES • FRANK JAMES • JESSE JAMES • SPAIN JAMES • OLIEG JAMNICKY • ROBERT JANKULOV • DANIEL JANTONIO • DONALD JANTONIO

## EXECUTIVE DIRECTOR'S/PRESIDENT'S MESSAGE

Two events occurred in 1992 that are significant to water pollution control in Cleveland. It was the 20th Anniversary of the Clean Water Act, the legislation that initiated the clean up of our country's water resources. It also was the District's 20th Anniversary, a time to celebrate clean water.

We celebrate because our lake and river have become assets that provide commercial, recreational and economic benefits. This was accomplished by investing in wastewater treatment plant improvements and interceptor construction, and regulating industrial facilities to prevent pollution of waterways over the past 20 years.

With the celebration behind us, we strive for continued water quality improvement knowing we will be challenged by the growing complexity of environmental issues. We rely on certain core values to guide us in our mission.

"Customers are our first priority" - We are listening and responding to the needs of our customers. Our Summer Residential Sprinkling User Charge Program demonstrates our commitment. Residential customers requested a method to reduce their sewer charge for water used on lawns and gardens in the summer. We considered allowing expanded use of second meters, but decided against this plan since it was not fair and equitable for all residential customers. Instead, we developed a computer sewer program that calculates summer bills based on winter water consumption.

"Leading by example and taking initiative to make things better" - The District is presently focusing attention on the problems of combined sewer overflows. A major scientific study is underway to determine the impact of these discharges and the best way to control them. The methods and results of our work are being shared nationally. Also, we are active participants in state and national discussions concerning legislation and regulation of combined sewer overflows. Our objective is to develop a master plan for combined sewer overflow control which is tailored to the particular needs and circumstances of our community.

"Doing the job well" - Our employees are dedicated to protecting area waterways. They operate our treatment facilities with efficiency and cost-effectiveness. However, as we recently discovered, doing our job well isn't always enough to protect the environment. We found ourselves holding the bag for cobalt-60 contamination which became our responsibility when it entered the sewer system. Although the discharge of radioactive material is exclusively controlled by federal agencies, the District has taken initiative by restricting access to the contaminated area and we are conducting our own investigation into the matter. We continue to work with the Nuclear Regulatory Commission during their investigation to assure that our employees and customers are safe.

"Going beyond the traditional role" - As demonstrated by the cobalt-60 issue, the increasing complexity of environmental issues requires us to go beyond the traditional role to ensure environmental protection. We are sponsoring research on pollution prevention and improved treatment technologies through our membership in the Water Environment Federation Research Foundation, a national organization that finances cooperative research and development programs for pollution abatement. We have taken on environmental surveillance through our Stream Monitoring Program which gauges water quality with chemical and biological measurements. Also, we are encouraging non-traditional multi-agency problem solving through the development of a Remedial Action Plan for the Cuyahoga River. This comprehensive watershed management effort seeks to involve the entire community in pollution control.

"Take responsibility to better the community" - As the remedial action planning process illustrates that the community needs to be involved in pollution control, District employees are demonstrating their belief that they need to be involved in helping the community. There are a number of charitable acts our employees perform to help people less fortunate than themselves. This generosity has been displayed through food drives and other fund raising events.

This report describes the progress made by the employees of the Northeast Ohio Regional Sewer District during the Year of Clean Water. This progress is helping to improve water quality and the quality of life in Greater Cleveland.



Erwin J. Odeal, Executive Director



Ronald D. Sulik, Trustee President



## BOARD OF TRUSTEES



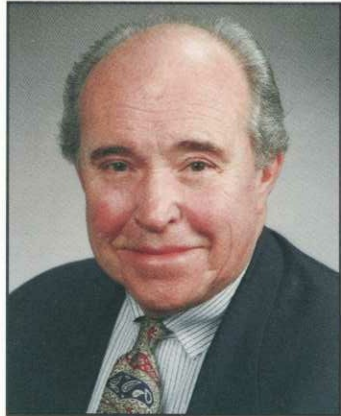
Mayor Thomas J. Longo  
City of Garfield Heights  
Trustee Vice-President



William M. Denihan  
Service Director, City of Cleveland  
Trustee Secretary



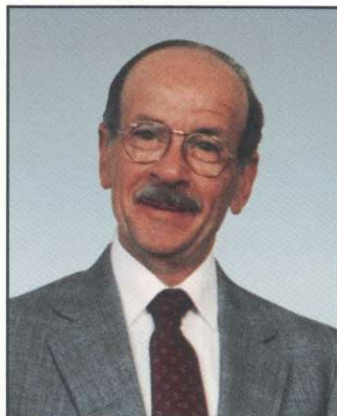
Rosemarie F. DeJohn  
Lakewood Municipal Court



Allan R. Mills  
Executive Secretary  
Cuyahoga County Mayors and  
City Managers Association



Michael L. Nelson, Sr., Esq.  
Character, Floyd & Demore



Edward H. Richard

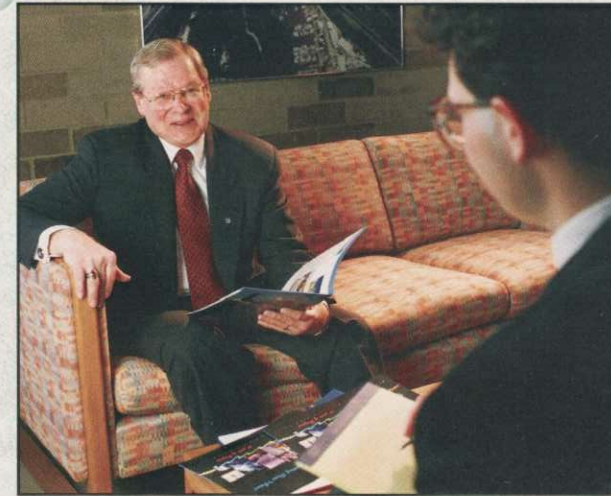


Lester C. Ehrhardt  
Retired From Board of Trustees  
March, 1992



William J. Reidy  
Retired From Board of Trustees  
August, 1992

## SENIOR MANAGEMENT



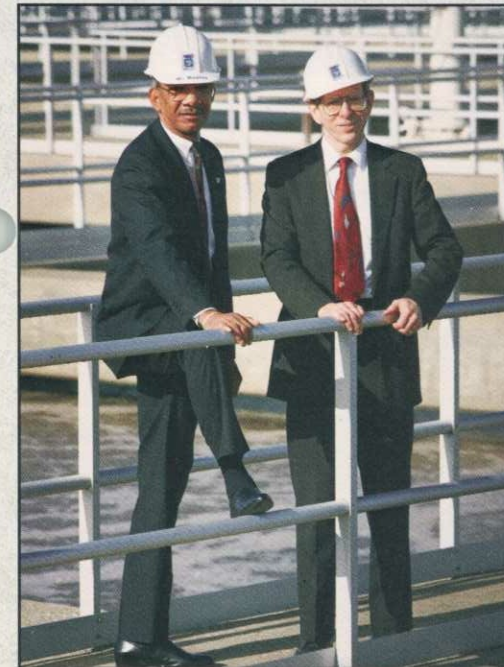
**Kenneth A. Pew,  
Deputy Executive Director**

- Service Time - 19 years
- President of NEO Regional Chapter of American Society for Public Administration
- Member of the Advisory Board for the Cleveland State University Public Works Management Program
- Member of the Advisory Board for Ohio Commission on Public Service
- Member of the Water Environment Federation



**William B. Schatz,  
General Counsel**

- Service Time - 15 years
- Member of Ohio and American Bar Association
- American Bar Association representative for Public Contract Law
- American Bar Association representative for Natural Resources and Environment
- Chairman of the Legal Affairs Committee of the Association of Metropolitan Sewerage Agencies
- Chairman of the Legislative Committee of the Ohio Water Pollution Control Association
- Member of the Water Environment Federation



**Charles J. Vasulka, P.E.  
Director of Engineering and Construction**

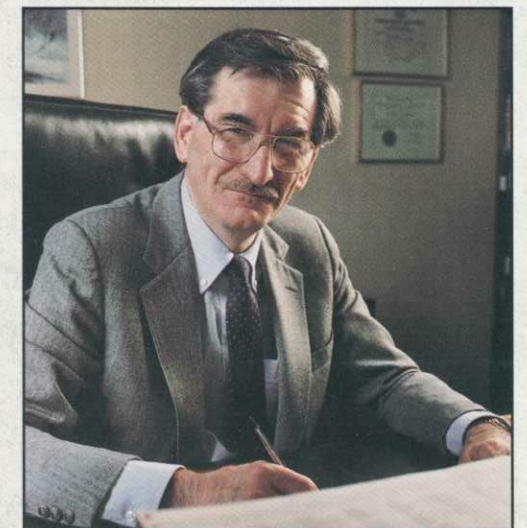
- Service Time - 17 years
- Member of the Water Environment Federation
- Member of American Society of Civil Engineers
- Member of Air & Waste Management Association

**Will R. Baylis,  
Director of Plant Operations and Maintenance**

- Service Time - 23 years
- Holds Class IV Ohio Environmental Protection Agency Wastewater Certification
- Member of the Water Environment Federation
- Member of the American Public Works Association

**David A. DeMarco,  
Director of Finance**

- Service Time - 9 years
- Member of the Government Finance Officer's Association
- Member of the American Institute of Certified Public Accountants





# THE YEAR OF CLEAN WATER

## Anniversary Marks 20 Years of Water Quality Improvements

The District reached a milestone in 1992. This year marked 20 years of efforts to improve water quality in Lake Erie and waterways throughout Greater Cleveland.

The 20th Anniversary festivities increased public awareness of the District's progress in water quality improvement and its impact on the revitalization of Greater Cleveland. The District highlighted its achievements in many ways.

Drivers and pedestrians saw colorful anniversary banners hanging along Euclid Avenue.

An anniversary poster highlighted the many uses of clean water for Greater Cleveland residents. A publication, "Celebrating Clean Water — 20 Years of Progress" noted the investments made in each of the District's facilities and the resulting improvements to area water quality.

## Public Learns About Wastewater Treatment During Anniversary Tour

More than 340 visitors walked through Southerly Wastewater Treatment Plant and the adjacent Environmental and Maintenance Services Center (EMSC) on the District's Anniversary, Saturday, July 18. Visitors learned how our work protects the environment. While guiding the public through the plant and EMSC, employees explained each step of the treatment process. Visitors were impressed by the cleanliness of the plant, the knowledge of the tour guides and the advanced technology in the laboratory.



Greater Clevelanders enjoying the amenities of the North Coast Harbor.

*There are more than 49,000 boats registered in Greater Cleveland and it hosts the country's largest fresh water regatta. Ships from 140 ports around the world make Cleveland their Port of Call and Cleveland is the Walleye capital of the world.*



Unit Process Manager Alan Nemecek explains to visitors the wastewater treatment process and the District's role to improve the Greater Cleveland waterways. Tours were held for the public at Southerly Wastewater Treatment Plant during its 20th Anniversary celebration.



## District Receives Public Service Award For RAP Participation

During its annual meeting, AMSA presented the District with its annual Public Service Award for its significant contributions to the Cuyahoga River Remedial Action Plan (RAP). The Cuyahoga River RAP is a comprehensive watershed management effort involving the cooperation of 33 water quality management agencies, regulatory agencies, environmental groups and other institutions working to improve area waterways.

The first stage of the RAP process, assessing the condition of Lake Erie and the Cuyahoga River, required many water quality studies. District employees took a leadership role by providing direction and resources for this and other RAP efforts.

Since this award was made possible by the efforts of all the groups, District and RAP representatives jointly accepted it.

## Cleveland's Waterway Turnaround Attracts National Attention

In May, representatives from more than 115 wastewater treatment agencies, regulatory agencies, and environmental groups across the nation came to Cleveland for the annual meeting of the Association of Metropolitan Sewerage Agencies (AMSA). The District is proud that the people responsible for protecting the nation's metropolitan waterways chose Cleveland as a gathering spot to assess the country's pollution control programs, discuss environmental legislation, and plan environmental strategies.

During her welcoming address, the District's Board of Trustees President Rosemarie F. DeJohn noted that dramatic water quality improvements are important for communities to recognize and celebrate. She added that in Greater Cleveland, people now can enjoy the beauty of scenic streams in area parks, along with new economic, recreation and entertainment benefits provided by Lake Erie and the Cuyahoga River.

*A major area of improvement was the Big Creek West Branch where a wall was repaired which significantly decreased pollution levels by 99.5 percent.*

## Report Documents Improvements in Area Waterways

The District released its "Greater Cleveland Area Environmental Water Quality Assessment 1989-1990 Report" in September. The 526-page document presents the results of chemical and biological sampling by the District's Water Quality and Industrial Surveillance employees. Samples were taken of near shore Lake Erie, the Cuyahoga River, and 18 other waterways at more than 90 locations in the District's service area. The document identifies the sources of pollution in the waterways and discusses actions taken by the District, industries, and local communities to alleviate these sources.

The report also compares historical and current data, which clearly show water quality improvements in the lake, rivers, and creeks, much of which is attributable to District projects. One area of major improvement is the Big Creek West Branch, where repair of a culvert wall to keep sanitary sewage out of the creek resulted in a 99.5 percent decrease in pollutants.



# NEARLY ONE BILLION DOLLARS LATER

## District Recognized for Recycling Fly Ash

The District received a Coal Ash Utilization Award from Centenor Energy Corporation for using coal ash as engineered flowable fill on the West Leg branch of the SWI. Flowable fill is made from fly ash that has been recycled instead of taken to a landfill. Created by mixing fly ash, cement and water, it is used for filling spaces and holes around concrete pipe in tunnel projects. This material is quicker and easier to use than grout and can still be excavated if necessary. Flowable fill is also being used as backfill on the Hilltop Interceptor project.



Concrete is poured for the top collar wall on the West Leg Interceptor, a branch of the Southwest Interceptor.

## Water Improvements Recognized

In December, The Ohio Environmental Protection Agency and the Ohio Water Development Authority, along with federal and state legislators, honored the achievements of the District and commended its participation in the Water Pollution Control Loan Fund (WPCLF) program. The WPCLF was established in 1989, after the grants program that funded municipal wastewater treatment system improvements for 16 years was phased out. The District was recognized for its water pollution control efforts over the past 20 years and for its participation in both programs. The former grants program and current loan program have enabled the District to make federally mandated system improvements while maintaining reasonable service charges.

Through 1992, the District has received three WPCLF loans for capital improvement projects that will help protect Lake Erie, the Cuyahoga River and tributary waterways. This financing is expected to save \$13.2 million because the District will not need to borrow at market rates to finance the projects.

In 1992, the District started \$63.8 million in capital improvement projects, bringing it close to a capital investment of \$1 billion since it was created in 1972. By the end of 1992, the District had invested a total of \$985 million to renovate treatment plants, build interceptors, control combined sewer overflows,

implement its industrial pretreatment program and improve water quality monitoring.

## Southwest Interceptor Enables Two Plants to Close

Late in the year, construction of the Southwest Interceptor (SWI) reached the cities of Middleburg Heights and Brook Park. Wastewater flow that had been treated by the Middleburg Heights and Brook Park Treatment Plants was diverted to the SWI and is now being treated at Southerly.

The two municipal plants were not capable of meeting the discharge limits required to restore and maintain good water quality in the Rocky River without major rehabilitation. The District's facilities plan completed in 1984 showed that the most cost effective method for serving this area was to build the SWI.

Construction on the SWI started eight years ago and will be complete in 1995. This year the District awarded a \$13.8 million construction contract financed with a WPCLF loan, for the final portion of the SWI West Leg branch. The last contract to complete the SWI will be awarded in 1993. When the SWI is completed, it will transport wastewater from 15 suburbs to Southerly.



## Largest Construction Contract Awarded For Hilltop Interceptor

The largest construction contract awarded in 1992 was for the Heights/Hilltop Interceptor project. This \$19.7 million contract is for a portion of the interceptor, known as Hilltop H-1, that will convey flow from six east side communities to the Easterly Wastewater Treatment Plant. This contract is being financed by the WPCLF program.

Upon completion in 2000, the Heights/Hilltop Interceptor will serve approximately 252,000 residents.

## Intercommunity Relief Sewer Projects Consolidated

Since 1986, the District has invested \$32.9 million in intercommunity relief sewer (ICRS) projects. An additional \$88.4 million in construction is scheduled over the next seven years. These relief sewers carry flow from more than one community. The sewers will work with the District's interceptors to help alleviate overflows by adding capacity to community and county sanitary sewer systems.

Originally, 47 separate relief sewer projects were planned. The engineering staff has consolidated this to 34 projects which will reduce the overall cost. To date, five of 34 planned ICRS projects are in service.

On the west side of Greater Cleveland, York Road and Big Creek Parkway ICRS projects were completed at a cost of \$3.9 million. After construction of the Big Creek ICRS, the District restored the Big Creek Reservation area in the Cleveland Metroparks System to its original appearance. On the east side, construction has started on the Richmond Road ICRS and the Bluestone ICRS is being designed.

## Big Creek Interceptor Project Receives Grant

The District received an Issue 2 Grant for \$647,631 from the Ohio Public Works Commission to reduce the cost of the Big Creek Interceptor rehabilitation project. The grant will be used to construct a pump station that will divert wastewater to the Southwest Interceptor temporarily during the rehabilitation.

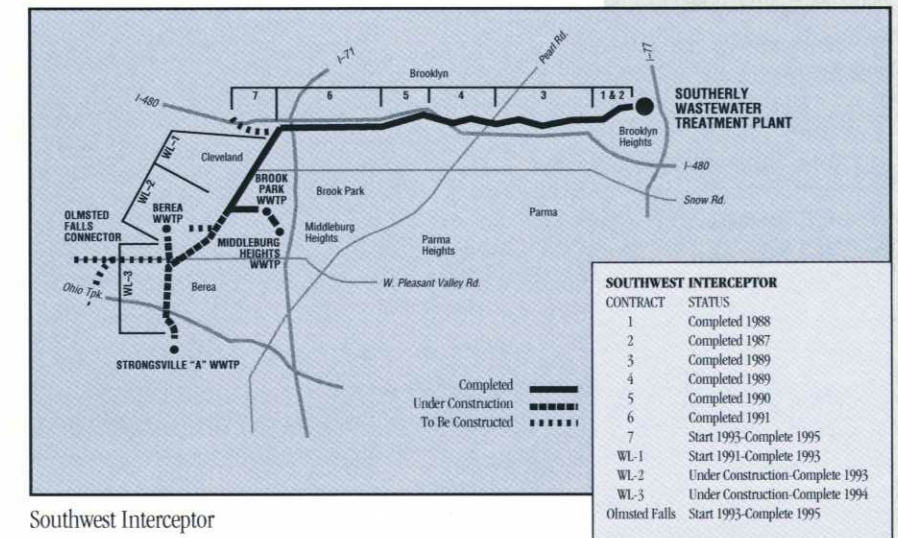
Approximately three miles of the 63-year-old, 7.9-mile interceptor will be repaired in the cities of Brooklyn and Cleveland. The Big Creek Interceptor serves 240,000 people in the southwest area of Cleveland, Brook Park and Brooklyn and conveys flow to Southerly.

## Modification of Westerly Begins

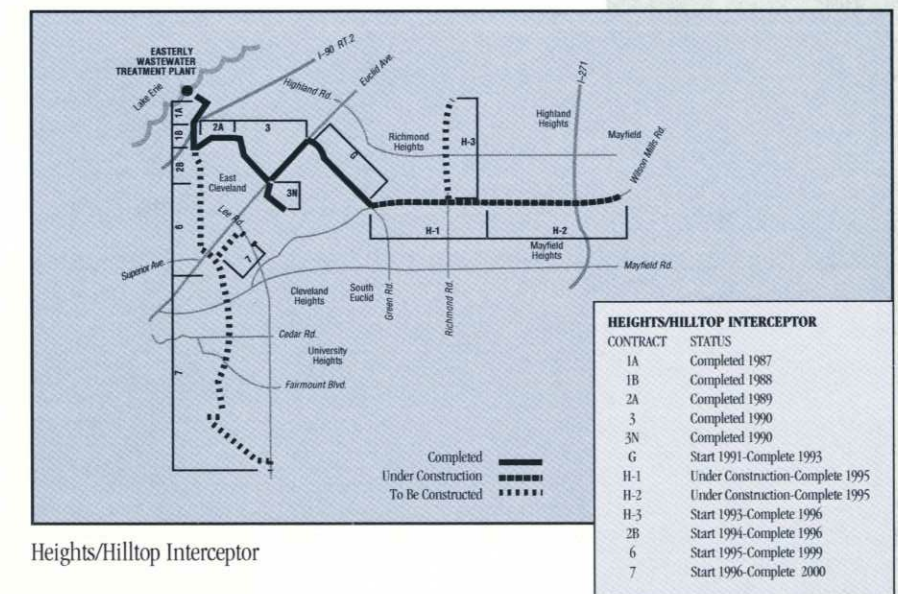
The first construction contract for the process modification program at the Westerly Wastewater Treatment Plant was awarded in January 1992. The \$1.8 million contract includes the removal and demolition of 12 underground storage tanks and the

replacement of the chlorine gas system. This is the first step towards changing Westerly into a biological treatment plant.

In 1974, the District began rebuilding Westerly as an innovative physical/chemical treatment plant. In the late 1980s, it was determined that the existing plant could not meet permit limits and that it should be converted to a biological treatment plant.



Southwest Interceptor



Heights/Hilltop Interceptor



## Lab Quality Earns High Marks

Analytical Services employees strive to provide accurate analyses data for plant operations. Their efforts resulted in an excellent performance audit inspection by the Ohio Environmental Protection Agency for 1992, even though the number of analyses increased by 38.7 percent over 1991. The inspection consisted of reviews of all experimental procedures and data interpretation methods used by laboratory personnel.

Although this rating was achieved by the contributions of all employees, a key contributor was Chief Chemist Peter Levitsky. His efforts to assure quality control in the laboratory were recognized during the Public Works Performance Awards Program. The annual program honors outstanding performance in public works professions.

Analyses performed by the District's laboratory have increased from 296,075 in 1991 to 410,618 in 1992 and have increased 107 percent over the past five years.

## Report Favors District's Performance

"The Performance of Special Purpose Government in Greater Cleveland," a report released by the Citizens League Research Institute showed the public's opinion of the District's performance continually increased between 1989 and 1991. The report noted the District's success at "keeping capital project costs within budget, accurately specifying requirements and estimating construction costs." The report also stated that the District has gained a national reputation for its industrial waste pretreatment program.

The report reviews the work of five special purpose government agencies. It states that "since 1972 the District has become one of the most successful regional agencies in Greater Cleveland."

## Easterly Saves Money By Centralizing Information

To efficiently monitor and control three separate processes from a central location, the District installed a \$290,000 computerized monitoring and data acquisition system at Easterly. This system, which requires fewer operators to continuously monitor equipment, is expected to save Easterly \$217,000 annually. The operators were given the opportunity to work in other areas of the plant.

## Southerly Improvements Include New Steam Boiler

Southerly expanded its Steam Generation Building to house a new steam boiler. The boiler replaced one that was inoperable. Southerly uses steam to operate plant processes and to heat buildings. The \$3.5 million project included improving the feedwater system by adding new feedwater pumps. One of the pumps is turbine powered. It uses steam instead of electricity for power. This alternate energy source will help reduce operating costs.

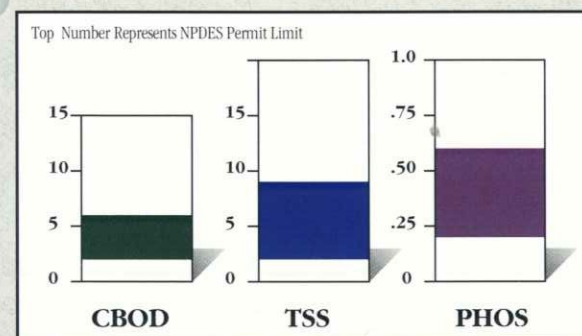
Southerly also added a new chemical-feed equipment facility and chemical storage tanks for chlorination and de-chlorination of the plant effluent. Southerly's maintenance staff installed the de-chlorination feed system. They also designed and installed the temporary de-chlorination system that was used for most of the 1992 disinfection season. Southerly saved approximately \$20,000 by having its staff perform the work.

## Plants Recognized for Superior Performance

The Association of Metropolitan Sewerage Agencies (AMSA) recognized four of the District's wastewater treatment plants for meeting the National Pollution Discharge Elimination System permit limits for 1991. An AMSA Gold Award was given to Strongsville "A" Wastewater Treatment Plant for consistently meeting every limit. AMSA Silver Awards went to Southerly, Easterly and Berea Treatment Plants.

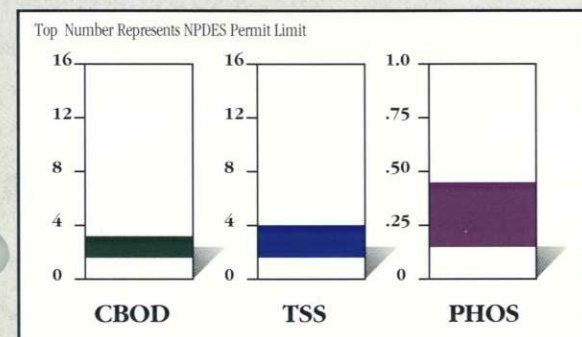
*"Since 1972, the District has become one of the most successful regional agencies in Greater Cleveland ..."*

Laboratory personnel analyze samples collected from treatment plants, industry and area waterways. By analyzing these samples the District can measure how well it is treating wastewater and improving water quality.



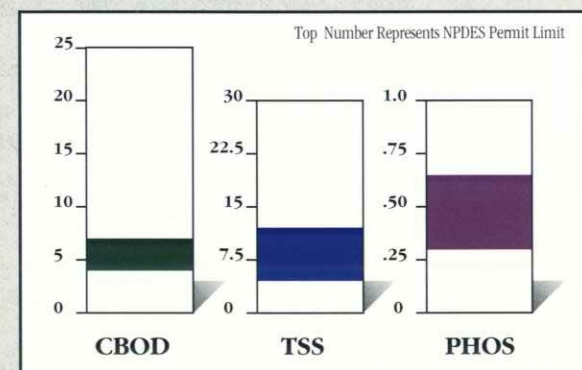
## Easterly Wastewater Treatment Plant

14021 Lake Shore Boulevard, Cleveland  
Treated an average of 150.9 MGD of wastewater  
Pumped 618.8 million gallons of sludge to Southerly  
Discharges effluent to Lake Erie  
Employs 63 people



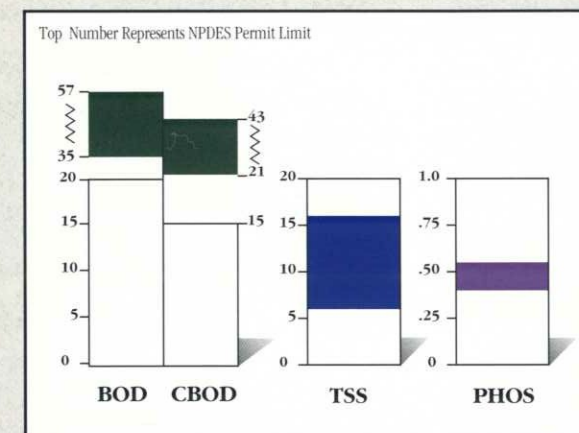
## Southerly Wastewater Treatment Plant

6000 Canal Road, Cuyahoga Heights  
Treated an average of 121.2 MGD of wastewater  
Processed 102,799 wet tons of filter cake, incinerated 97,538 wet tons and hauled 5,261 wet tons to the landfill.  
Discharges effluent to the Cuyahoga River  
Employs 225 people



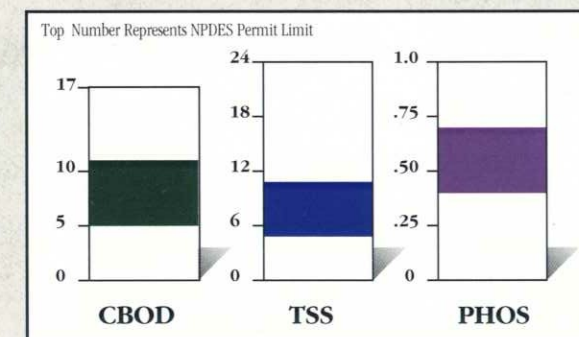
## Strongsville "A" Wastewater Treatment Plant

22707 Sprague Road, Strongsville  
Treated an average of 3.5 MGD of wastewater  
Discharges effluent to Blodgett Creek (tributary to West Branch of Rocky River)  
Employs 6 people



## Westerly Wastewater Treatment Plant

5800 West Memorial Shoreway, Cleveland  
Treated an average of 34.1 MGD of wastewater  
Processed 36,640 wet tons of centrifuge cake, incinerated 35,825 and hauled 815 wet tons to the landfill.  
Discharges effluent to Lake Erie  
Employs 73 people



## Berea Wastewater Treatment Plant

400 Barrett Road, Berea  
Treated an average of 2.4 MGD of wastewater  
Discharges effluent to East Branch of Rocky River  
Employs 5 people

■ ■ ■ Average Monthly Performance Range  
NPDES: National Pollutant Discharge Elimination System  
BOD: Biochemical Oxygen Demand  
CBOD: Carbonaceous Biochemical Oxygen Demand  
TSS: Total Suspended Solids  
PHOS: Phosphorus  
MGD: Million Gallons per Day



## RESPONDING TO COMMUNITY NEEDS

### Cost-Saving Program Implemented For Customers

After listening to customer concerns about paying wastewater treatment charges for water used on lawns and gardens, the District adopted a Summer Residential Sprinkling User Charge Program. This innovative program provides an equitable solution for home owners who feel it is unfair to pay wastewater treatment charges for water not entering the collection system. The District will base summer charges on winter water consumption, unless actual summer water consumption is lower. The program will be implemented in May 1993 for owner occupied one, two, three and four family residences. It will be in effect each year from May 1 through September 30. Home owners must apply to qualify for the program.

### Keeping Neighbors Informed

To keep customers abreast of the impact interceptor construction projects may have on their neighborhood, we stepped up our public information efforts. We meet with and explain projects to city officials so they keep their constituents informed. We also send fact sheets to residents, community representatives and city officials before construction. The fact sheets contain information about the projects and any noise that would occur from blasting. The program has been well received by city officials.

### Change in Sewer Bills

The format for sewer bills was revised this year to assure privacy for our customers. The bill is now sent in an envelope instead of as a postcard. Also, a return envelope is included for the convenience of customers. The new bill contains more information about the account and allows us to better communicate with our customers.

### Sewer Bills Adjusted for Customers With Leaking Supply Lines

When a customer receives a higher than average bill, it may mean there is a water leak. If the water is leaking from a sink or other fixtures, the customer must make the repair and pay wastewater treatment charges for the wasted water. If the leak is not under the customer's control such as in the underground supply line between the meter vault and the property structure, the District has a process to credit the account for wastewater treatment charges. The District investigated and adjusted bills for 16 customers during the year as a result of leaking supply lines.

### Generosity Of Employees Shines In 1992

Aside from protecting public health through effective wastewater treatment, District employees showed how they also care about the community by assisting the people who go hungry in Cleveland. Employees held a food drive in July. The food was distributed to a Greater Cleveland Hunger Task Force Center. The drive helped a great number of people feeling the consequences of the current economy.

Employees also showed their concern by donating generously to the Charity Choice campaign. Employees made contributions to United Way Services, United Negro College Fund or the Greater Cleveland Community Shares. The District is also proud of its many employees who donate time and money to charities, local churches and hunger centers throughout the year.

Westerly Plant Maintenance Helper James Kalas unloads a truck load of food to give to the Cleveland Hunger Task Force.



## PROMOTING EDUCATION

### Employee Education Program Introduced

The District started the Tuition Assistance Program (TAP) to help employees develop their professional and technical skills. TAP reimburses employees for the cost of courses that relate to their work or increase opportunities for advancement. Twenty-one employees participated in TAP. The program helps employees pursuing degrees as well as those taking single courses.



Investigators Frank Foley and Calby Zamborsky explain to children what they are viewing under the microscope at Earthfest 92. Earthfest is sponsored by the Earthday Coalition and held at the Cleveland Metroparks Zoo.

### Educating the Public About Wastewater Treatment

Educating the public about wastewater treatment and environmental issues is important to the District. One way we explain the District's role in protecting area waterways is hosting public tours of our wastewater facilities. This year 16 groups toured treatment facilities. The audiences ranged from students in junior high school, high school and college, to professional groups, customers and environmentalists. Visitors are eager to learn about processes used to treat and monitor wastewater. They are always impressed with the massive equipment and cleanliness of the facilities.

### District Recognized for Workplace Literacy Program

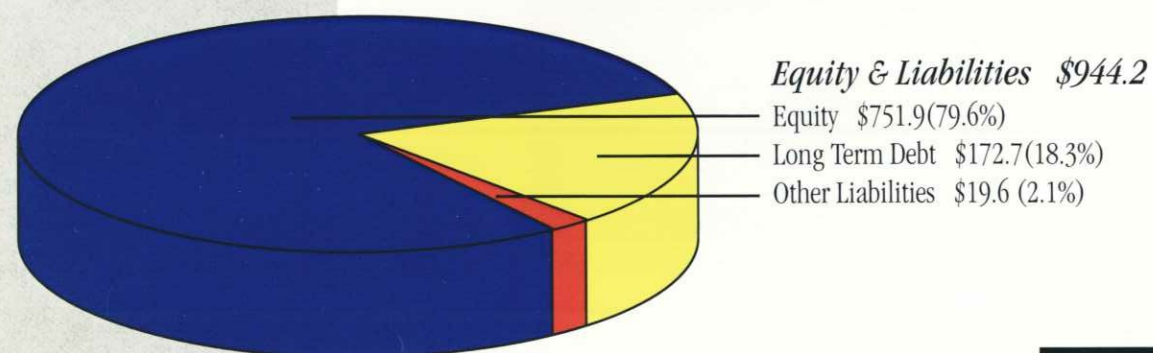
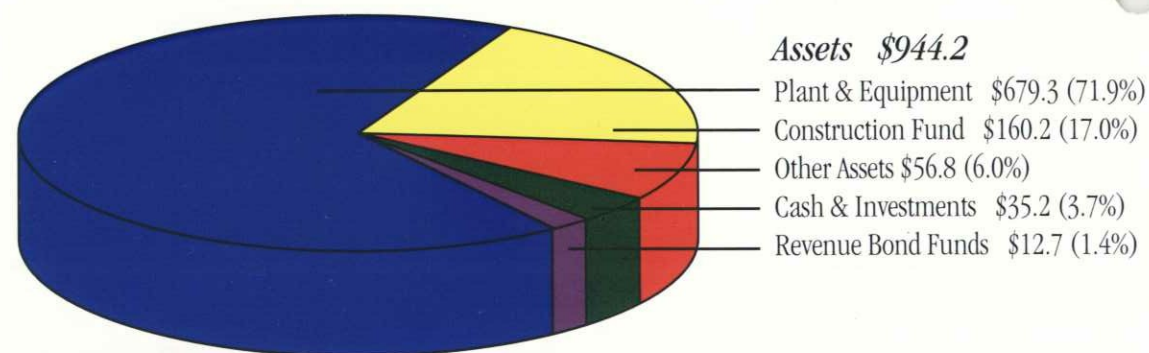
The District received the Governor's Workplace Literacy Award for developing and implementing a program to improve employees' basic skills. The award was presented to six organizations in Ohio who invested in improving the skills of their employees.

The customized education program, BIG STEP — Basic Skills Training and Enhancement Project — was developed by Cuyahoga Community College and the District in 1989 to help employees effectively compete for advanced positions. The program has served 47 employees.

Through BIG STEP, employees achieve their learning objectives by solving mathematical equations and reviewing reading and writing tutorials. They have obtained their high school equivalency certificates, continued in technical and other training programs, and increased self-esteem. Some employees have become state-certified wastewater treatment plant operators. Education, an important and often neglected area in the work force, is and will continue to be a key priority of the District.

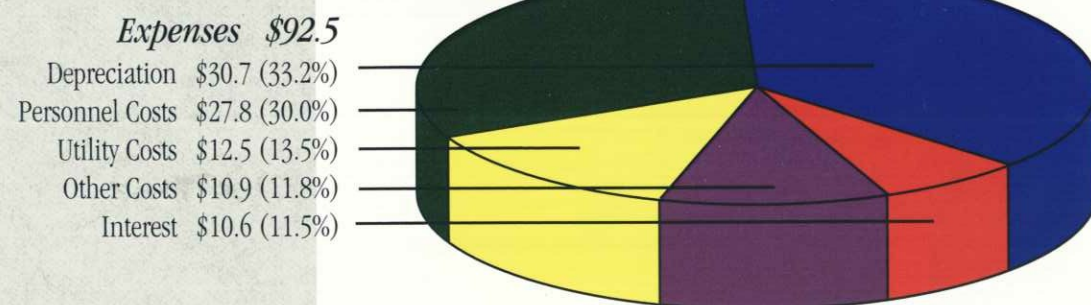
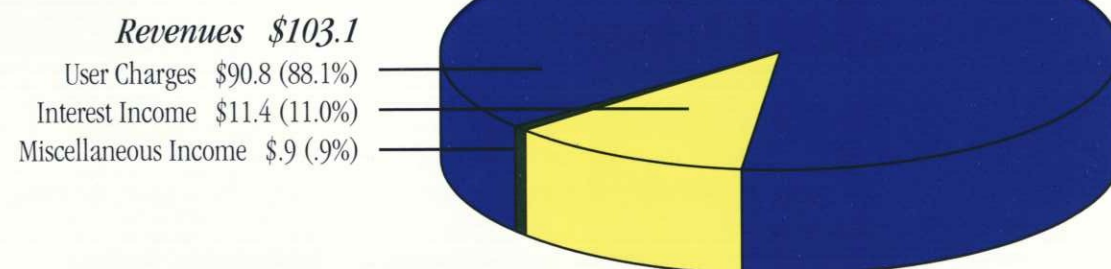






## FINANCIAL POSITION (in \$ millions)

## REVENUE AND EXPENSES (in \$ millions)



EDWARD JAROSZ • LEONARD JENKINS JR. • JEFFERY JENNINGS • ROBERT JOHNSON JR. • BARBARA JOHNSON • BETTY JOHNSON • BRENT JOHNSON • CHARLES K. JOHNSON • CHARLES W. JOHNSON • DAWN JONES • EUTHA JONES • ANTHONY JORDAN • LEONARD JUFKO • SUBHASH KACHORIA • JAMES KALAS • CLIFFORD KALKREUTH • WILLIAM KASBERG • WILLIAM KEEN • JUKIS KETERS • OSCAR KELLEY • GERALD KENNEY • FRED KEYSERLEBER • STEPHEN KEYS • JOHN KINNAIRD • LEONARD KLEPATZKI • DEBORAH KLOSZ • JAMES KLOSZ • DAVID KLUNZINGER • JOHN KOPEITZ • LOUISE KOSINSKI • INGRID KOSMOWSKI • ZIG KOSMOWSKI • ROBERT KOSON • ROBERT KOZMICKI • ROBERT KOWNACKI • DALE KRAMER • JOHN KREPOP • GARY KRIVOS • JOSEPH KUBA • ILDRD KUBIAK • WENDELL KUCERA • DONALD KUCZKOWSKI • PHILIP KUHN • ROBERT KUNKLE • CATHERINE KUTAS • TIMOTHY LACROSSE • JAMES LAHETA • MAIRA LAMBERT • STEPHEN LANGDON • WILLIAM LANGMEYER • RANDY LAPOHN • JOHN LAURIE • JOHN LAWS • PETER LECASTRE • MILTON LEE • ALAN LEGAULT • JAMES LEITH • JOSEPH LEMMEIER • HARRY LEMMEY • THOMAS LENHART • JOYCE LESCHINSKI • PETER LEVITSKY • ARNETTA LEWIS • KEITH LINN • VALETTA LITTLETON • DAVID LIVINGSTON • RICKY LOCH • THOMAS LOGAN • ANTHONY LOMBARDO • THOMAS LONGO • GEORGE LONTOR • JEFFREY LOOBY • ROBERT LOOBY • HERMAN LOOPER • ALFREDIA LOWE • JAMIE LUKAS • ROGERS LYDE • MELVIN LYONS • MARY MACIEJOWSKI • CHESTER MACK • WILLIAM MACK • CHARLES MACZKO • JOSEPH MADRO • MARK MAGALSKI • JOHN MAKSYM • JOHN MALLE • ROBERT MALHENEK • FRANK MANCUSO • MARK MANDRAK • DANIEL MANIK • KAREN MANNING • THEODORE MANNING • ROBERT MANTELL • STANLEY MARKOWSKI • JOSEPH MARSALA • PAT MARSALA • BERTHA MARTIN • MICHAEL MARTIN • DONALD MARTOWICZ • DAVID MATTHEWS • JOANNE MATTHEW • THOMAS MAXWELL • JOHN MAYER • KEVIN MC CARTHY • MICHAEL MC CARTHY • NANCY MC CARTNEY • CHARLES MC CREE • RONALD MC CUNE • MICHAEL MC GING • APRIL MC GRADY • WILLIAM MC GREW • JAMES MC GUINNESS • EDWARD MC INTOSH • LINDA MC KEEGAN • DANIEL MC KENNA • MICHAEL MC LAURITIN • PATRICIA MC LAUGHLIN • JAMES MC MURRAY • DAVID MC NEELLY • BRIAN MC TAGGART • KERRY MC CULLOUGH • MICHAEL MEDINA • TERRY MEISTER • RALPH MELENA • PHILLIP MELICANT • LOUIS MERKLE JR. • FRANK MERRICK • THOMAS MEYER • BRENNIA MILLER • CHARMAINE MILLER • DAVID MILLER • ALLAN MILLS • EDWIN MINTER • DENNIS MOEHRENG • LEONARD MOLNAR • PAUL MONTGOMERY • STEPHEN MONIAK • YVETTE MOORE • EDWARD MORAD • JR. • HERBERT MORROW • EUGENE MUELLER • JOSEPH NAGY • ARTHUR NAPIER • MICHAEL NELSON • THOMAS NEMCEK • ALAN NEMCEK • WILLIAM NEUNDORF • CHARLES NEWMAN • SAMUELA NEWSOM • CURTIS NICKLE • LUTHER NORMAN • WILLIAM NORTON • MICHAEL NOTARO • GLENN NOVAK • JENNIE O'BANNON • TIMOTHY O'TOOLE • ROBERT OBERNDORF • RAYMOND OBOJSKI • ERWIN ODEAL • ADA OLMEIDA • RICHARD OLS • LESLIE OLSIESKI • MICHAEL ORTIZ • GARY OUCZS • DOLORES OWEN • LEROY OWENS • MICHAEL PAAD • VLADIMIR PACAS • ARTHUR PAETH • ANTHONY PAGLIA • OLIVO PALLINI • ANDREW PAPP • ERIC PARHAM • KIRIT PARIKH • LINDA PARTNER • KENNETH PASTOR • MARY PALGH • JUDITH PAULIG • THOMAS PAVLICA • GLENN PAYLIK • MICHAEL PAYLIK • RHONDA PAXNE • JANET PEDRO • JOHN PELEPETTO • GARY PEPERA • EDMUNDO PEREZ • LINDA PERRIEN • CLARENCE PERRY • ERNESTINE PERRY • THEODORE PETRYSZAN • KENNETH PEW • EDWARD PICH • MYRA PIERCE • ALLAN PIIPARINEN • PAUL PITINO • CAROL PLA • THOMAS PLANK • GERALD PODRACKY • LARRY POOLE • JOSEPH PUSANTE • WILLIE PRESLEY • THEODORE PREZTAK • JOSEPH PRIAH • ABRIE PRITCHARD • GREG PROSSER • VICTOR QUINONES • THOMAS RAFAI • DWIGHT REED JR. • CARLA REED • DAWN REED • JOSEPH REESE • TONY REESE • THOMAS REID • WILLIAM REIDY • ROBERT REPPENHAGEN • SHARON REYNOLDS • JOHN RHODES • JOSEPH RHODA • EDWARD RICHARD • JAMES RINGENBACH • ROBERT RISHAW • WILLIAM RITZ • WILSON RIVERA • FRANK RIZZO • GEORGE ROBINSON • THOMAS ROCK • JULIE RODDY • JAMES ROSACCO • PAUL ROSENFELD • MARGARET ROWE • RUSSELL RYS • ERNEST RZESZOTARSKI • ANTHONY SAPOLIK • OTTO SACHS • DANA SAFFO • OMID SALEHI • CHARLES SAMMONS • NELLIE SAMMONS • SCOTT SANDER • JOSEPH SANDIA • JAMES SANTIAGO • ISTVAN SARAI • ROBERT SARGENT • DARLENE SAUNDERS • STANLEY SCHAB • MARGARET SCHAEFER • WILLIAM SCHWITZ • TIMOTHY SCHEALL • ROBERT SCHERMA • PHILLIP SCHERVISH • WARREN SCHINDLER • SCOTT SCHRADER • ALISON SCHREIBER • GEORGE SCHUL • FRANK SCHULSH • THOMAS SCHUSTER • DAVID SCHWARK • TROY SCOTT • USHER SCOTT • KENNETH SELBY • GINA SENES • ANDREW SEATO • FRED SEVER • PRAEHAAT SHARMA • MATTHEW SHARP • DONALD SHAWER • KIM SHAW • ROBERT SHEETS • GARY SHERANRO • LARRY SHIMERKA • LINDA SHOMON • DAVID SHUBERT • ANTHONY SIGGIA • MARTHA SILVERA • CHARLIE SIMMONS • WILLIE SIMS JR. • EDDIE SKINNER • GERALD SLATTON • STEVEN SLECHTA • TERENCE SLOGUN • THOMAS SNEAL • ARLYNE SMITH • CHRISTINE SMITH • DANIEL SMITH • JANE SMITH • HELEN SMITH • MARTIN SMITH • RAYMOND SMITH • CHRIS SMOSARSKI • NANCY SNYDER • ROBERT SOBEZAK • DONALD SOBODINSKI • FRANK SONNENDECKER • KEVIN SONGIA • GEORGE SOTO • JAMES SPENCER II • WALTER SPRUELL • DAVID STANISLAW • BRIAN STAPLETON • DAVID STARYNCHAK • EDWARD STAWICKI JR. • GREGORY STAWICKI • PAUL STEFANSKI • CHARLES STERNER • THEODORE STOLL • KEVIN STRONG • LARRY STRUM • RONALD STULNIARZ • LESTER STUMPE • RONALD STUMER • MICHAEL SCHLAHA • LISA SULIK • RONALD SULIK • MICHAEL SULLIVAN • DAVID SVEJKOVSKI • MARC SWEET • RICHARD SWITALSKI • JIMMIE SWOOP • AZIZ SYED • DANIEL STROWSKI • MICHAEL SZARO • PAUL SZARO • GENE TAKACS • ERIC TAYLOR • MORRIS TAYLOR • MICHAEL TAYLOR • ROBERT TAYLOR • ALEN TENCH • DAVID TERKEN • SUZANNE TERLOP • FRANCIS TESAR • PATRICE THOMAS • DEAN THURMAN • ANTHONY TICCHONE • TIMOTHY TIGUE • SCOTT TIPTON • RUSSELL TISCHER • MARK TOMARO • JEROME TOMASHESKI • CHEYENNE TOOL • JOHN TRAFFIS • JOAN TRETZGER • STEFAN TRIFU • ERNEST TROIA • JAMES TUBERO • ROBERT TUCKER • TERENCE TURK • DENNIS TYBORSKI • GEORGE UHL • BRIAN VACCHER • OLIVER VACCHER • DONALD VANDRASK • CHARLES VASULKA • DAVID VAUGHN • PATRICK VELOTTA • BRIAN VEYERKA • WILLIAM WAITE JR. • DURRELL WAH • LLOYD WALDEN • ROBBIN WALKER • REGIS WALLACE • JOHN WARD • KENNETH WARD • JAMES WATKINS • DONALD WEBER • JAMES WEBER • THOMAS WEBSTER • RAYMOND WEEDEN • SANDRA WEEDEN • ROBERT WEGAND • RONALD WEIZER • CHARLES WELLMAN • MICHAEL WENG • PATRICK WESLEY • SVEN WIBERG • BRIAN WIDOWSKI • PHILLIP WIENCLAW • THOMAS WILD • ALFRED WILLIAMS • COLANDERS WILLIAMS • CYNTHIA WILLIAMS • JOSEPH WILLIAMS • ROBERT WILLIAMS • SEDALIA WILLIAMS • SIDNEY WILLIAMS • TROZELLE WILLIS • JAY WILSON • MARY WILSON • CHARLES WINEMILLER • THOMAS WOHLFEL JR. • MICHAEL WOLF • JOHN WOOD • KATHRYN WOODRUFF • SARRINA WOODSON • HARRY WRIGHT • JOHN YENYO • ELIZABETH YINGLING • BERNARD YORKO • KENNETH YOUNG • PRESTON YOUNG • JAMES YUSKO • THOMAS ZABLOTNY • MOHAMMED ZACHARIAH • VICTOR ZADILL • TIMOTHY ZAK • CATHERINE ZAMBORSKY • ROBERT ZAVISKA • GLENN ZAKORELL • KURT ZEH • DAVID ZIEMICKI • BETTY ZIGMUND • ALFRED ZIMMIE • STEPHEN ZYCH



Northeast Ohio Regional Sewer District  
3826 Euclid Avenue  
Cleveland, Ohio 44115

