NEWARK
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City of Newark, Ohio
Division of Water and Wastewater
2024 Annual Report

South 2nd Street Sewer Separation Project

Division of Water and Wastewater

City of Newark, OH

"To provide essential services that protect public health, preserve the environment and support sustainable growth of the community"

The Division of **Water and Wastewater** plays a vital role in maintaining public health, environmental sustainability, and the overall quality of life within the City of Newark. This annual report highlights the key activities, challenges, and achievements of the department over the past year, reflected in our commitment to providing safe, clean, and reliable water and wastewater services for 2024 and setting the stage for the future.

In the face of growing water demands, aging infrastructure, and evolving environmental regulations, our department has worked diligently for continuous improvement and modernization of the water treatment systems, enhance wastewater treatment practices, and ensured compliance with water quality standards. This report provides a high-level look at the division's efforts to address these challenges, as well as the progress made in key areas such as water sustainability, asset management, wastewater treatment efficiency, infrastructure upgrades, and customer service improvement.

The year in review has been one of continued transformation. Through innovative projects, collaboration with local governments, and strong community outreach, we have made substantial strides toward sustainability, resource optimization, and cost-effectiveness. We are proud of the progress we have made and remain committed to improving our services to ensure the health, safety, and satisfaction of the residents of Newark.

The accomplishments of the Division are a testament to the hard work, dedication and collaboration of our exceptional team. I extend a sincere thanks to the dedicated water and wastewater staff that work 24/7/365 to ensure safe drinking water and reliable wastewater treatment, City Council and Administration for supporting our short-term goals and long-term visions, and all other City Departments who support our work. Together, we continue to build a resilient and sustainable future for the water and wastewater systems in Newark.

Brandon D. Fox
Water Administrator

Financial Information

Wastewater Department	
Active Customers	17,657
Volume Treated	2,757
Miles of Sewer Line	182
Miles of Combined	57
Lift Stations	16

Water Department	
Active Customers	19,336
Volume Billed (MG)	1,717
Water Produced	2,868
Miles of Water Line	248
Booster Stations	3
Storage Facilities	2

Expenses (excluding capital funding and projects)

Wastewater - Expenses		
Administration	$	1,654,585
Treatment	$	2,759,813
Sewer Maintenance	$	645,326
Environmental Lab	$	395,193
Debt Retirement	$	5,930,610
Total	**$**	**11,385,527**

Water - Expenses		
Administration	$	2,599,819
Treatment	$	3,659,722
Distribution	$	1,474,384
Meter Shop	$	292,894
Debt Retirement	$	1,724,996
Total	**$**	**9,751,816**

Revenue		
Rental *(sewer service)*	$	4,417,070
Administration	$	1,815,205
Debt Retirement	$	3,635,447
Surcharge	$	274,698
Capacity Fees	$	468,547
Trucked Waste	$	515,283
Transfers	$	1,098,519
Miscellaneous*	$	47,532
Total	**$**	**12,272,301**

Revenue		
Sales	$	7,010,349
Bulk Water	$	19,846
Delinquent	$	210,378
Meters	$	84,934
Tap Fees	$	76,775
Capacity Fees	$	394,433
Deposits	$	150,631
On Account	$	379,112
Backflow Fee	$	85,541
Miscellaneous*	$	2,012,834
Total	**$**	**10,424,834**

Debt Service Ratio	1.17	1.46
Percent Debt	52%	18%

** Includes $1,414,143 in transfers from sewer fund and $316,674 from stormwater for water administration costs*

Water Rate Comparison for 6,000 gallons of Usage (8 Units)

	Granville	Heath	Johnstown	LRWD	Columbus	Lancaster	Newark
Water	$ 45.06	$ 54.06	$ 73.84	$ 45.65	$ 41.94	$ 62.49	$ 34.56
Wastewater	$ 49.74	$ 61.81	$ 53.47	$ 81.30	$ 55.49	$ 82.52	$ 42.17
Total	$ 94.80	$ 115.87	$ 127.31	$ 126.95	$ 97.43	$ 145.01	$ 76.73

Water and Wastewater Facilities

The Division of Water and Wastewater is made up of six departments at four different base locations throughout the City. Other Facilities include 16 Sanitary Lift Stations, 3 Water Booster Stations, 2 Water Storage Facilities and 2 Auxiliary Water Wells.

Water Treatment Plant

North Newark on the North Fork of the Licking River, 164 Waterworks Road.

Wastewater Treatment Plant

East Newark on the Licking River at East Main Street and Ecology Row.

Water Distribution & Sewer Maintenance Complex

East Newark, 1275 East Main Street.

Water Administration Office, Meter Shop and Water Engineering

Downtown Newark, 34 South 5th Street

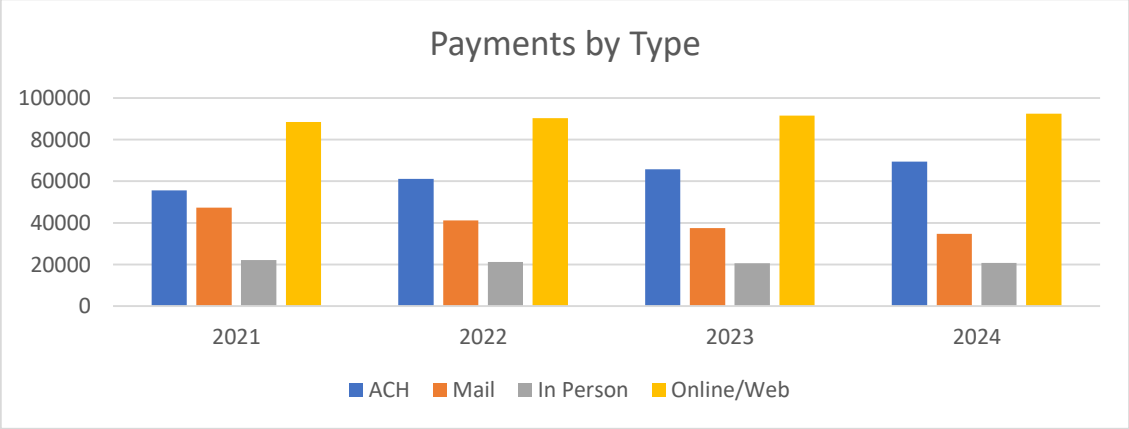
Achievements by the Numbers

11,004 Phone Calls Answered

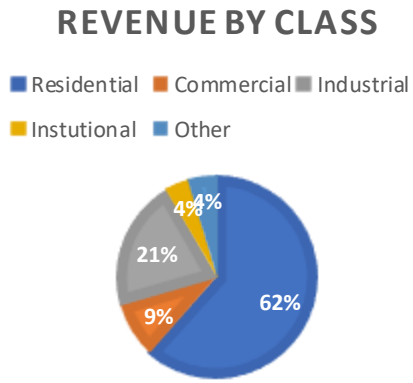
100 New Construction Accounts

$28,006 Recuperated from Liens

2059 Backflow Devices Filed



Automated Clearing House (ACH) is the most efficient way for us to collect revenue.



Top 5 Consumers

Owens	849,691 gpd*
Anomatic	371,401 gpd
Tamarack Farms Dairy	159,574 gpd
Licking Memorial Hospital	129,667 gpd
Mobile Power Wash (Industrial Water)	91,051 gpd

**Includes leak in Nov & Dec*

Account Delinquency Report

Amount Delinquent as of 12-31-2024 (>90 days)
$130,000

Amount Delinquent as of 12-31-2023 (>90 days)
$121,000

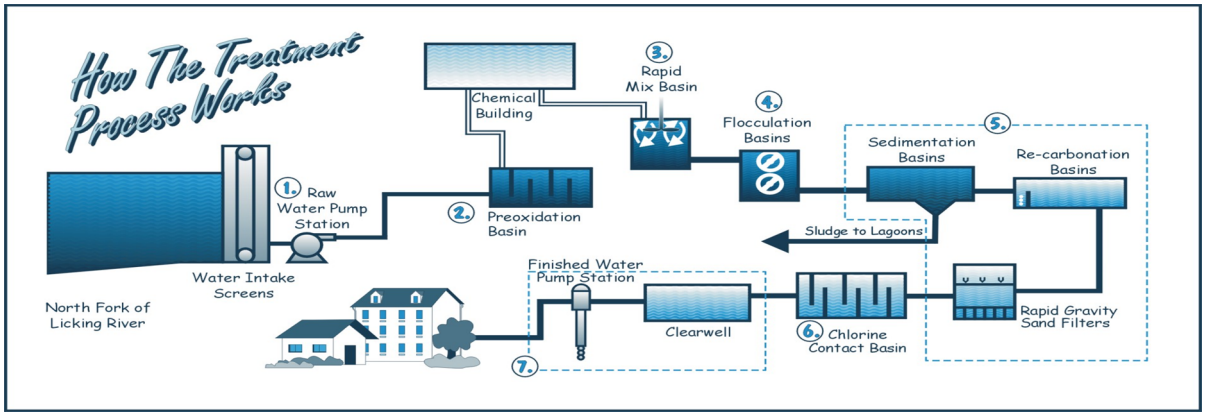
Delinquent amounts are being collected through withholding of services, placing liens on properties and in-house collections.

2025 Plan

We will begin the process of replacing our current Customer Information System which has been in place since 2006. An in-depth analysis will occur in 2025 with the assistance of consultants to help guide us in the planning and creation of an RFP. The staff will participate in exercises to help evaluate our current software and develop goals and objectives for the new system. The plan will be to have a new vendor selected by the end of the year.

Water Treatment Plant

ANNUAL REPORT 2024



Ohio EPA Chemical Monitoring Averages for 2024

Fluoride	0.95	mg/L
pH	8.72	S.U.
Phen. Alkalinity	1.83	mg/L
Total Alkalinity	48.67	mg/L
Stability	-3.3	mg/L
Hardness	113.3	mg/L
Phosphate	0.19	mg/L
Free Chlorine	1.27	mg/L
Combined Chlorine	0.12	mg/L
Nitrate	1.31	mg/L
Turbidity	0.05	NTU
TOC (raw)	2.08	mg/L
TOC (finished)	1.23	mg/L
Lead (90^{th} percentile)	0	ug/L
Copper (90^{th} percentile)	0.021	mg/L

Production Data for 2024

Daily Average Production	8.41	MGD
Yearly Total Production	2,868.4	MG

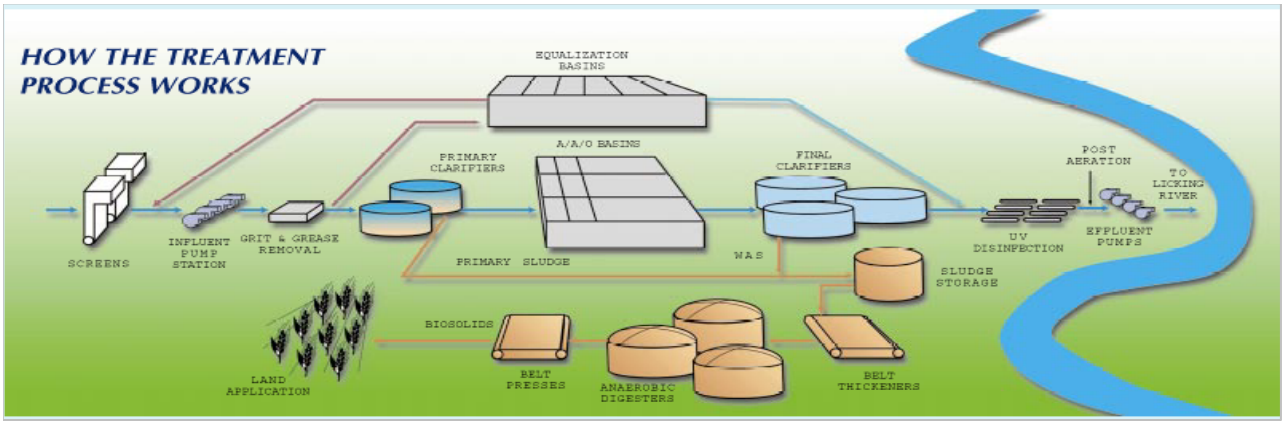
Major Project Goals for 2025

- Lime Sludge #3 lagoon hauling (Cont.)
- River Dredging
- Install Battery Backup for all PLCs
- Finish remaining filter controllers
- Complete rebuild on Floc Basin #1
- Replace check valve on raw water pump #3
- Replace all sodium hypochlorite plumbing
- Replace all sodium hypochlorite transfer pumps
- Rebuild backwash pump #1
- Install rebuilt carbon bulk tank mixer

Major Projects Completed in 2024

- Overhaul on Floc Basin #3
- Installed Raw water monitoring devices (pH, Turbidity, Ammonia, Temperature)
- Installed Inline fished water meters (Fluoride, pH, Chlorine)
- Installed new heater in North Screen House
- Replaced 7 PLCs in Lime room
- New filter controllers on filters 1,2,6
- Carbon bulk tank mixer down for repair
- Repaired all 3 Boilers
- Repaired surface wash line for filter #6

Wastewater Treatment Plant



2024 Plant Operation Data

Annual Average

Ave. Flow MGD	Raw Suspended Solids mg/l	Final Suspended Solids mg/l	% Removal Suspended Solids	Raw CBOD mg/l	Final CBOD mg/l	% Removal CBOD	Raw Ammonia mg/l	Final Ammonia mg/l	% Removal Ammonia
7.54	168.6	2.5	98.5%	136.5	3.4	97.5%	13.3	1.0	92.5%

Major Projects Completed in 2024

- Replaced #4 influent pump motor
- Repaired 2 sludge storage mixers
- Replaced administration building HVAC unit
- Replaced bull gears on #1 dewater press
- Installed new NPW flow meter
- Replaced #3 aeration tank mixer
- Replaced grit transfer pump motor
- Installed spray bars for dewater belts
- Replaced downstream level indicator in screen building
- Replaced shorted out wiring going to aeration basins
- Replaced south side overhead door in dewater building
- Replaced 8 broken wheels on primary tanks

Major Project Goals for 2025

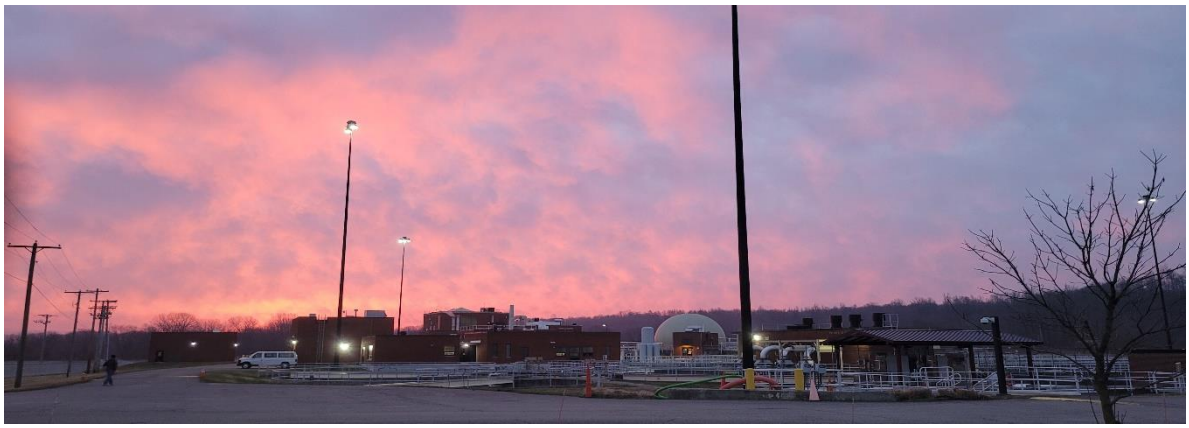
- Replace dewatering well pump
- Replace #1 influent pump wear rings
- Continue painting projects
- Continue replacement of aging equipment
- Repair concrete throughout the plant site
- Complete Master Plan Study for the Wastewater Plant
- Upgrade security and process control cameras throughout the plant
- Replace aging Fire Alarm System
- Upgrade dissolved oxygen sensors
- Install new grit pump
- Replace influent sampler
- Replace exhaust fan and rooftop unit on dewater building

Operations: To maximize the efficiency of the wastewater plant while achieving the highest level of treatment our facility can provide.

Trojan Signa UV Disinfection

As indicated on previous page, the treatment operation maintained full compliance in removing CBOD, ammonia, and suspended solids while successfully treating over 2.7 billion gallons of wastewater.

Our wastewater treatment plant employees are the backbone of our community's health and environmental sustainability. Their dedication, expertise, and tireless efforts ensure that our water systems operate efficiently, protecting public health and preserving natural resources. Through their hard work, they maintain complex treatment processes, respond to challenges with professionalism, and uphold the highest standards of safety and compliance. Their commitment to innovation and continuous improvement helps our facility run smoothly, meeting regulatory requirements while safeguarding the environment. We deeply appreciate their resilience, teamwork, and unwavering dedication to this critical service, which benefits every resident and business in our community.



Staffing Changes at WWTP

The Industrial Pretreatment Program saw some personnel changes in 2024. Long-time employee Randy McDaniel, the Industrial Waste Inspector, chose to retire after 36 years with the City of Newark. Randy has been a tremendous asset to the Industrial Pretreatment Program, and will be missed. His years of knowledge, attention to detail, and well-known ability to create innovative solutions for tough sampling situations in the field has made him a highly valued employee. Randy was well-liked by co-workers as well as personnel at the various industries that he sampled throughout Newark.

In 2024, Eric Mitchell, was promoted from the Operations Technician position to Wastewater Facilities Assistant Manager. Plant Operator Chris Sims has become our new Operations Technician, and is in the process of learning Sample Collection, Laboratory Techniques, and other various duties that he will be managing in his new job.

After careful consideration, the decision was made to abolish the job title of Industrial Waste Inspector, and fill the position with a second Operations Technician. This will allow more flexibility when extra personnel are needed throughout the various areas of our facility; industrial sampling, laboratory, maintenance, and operations.

Randy McDaniel Filling Out Bench Sheets

Water Distribution

Accomplishments 2024

- Renewed water services 77
- Maintained street and property maintenance
- Installed new water taps 12
- Discontinued water services 12
- Repaired water main breaks 39
- Replaced Fire Hydrants 6
- Repaired Fire Hydrants 117
- Annual flushing program completed
- Painted Fire Hydrants 306
- New Water Main Replacement: 9
  - 1" Poly Main Moundbuilders / Parkview
  - 1" Poly Main behind 881 W. Main St.
  - 1" Poly Main 7th Street
  - 1" Poly Main North Ave.
  - 1" Poly Main Nathaniel Avenue
  - 1" Poly Main Miller St.
  - 6" Poly Main Krebs Ct.
  - 2" Poly Main N. 10th St.
  - ¾" Poly Van Voohris
- Leak detection
- Worked Valve Maintenance Program … repaired Valves, Worked Valves, Replaced Valves 437
- Services Checked for Lead Program 875

Goals for 2025

- Upgrade water main on Euclid Avenue.
- Continue investigating services for Lead Program.
- Continue to upgrade old galvanized water services.
- Continue fire hydrant flushing programs.
- Resume valve maintenance program.
- Continue valve and leak detection program.
- Continue high quality service to water customers of Newark.

*Work was completed by one crew for the majority of 2024.

Sewer Maintenance

Accomplishments 2024

- Responded to plugged sewer orders on city mains 27
- Responded to plugged orders on owners 72
- Televised miles of sewer main 22.8
- Cleaned miles of sewer main 45.6
- Inspected CSO overflows times after rain events 64
- Manholes Worked, repaired or replaced 70
- Manhole inspections completed 924

Goals for 2025

- Continue televising sewer mains to determine if repairs are needed in an effort to reduce the chances of catastrophic sewer failure.
- Complete upgrade of sanitary and storm lift stations with SCADA monitoring system.
- Continue to monitor for long term control plan.
- Continue with preventive maintenance work on manholes and sewers to provide customers with reliable and uninterrupted service.

Engineering/Construction

Fourth Street Sewer Separation

Description	Part of Long-Term Control Plan as required by our NPDES Permit. Separation of sewers on 4th Street from National Drive Pump Station to Locust Street, Locust Street to Granville and Granville to State Route 16 Bridge. Work will include new sanitary, storm and water lines. Separation of combined sewers to reduce overflows to mandated levels.
Cost	$**27,181,183**
Issues	June 2023 milestone was met for all sanitary and sewer separation to occur. Working to finalize punch list items and complete project.
Schedule	Completed June 2024

East Side Water Transmission Line

Description	Installation of approximately 3 miles of 16" water line to loop system from New Haven Ave. to Dayton Road area. This line will improve water quality, provide better fire protection.
Cost	**$3,500,000**- Funded by Ohio Dept. of Development Grant
Issues	Coordination with County on impacts to roads and needed improvements to asphalt.
Schedule	Completed November 2024

Thornwood – Faye Drive Booster Stations

Description	Installation of a new booster station on Faye Drive and upgrading the existing station on Thornwood Drive. The current status of the Southwest Pressure Zone is that there is one booster station to supply pressure to the entire area. While this station has a back generator for emergencies a second complete station is needed to ensure consistent service to this area.
Cost	**$4,111,281.40**
Issues	Coordination with Thornwood Drive/Cherry Valley Road bridge replacement and River Road Sewer project is critical.
Schedule	Construction started 3rd Quarter 2023 with waterline replacement portion. Faye Dr. booster station operational and currently installing new Thornwood Dr. booster station. Anticipated completion 3rd Quarter 2025.

Lead Service Line Replacement #4-5

Description	Replacing 1,100 non-copper service lines within the system. Identification of service line material is an on-going process and an interactive map of service line material has been developed. Part of the Ohio EPA mandate to remove all lead from the drinking water system.
Cost	**$3,934,875 total – ($3,741,595 OWDA 0% interest loan and $193,280 ARP funds)**
Issues	All eligible customers must sign agreement for City to work on private water line.
Schedule	LSL #4 completed October 2024 and LSL #5 completed December 2024.

Lead Service Line Replacement #6-12

Description	Replacing approximately 4,000 non-copper service lines within the system. Identification of service line material is an on-going process and an interactive map of service line material has been developed. Part of the Ohio EPA mandate to remove all lead from the drinking water system.
Cost	**$12,000,000**
Issues	All eligible customers must sign agreement for City to work on private water line.
Schedule	1,500 Services per year for Project years 2025-2027.

UV Upgrade – WWTP

Description	Installation of a new ultraviolet light disinfection system to replace the existing system. UV system was functional May 2022 and weir covers were completed September 2022.
Cost	**$5,123,980**
Issues	Substantial completion February 2024
Schedule	Anticipated Final completion July 2024

WTP Instrumentation Upgrades

Description	Updating plant monitoring system with new PLC's and SCADA system. Additional controls for water treatment processes are being added as well as storage tank monitoring on Horns Hill and River water quality monitoring. Replacing failing SCADA radio systems on remote water booster stations and sanitary pump stations.
Cost	**$3,113,536.36**
Issues	Coordination with SCADA for Plant outages
Schedule	Completed December 2024.

South Second Street

Description	Part of the Long-Term Control Plan, this project will connect the separated sewers in the downtown area to the Interceptors along the South Fork Licking River and then to the treatment plant. This will also add a storm water line from the same area and replace aging water lines in the same area. Reduction of CSO's and new infrastructure.
Cost	**$13,525,853**
Issues	Coordination with Floodwall improvements on 2nd Street. Coordination with traffic and entrance improvements at Don Edwards Park and Ohio Street. Coordination with businesses and residents on 2nd St and traffic patterns.
Schedule	Construction started April 29, 2024 and anticipated completion by 3rd Quarter 2026.

River Road Sewer

Description	Installation of 3,400 feet of gravity sewer line on River Road connecting Park Trails to Reddington Road. Replacing a sanitary lift station and force main with a gravity system. Work is part of the Thornwood Drive/Cherry Valley Bridge Project.
Cost	**$3,965,934 (Funded with ARP)**
Issues	Coordination with ODOT bridge project and River Road culvert replacement. Deep (30-35') sewers on east end of River Road. Coordination with residents and traffic patterns due to required shut down of River Road.
Schedule	Project awarded and start construction May 2025. Anticipated completion by 4th Quarter 2025.

16 North Project: In Detailed Design

Description	Part of the Long-Term Control Plan, this sewer separation project will include area north of SR 16 at Hudson Ave and along SR 13 to Rugg Ave. Reduction of CSO's and new infrastructure.
Cost	**$110,000,000**
Issues	Largest CSO project to date and will be completed in two phases. Impact to traffic patterns on Hudson Ave. and Mt. Vernon Road. Coordination with ODOT for Log Pond Run Bridge replacement. Potential flood control improvements of Log Pond Run, neighborhood revitalization and storm water removal from residences. Received approval from Ohio EPA in March 2025 to split the project into Phase 1 (Mt. Vernon Road) and Phase 2 (Hudson Avenue). Phase 1 will
Schedule	Phase 1- Complete design in 2nd Quarter 2025 and Construction starting January 2026 with completion by July 2028. Phase 2- Complete design in 2nd Quarter 2025 and Construction starting 1st Quarter 2028 with completion by 2031.

North Fork Licking River Dam Improvements (Spillway remediation):

Description	Address deficiencies identified by the State of Ohio Dam Safety Authorities. Create overflow channel on east side of dam to direct flows to a control structure that will discharge to the river approximately 200 ft downstream.
Cost	**$322,632**
Issues	Coordination with Horns Hill Roundabout project
Schedule	Completed September 2024.

Water System Capacity Study

Description	Develop high level overview of North Fork Licking River firm capacity, WTP capacity and potential impacts of western Licking County demand
Cost	**$140,000**
Issues	Coordination with AMP Development
Schedule	Completed September 2024. Continued evaluation of water system demands.

Wastewater System Master Plan

Description	Evaluation of Wastewater Plant current and future flow and loading conditions, high level condition assessment of major assets, develop a process and hydraulic capacity model, evaluate and recommend nutrient removal improvements required to meet a 5.0 mg/l and 1.0 mg/l Total Phosphorus limit, evaluate the solids handling and septage receiving facilities and recommend improvements required and develop implementation schedule, capital improvement budget and high level financial analysis to meet future conditions.
Cost	**$300,000**
Issues	Understand existing infrastructure and planning to meet 5-20 year growth projections
Schedule	Draft study completed by 3rd Quarter 2025.

Future Projects 2024

Water Tower painting

Description	Replace aging coating on water tower
Purpose	Sandblast and Paint Water Tower to prevent corrosion
Cost	Engineers estimate- **$400,000 - Submitted for Ohio Dept. of Development Grant**
Issues	Tower must be out of service during rehabilitation
Schedule	3rd Quarter 2024

Water Treatment Plant Rehabilitation

Description	Based on Asset Management Plan, repair/replace existing infrastructure at WTP. Plant was built in 1943 with last major upgrade in 1996. Over 30% of assets are at or near failure. Will need to evaluate current treatment capacity and future capacity requirements.
Cost	Engineers estimate **$30,000,000**. Anticipate using Ohio EPA Water Supply Revolving Loan
Issues	Coordination of current production with Water Capacity Study to determine potential expansion needs.
Schedule	Master Plan 2025, Detailed design 2026-2027, Anticipated Construction 2028.

Stormwater

Small Drainage Projects completed in 2024

- Jonathan Lane ditch cleanout
- Jonathan Lane neighborhood drainage and culvert project
- Broad Street grading and catch basin & pipe installation
- Pound/Pine Streets catch basin and pipe installation
- Laverne Apartments cost-share, outfall and ditch construction
- Country Club Drive neighborhood drainage project
- Berwyn Lane creek stabilization
- Donovan Drive pipe repair from flood washout
- Sharon Valley Road at King Road culvert replacement

Studies

- Stormwater Rate Study ongoing
- Log Pond Run Diversion Channel ongoing
- Wells Ave Storm Sewer Feasibility study completed

Education/Outreach in 2024

- Backyard Conservation Day
- Hartford Fair Booth
- Infrastructure Tour for Educators
- MORPC Green Infrastructure Tour
- Heritage Ohio Conference Downtown Infrastructure Tour
- Stream Team training with Licking County Soil & Water Conservation District

Stormwater Credits Program Activity in 2024

- 21 business credit recipients
- 11 school credit recipients
    - Six educator trainings offered

River Clean Ups in 2024

- Raccoon Creek Clean Up – April 13, 2024
- Log Pond Run Clean Up – April 20, 2024
- Licking River Round Up – September 7, 2024
    - Three base locations in Newark
    - 288 participants, county-wide
    - 64 poster contest entries
    - 12,000 lbs of trash, 124 tires, 1,420 lbs of scrap metal removed, county-wide

Levee Activity in 2024

- Design work for gate and levee improvements, continued in 2024
- Vegetation maintenance, including mowing and spraying, continued in 2024
- South 2nd Street gate closures erected during April flood event

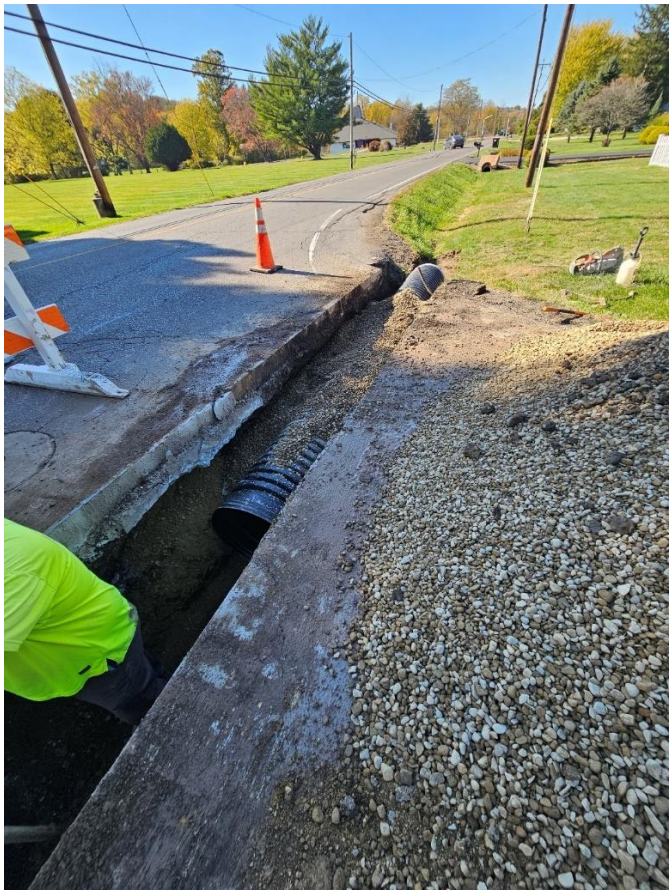
Watson Road Landfill Maintenance in 2024

- Explosive gas monitoring conducted in spring and fall
- Sampling location moved
- Access to new sampling location improved with stone driveway, brush clearing and excavation
- Installed outfall signage
- Mowing and weekly sampling continued in 2024
- Applied for NPDES permit renewal

Other 2024 Accomplishments

- Purchased two street sweepers
- Purchased new construction inspection software
- Repairs on flood control roof
- Started weekly recycling pickups at water buildings
- Purchased three water bottle refilling stations through Ohio EPA's Recycle Ohio Grant
- Removed log jam on Jefferson Street bridge with funds from Muskingum Watershed Conservancy Debris Removal Grant
- Removed trees from Waterworks dam and at WTP intake
- Three NOI permits approved from EPA for city projects (South 2nd Street, Waterworks Road/Horns Hill Road Roundabout, and River Road Sewer)
- 14 city employees attended illicit discharge training
- 147 construction sites inspected
- 51 dry weather screening inspections of outfalls
- 20 storm drain markers installed
- 40 plans reviewed, with 11 of them requiring SWPPP review and approval
- 134 post-construction BMPs inspected
- 115 households participated in leaf pick up program, with 1,674 bags of leaves collected
- MOU continued with Licking County Soil & Water Conservation District in 2024

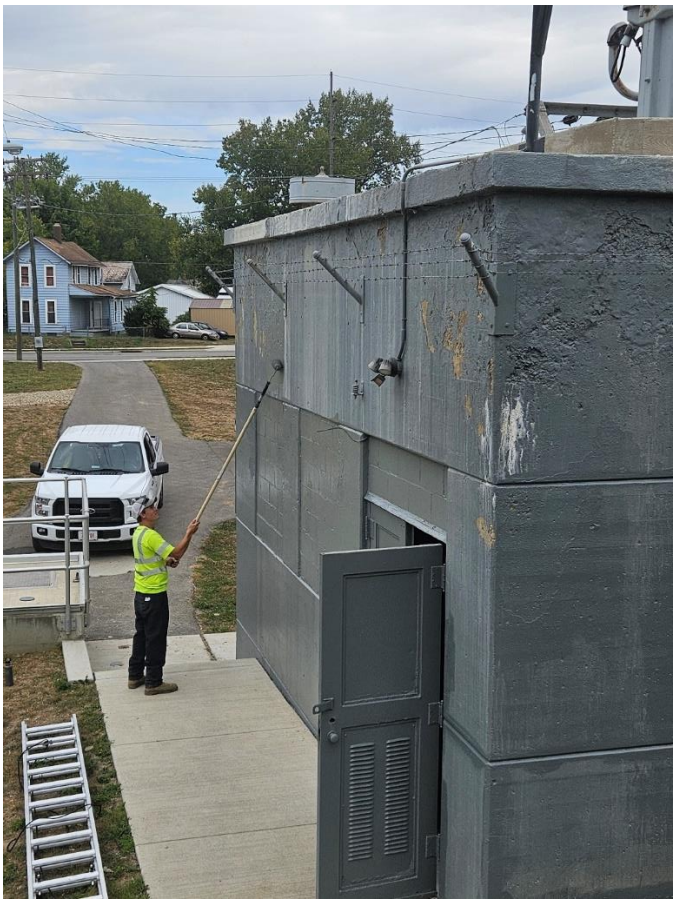

Newark Water Department
34
We Love Nature.
LICKING COUNTY
RIVER
ROUNDUP
EVERY
SEPTEMBER




ELGIN
Crosswind


CITY OF NEWARK
Watson Road Landfill
Permit No. 4IN00182
Outfall No.001
740-670-7753
www.newarkohiowater.net


Water Bottle Filling Station
Funded by Ohio EPA
NEWARK
Ohio
Environmental Protection Agency
Recycle Ohio Grant Program
sensor activated
ELKAY
ezH2O

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