



23828 30th Avenue South, Kent, Washington
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2023 Annual Report

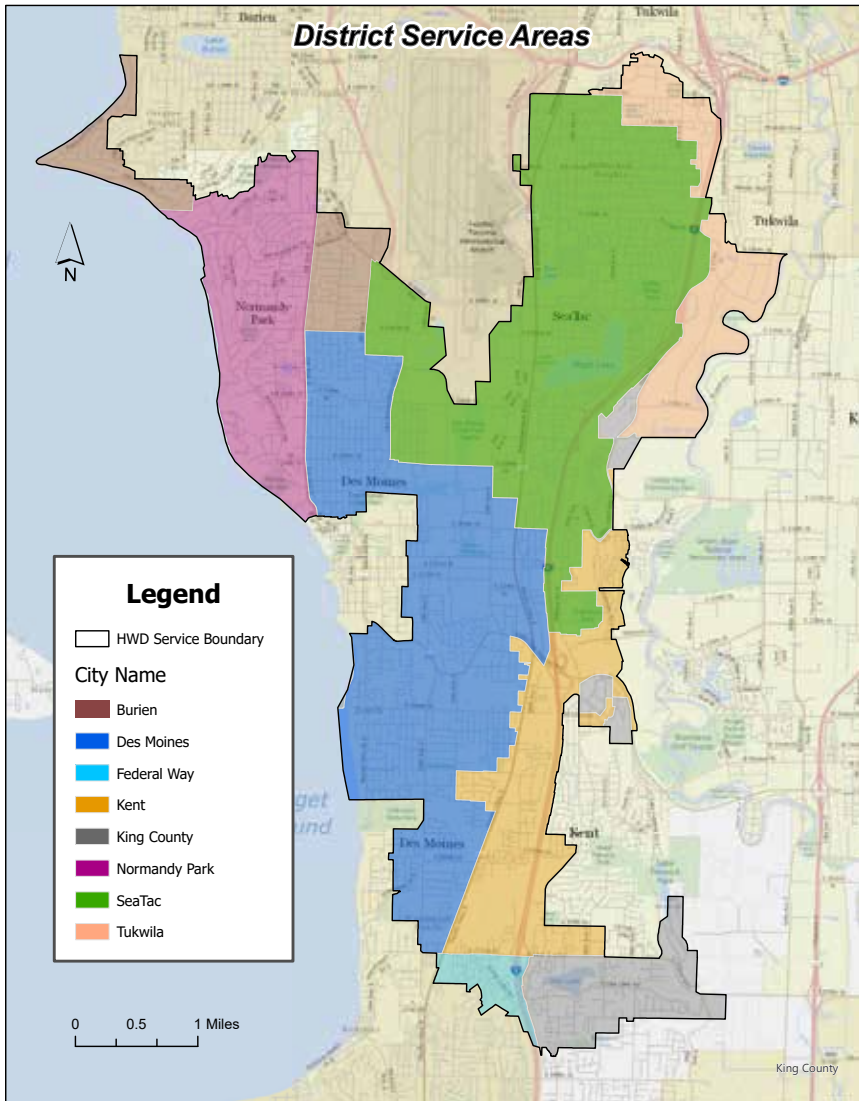


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Overview of 2023

Water Sources

Seattle Public Utilities supplied approximately 75% of our water from three metered locations; the remaining 25% was sourced from three District-owned groundwater wells and two treatment facilities. The District supplied approximately 2.4 billion gallons of water in 2023.

System Inventory

Pump Stations	8
Water Storage Facilities	8
Water Storage Volume	20.6 MG
Pressure Zones	12
Pressure Reducing Stations	29
Emergency Interties	10
Miles of Water Main (from 2" to 36" diameter)	306
Active Meters*	18,853

*Ranging in size from 5/8" to 8", including one hundred and twelve 3" and larger meters.

Miles of Water Main by Type

Ductile Iron	203.2
Asbestos Cement	57.4
Cast Iron	39.9
Other	4.4

Infrastructure Overview

The District continues to mitigate the impacts of regional transportation projects affecting our water infrastructure.

Sound Transit is nearing completion of the utility relocations necessary to accommodate the Federal Way Link Extension project; however, WSDOT continues construction of the SR 509 extension that will continue over the next several years. Des Moines, King County, Normandy Park, and SeaTac all have transportation projects necessitating relocation and/or replacement of District infrastructure to accommodate their projects. The District expects to invest approximately \$11.6M between 2023 and 2026 to address regional transportation initiatives.

In 2023, the District invested approximately \$2.1M in capital additions. The 2024 budget identifies 13 projects in various stages of planning, design, and construction estimated at \$8.2M. Debt service continues to decline from \$415K in 2023 to \$364K in 2024 as the District continues to retire existing debt.



Overview of 2023

Administrative and Operations Overview

The Administration and Operations Departments continued to navigate the District through complex transitions during the year. Most notably, Human Resources managed several key changes in personnel. Three long-term employees left Highline through retirements or relocations. Four employees transferred into new positions and five new team members joined the organization. The District filled two key positions: the Field Supervisor position after the retirement of a 35+ year employee and the newly created GIS Administrator position.

Staff installed or replaced 153 new or deficient services and performed three main replacement projects all while continuing cross-training new personnel. 2024 will be a year of continued evaluation of processes and tasking to improve efficiencies while we continue investing in new personnel.

Finance began the migration from a legacy financial software to the new, Cassell Enterprise Resource Management System. The new software allows for increased transparency in financial matters, streamlined approvals, and improved integration with other operational software. The Cassell software went live in early January 2024.



Other Notable Achievements in 2023

- Clean 2022 Financial and Performance Audits by the Washington State Auditor's Office
- Water Loss kept to less than 5%
- Developed a new Procurement Manual to assist staff in purchasing and contracting
- Negotiated Franchise Agreements with the cities of Federal Way and Tukwila
- Executed 4-year Collective Bargaining Agreement with UA Local 32 represented employees
- Executed three Interlocal Agreements with partner agencies for CIP Construction (WSDOT, King County, and Des Moines)
- Assisted KCWD 54 in their water quality challenges
- Researched and prepared Opt-Out for 3M and Dupont PFAS Settlements



Water Production

The annual goal for water production from the District's three operating wells was 729,000 CCF; actual production in 2023 was 790,000 CCF, equal to about 600 million gallons of water. Seattle Public Utilities sourced the remaining volume for a total combined water production of 2.4 billion gallons. Unaccounted water loss in 2023 was 4.2%.

Water Sales

Year	Meters	Billed (CCF)
2019	18,771	2,847,942
2020	18,775	3,152,690
2021	18,796	3,150,535
2022	18,809	3,076,176
2023	18,853	3,031,893

Water Quality

Highline continued to provide high quality water that meets or exceeds applicable state and federal standards for safe drinking water. The 2022 Consumer Confidence Report (CCR) was offered to District consumers in three formats: 1) on our website (as a PDF); 2) by email; or 3) as a printed copy by request. The District sent 13,341 postcards and 18,853 water bill messages outlining methods of obtaining the CCR to customers within the District's service area. The 2023 CCR will be available mid-2024. The 2022 CCR is on our website at:

www.highlinewater.org/media/92993/highline_2022_ccr_news_in_2023-3_web.pdf

In 2024, the District will collect samples for the Unregulated Contaminant Monitoring Rule 5 (UCMR5) as required by the Environmental Protection Agency. The UCMR is a program to collect data for contaminants that are suspected to be present in drinking water but do not have health-based standards set under the Safe Drinking Water Act (SDWA). All testing will be compliant with mandated water quality regulations.



PFAS Update

In 2022, the District began testing our well sources for Per- and Poly Fluoroalkyl Substances (PFAS). The testing was in response to newly enacted regulatory requirements for five types of PFAS by the Washington State Department of Health. One District source, the Tye Well, was found to exceed State Action Levels for the PFAS contaminant Perfluorononanoic Acid (PFNA). Upon confirmation of the PFNA presence in June 2022, the District suspended Tye Well operations. Tye will continue to remain offline until the District explores and implements necessary treatment processes.



Water Quality Goals and Achievements

Provide High Quality Water

- Complied with DOH WAC 246-290 monitoring requirements.
- Maintained Cross-Connection Control Program per State and District Standards.

Be Responsive to Customer Needs

Customer concerns regarding water quality remained a priority for our staff. The District's goal is to respond to water quality inquiries within one hour. During 2023, we responded to the following 36 water quality inquiries:

11 Miscellaneous	4 Taste
16 Color	5 Odor

Each of these inquiries prompted a site visit, evaluation by District staff, and follow-up communications to inform our customers of our findings and/or any remedial action taken.

Perform Routine Water Main Flushing and Tank Cleaning

- Flushed 18.5 miles in 2023. The goal is to flush all small diameter distribution mains every five years (59 miles annually).
- Flushed approximately 225 dead-end mains.
- Maintained chlorine residual in the distribution system between 0.20 mg/L and 1.70 mg/L.
- Cleaned and disinfected two of the District's eight tanks.

Maintain Water Treatment Goals

- Removed a minimum of 90% iron and manganese at treatment plants.
- Managed tank water levels to maximize water turnover.
- Ensured proper pH, chlorine, and fluoride levels in accordance with regulatory guidelines.
- Maintained Wellhead Protection Plan.



Preventative Maintenance Goals

Services

- Installed 12 new, relocated 21, replaced 88, and repaired 32 deficient services in 2023.

Hydrants

- Continued aggressive policy of policing or monitoring hydrant use by third parties to prevent unauthorized or improper use.
- Clean and paint 600 hydrants each year: *completed 475 in 2023.*
- Fire hydrant maintenance: *Replaced, relocated, or repaired 36 hydrants.*

Valves

- Operate/maintain approximately 2,200 smaller diameter valves each year (on a 5 year cycle): *completed 1,926 in 2023.*
- Operate/maintain approximately 252 Air/Vacs each year: *completed 43 in 2023.*

Meters

- Replaced 30 large and small diameter meters by work order.
- Continued GPS locating of meters, hydrants and valves for the Geographic Information System (GIS): *completed 250 in 2023.*

Treatment and Pump Stations

- Performed daily facility checks and inspections
- Replace routine wearing parts on annual basis
- Clean backwash tanks and recharge filter vessels annually.

Easements

- Checked 258 out of 1387 District easements for encroachments (on a 5-year cycle) in 2023.

Pressure Reducing Valves (PRV)

- Checked PRV Stations monthly; cleaned annually.
- Rebuilt control valve #12.

Breaks, Leaks, and Unexpected Shutdowns

Between 2019 and 2022, the District experienced an average of ten (10) water main breaks per year. During 2023, there were a total of five (5) breaks. These breaks were caused by pipe age, from outside forces such as ground settlement or tree roots, from contractor operations, or unknown causes. When a water main break occurs, our goal is to have the water service restored within eight hours or less.



Water Loss

- Keep unaccounted water usage below 10% (as per WSDOH Water Use Efficiency Requirements): our unaccounted-for water was 4.2% in 2023.
- Continue monitoring for unmetered water connections / uses.

Emergency Management and Mitigation

- Upgraded the Fire alarm communication system at the District Headquarters.
- Upgraded the burglar alarm system at the District Headquarters.
- Upgraded Win911 and WinCC software for SCADA callouts and emergencies.

Safety

Highline Water District had one (1) reportable injury in 2023. The injury did not result in any lost time. The L&I experience factor was 0.9 for 2023.

Completed Training

- Asbestos Pipe Handling.
- Heat Stress First Aid.
- Annual Hearing Testing.
- Confined Space.
- Forklift Certification.
- Flagger Certification.

Hazard/Safety Committee Goals

- Develop Tabletop Exercises for training purposes.
- Maintain current Incident Action Plan (IAP) contact information.
- Continue Hazard/Safety Committee meetings.
- Target minimal L&I incidents and no time loss due to on-the-job injuries.
- Begin implementation of the recommendations identified in the Vulnerability Assessment.



Location Requests

Location requests are an important role in District Operations. Chapter 19.122 RCW outlines the requirements underground utilities must comply to ensure safe excavation around their infrastructure.

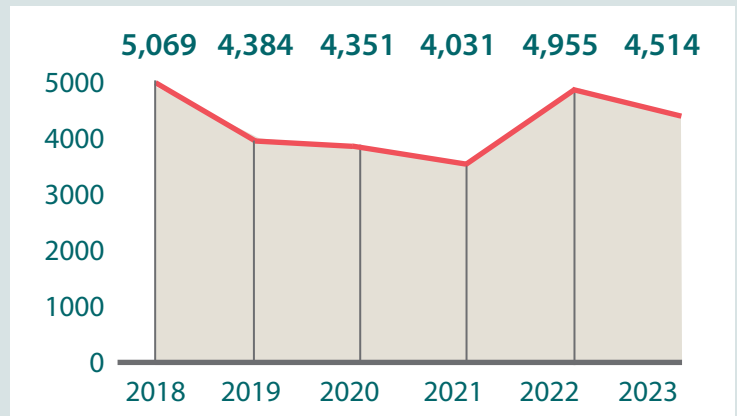
The District must respond to locate requests within 2 full business days. Failure to comply with these requests may result in a civil penalty of not more than \$1,000 for the initial violation, and not more than \$5,000 for each subsequent violation within a 3 year period.

The District received 4,514 line location requests in 2023; 693 of those requests required a site visit.

Location Requests by Type

Emergency - 343; Total - 4,514

Location Requests by Year



Paint Colors Used in Location Requests

Proposed Excavation
Temporary Survey
Electric Power
Gas, Oil, Steam, Petroleum
Communications, Alarm or Signal, Cables or Conduit
Potable Water
Reclaimed Water, Irrigation, Slurry Lines
Sewer and Drain Lines

Human Resources

During 2023, Human Resources managed several key changes in personnel. Three long-term employees left Highline through retirements or relocations. Four employees transferred into new positions, and five new team members joined the organization. The District filled two key positions: the Field Supervisor position after the retirement of a 35+ year employee, and the newly created GIS Administrator position.

In 2024, the District will create a second field crew and add a newly created Lead position dedicated toward Preventive Maintenance (PM) of distribution assets. PM activities include high-velocity flushing of water mains, valve operations program, repair and maintenance of Pressure Relief Valve stations, dead end and monthly perimeter flushing, and other maintenance programs. The new Lead position will report to the Field Operations Supervisor. The additional staffing and second field crew will help the District be timely in maintenance duties, increase response times, help achieve PM goals, and promote cross training within the Department.

Customer Service

During 2023, Customer Service staff answered over 22,000 phone calls, and our Field Staff went out on approximately 4,000 field calls to assist customers with various questions.

In 2024, Highline will implement an upgraded customer payment portal for online transactions. The new access will allow for an improved customer experience, more payment options, and the ability to receive text billing notifications. The upgrade will also integrate with the District's billing software to maintain real-time payment integration.

Customers continue to utilize the District's online account access. 4,500 have chosen paperless billing, and 4,600 are using the autopay feature.

Billings	2021	2022	2023
Regular Bills	112,000	115,000	115,100
Electronic	26%	26%	31%
Final Bills	1,522	1,326	1,076

Finance

Finance began the migration from a legacy financial software to the new, Cassell Enterprise Resource Management System. The new software allows for increased transparency in financial matters, streamlined approvals, and improved integration with other operational software. The Cassell software went live in early January 2024.

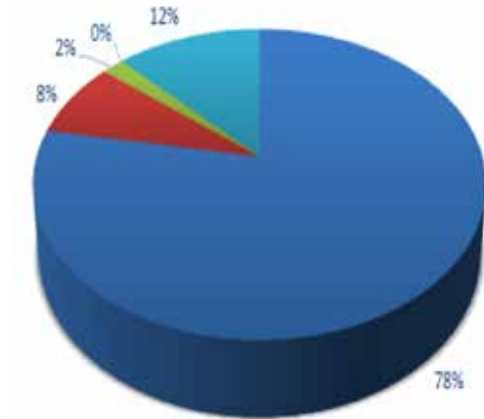
The Department continues to comply with the Governmental Accounting Standards Board (GASB) and the Washington State Auditor, including:

- Communicate the District's Ethics policies to staff and Board annually and provide an ethical work environment.
- Create quarterly and year-end financial reports for the Board in a timely manner.
- The District received another clean Audit for FY 2022.
- Maintain GAAP procedures and internal controls.
- Economic Stability: maintain rates < 1% of median household income.



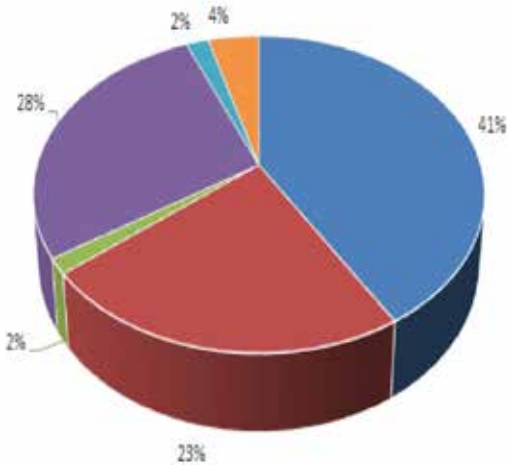
Administrative Operations: Financials

2024 Sources of Funds



- Rates (\$19,262,219)
- Other Revenues (\$1,991,559)
- General Facility Charges (\$450,000)
- Reserve Accounts (\$3,051,404)

2024 Uses of Funds



- Operation & Maintenance (\$9,785,203)
- Water Supply (\$5,394,127)
- Debt Service (\$363,796)
- Capital Projects (\$6,621,015)
- Meters / Hydrants / Services (\$450,000)
- Capital Asset Purchases (\$1,112,006)
- B&O Tax (\$24,755,182)

2023 Budget Recap

Sources of Funds	Budget	Actual	% of Budget
Rates	\$18,735,170	\$18,941,543	101.1%
Other Revenues	\$1,648,364	\$2,605,318	158.1%
General Facility Charges	\$500,000	\$400,000	80.0%
Other Funding Sources	0	0	
Reserve Accounts	\$2,577,915	(\$5,404,185)	-\$209.6%
TOTAL SOURCES OF FUNDS	\$23,461,449	\$16,542,673	70.5%

Uses of Funds	Budget	Actual	% of Budget
Operations & Maintenance	\$ 8,941,511	\$8,070,226	90.3%
Water Supply	\$5,386,062	\$5,249,241	97.5%
Debt Service	\$415,882	\$415,880	100.0%
Capital Projects	\$6,485,915	\$1,316,511	20.3%
Meters/Hydrants/Services	\$650,000	\$431,435	66.4%
Capital Asset Purchases	\$583,135	\$150,589	25.8%
B&O Tax	\$998,944	\$970,275	97.1%
TOTAL USES OF FUNDS	\$23,461,449	\$16,604,157	70.8%

2024 Board-Approved Budget

Sources of Funds	Budget	% of Budget
Rates	\$19,262,219	78%
Other Revenues	\$1,991,559	8%
General Facility Charges	\$450,000	2%
Reserve Accounts	\$3,051,404	12%
TOTAL SOURCES OF FUNDS	\$24,755,182	100.0%

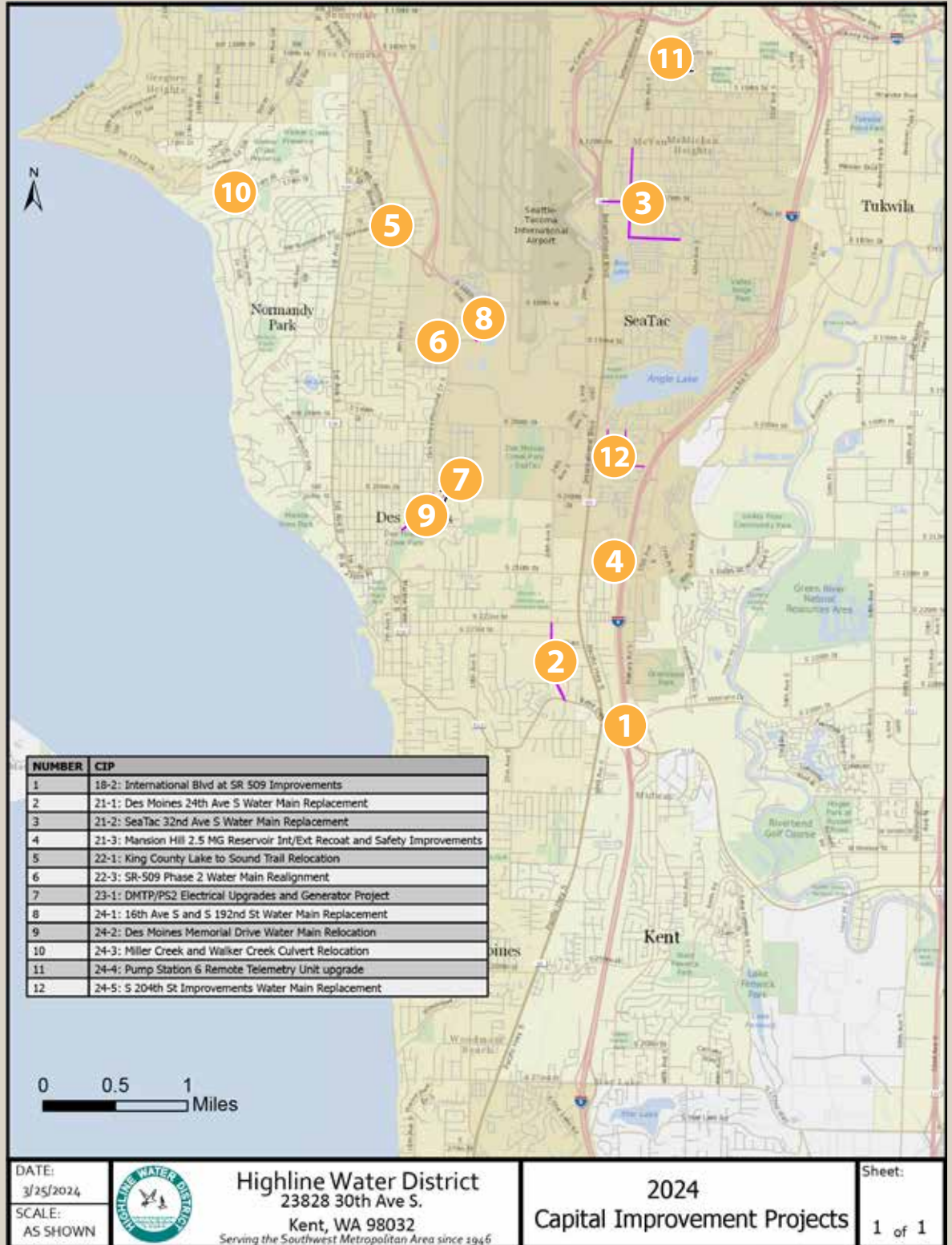
Uses of Funds	Budget	% of Budget
Operations & Maintenance	\$9,785,203	40%
Water Supply	\$5,394,127	22%
Debt Service	\$363,796	1%
Capital Projects	\$6,621,015	27%
Meters/Hydrants/Services	\$450,000	2%
Capital Asset Purchases	\$1,112,006	4%
B&O Tax	\$1,029,035	4%
TOTAL USES OF FUNDS	24,755,182	100%

Highline Water District’s goal is to provide high quality and reliable water service to all customers in accordance with the rules and regulations governing water purveyors.

The District’s Capital Improvement Program (CIP) is an on-going effort with the primary mission to replace aging infrastructure with modern, more reliable technology and materials.

The following pages provide a summary of CIP projects authorized by the Board of Commissioners.

For additional information on Capital Improvements, see the 2024 Capital Improvement Plan.



1 Project# 18-2 International Boulevard South at SR-509 Improvements

The District partnered with the Washington State Department of Transportation (WSDOT) to relocate approximately 6,400 LF of water mains and appurtenances in conflict with the new SR 509 project. This project is the first of a two-phase initiative to connect Interstate 5 with SR 509 at S 188th Street. Phase one completes the section from Interstate 5 to 24th Avenue S.

Atkinson Construction started construction in late 2022 and water work in approximately 80% complete at the end of 2023. One water installation location remains to be completed: Veterans Drive S and Interstate 5. The Veterans Drive work includes installing a 12-inch water main through a proposed tunnel under the Interstate. Work is scheduled to be complete in 2025.

Lead Agency:

Washington State Department of Transportation

Status:

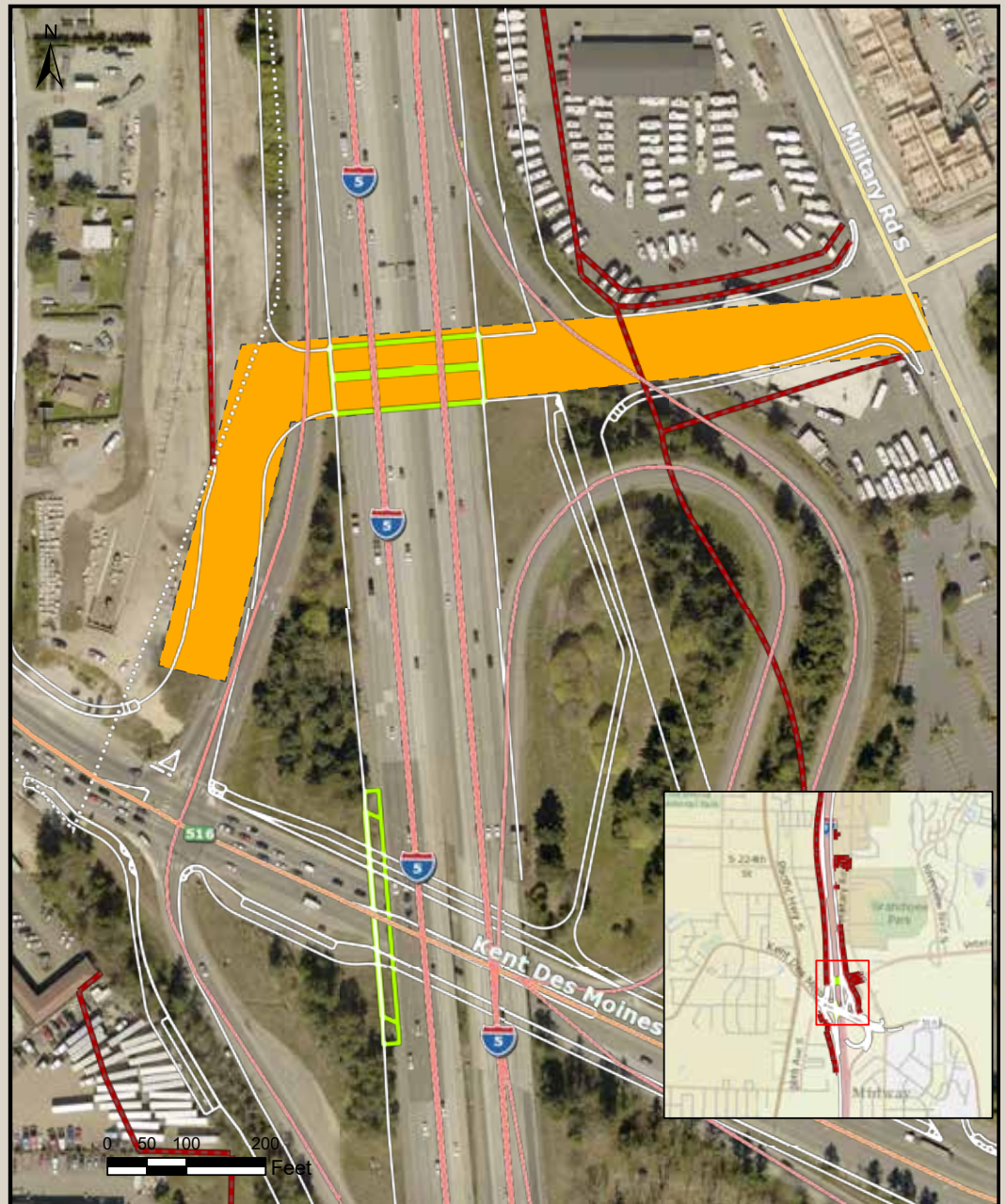
Construction

Schedule:

Completion in 2025

Budget:

\$4.9 million



DATE:
4/22/2024
SCALE:
AS SHOWN



Highline Water District
23828 30th Ave S.
Kent, WA 98032
Serving the Southwest Metropolitan Area since 1946

International Blvd at SR 509
Road Improvements

Sheet:
1 of 1



2 Project# 21-1
**Des Moines 24th Avenue S
 Water Main Replacement**

The City of Des Moines proposed a stormwater and road widening project along 24th Ave S from S 223rd St to Kent-Des Moines Road. During the planning phase, a crucial conflict emerged between the existing 10-inch AC water main and the City’s proposed improvements. The water main is nearing the end of its useful life, and the project became an opportunity to replace the aging infrastructure.

The District partnered with the City to replace approximately 2,560 LF of water main concurrently with the construction project. The City awarded the project to SCI Infrastructure and water construction began in late 2023. The water work will be complete by Spring 2024 with overall construction done by the end of the year.

Lead Agency:
 City of Des Moines

Status:
 Construction

Schedule:
 Completion by end of 2024

Budget:
 \$1.5 million



3 Project# 21-2 32nd Avenue S Water Main Replacement

The City of SeaTac notified the District of a proposed storm drainage and roadway improvement project along 32nd Ave S from S 170th St to S 180th St. During the planning stages, a potential conflict emerged – the existing water mains along the project alignment are in direct conflict with the City’s planned improvements. Fortunately, the existing AC mains are nearing the end of their useful life, so the project provided an opportunity to partner with the City to eliminate these aging mains.

The project includes replacing approximately 5,300 LF of water main with new 8-inch and 12-inch ductile iron pipes in a location to avoid future conflicts. The District retained the services of KPG/Psomas Engineers to design the proposed improvements. Work is expected to begin in 2025.

Lead Agency: City of SeaTac
Status: Design
Schedule: Construction in 2025
Budget: \$3.3 million



4 Project# 21-3 2.5 MG Mansion Hill Reservoir Improvements

The 2.5MG Mansion Hill Reservoir is a vital component of the District’s water storage system. To maintain the integrity of this important storage facility, the District initiated a project to upgrade the structural integrity and safety appurtenances of the tank. The project includes repairing any corrosion found on the structure and replacing the interior and exterior coatings. Additionally, the project will upgrade safety features including stairs, safety cages, and fall protection to further enhance the security of the facility. The District awarded the project to T Bailey Construction in March 2024.

Lead Agency:

Highline Water District

Status:

Preconstruction

Schedule:

Construction in 2024 with completion in early 2025

Budget:

\$3.7 million



Infrastructure: 2023–2024 Capital Improvement Projects

5 Project# 22-1 King County Lake to Sound Trail

King County proposes the Lake to Sound Trail, a new pedestrian and bicycle path that will provide a safe direct route in conjunction with the SR 509 project. A section of the District's existing 16-inch CI water main along S 188th St conflicts with the planned retaining walls for the trail. Partnering with King County, the District will relocate approximately 1,300 LF of the existing water main. The County awarded the project to SCI Infrastructure who will begin construction mid-2024.

Lead Agency:

King County

Status:

Preconstruction

Schedule:

Construction in mid 2024 with completion by spring 2025

Budget:

\$1.1 million



Infrastructure: 2023–2024 Capital Improvement Projects

7 Project# 23-1 DMTP/PS2 Electrical Upgrades and Generator Project

The Des Moines Treatment Plant (DMTP) plays a critical role providing the delivery of clean drinking water to District customers. To expand the functionality of the DMTP, the District is planning expansion for the existing electrical equipment and replacing the aging emergency generator to allow for continued operations during power outages.

The new, larger-sized emergency generator will extend capacity to the Des Moines Well and Pump Station 2. The new, more reliable generator will further enhance the resiliency of the DMTP, to provide a continued and uninterrupted supply of water. The District retained RH2 Engineering to assist with sizing and designing the proposed improvements.

Lead Agency: Highline Water District

Status: Design

Schedule: Procurement of equipment in 2025;
Construction in 2026

Budget: \$1.5 million

8 Project# 24-1 16th Avenue S Water Main Replacement

Responding to the City of SeaTac's stormwater upgrades along 16th Ave S from S 188th St to S 192nd St, the District will use the opportunity to replace approximately 1,200 linear feet of aging AC water main, hydrants, and services. The District retained the services of Atwell, LLC for survey and design services.

Lead Agency: City of SeaTac

Status: Design

Schedule: Estimated start of construction 2025
(to be confirmed)

Budget: \$850,000

9 Project# 24-2 Des Moines Memorial Drive and S 208th Street Water Main Relocation

The City of Des Moines is planning stormwater upgrades along Des Moines Memorial Drive, between S. 208th street and S. 212th Street. During the planning process, it was determined that the City's new stormwater infrastructure would conflict with the District's existing DI water main. The project scope includes planning, design, and construction to relocate the water main, ensuring its compatibility with the City's stormwater improvements. The District will also explore the option of compensating the City to locate their infrastructure in the roadway to avoid the need to relocate the water main.

Lead Agency: City of Des Moines

Status: Design

Schedule: Estimated start of construction 2025
(to be confirmed)

Budget: \$850,000

10 Project# 24-3 Miller Creek and Walker Creek Culvert Relocation

In partnership with the City of Normandy Park, the District will replace and relocate approximately 600 LF of existing 12-inch water main and related components. This work will be conducted in conjunction with the City's planned bridge replacement project, replacing old culverts along 12th Avenue SW (near Normandy Park Swim Club). The District retained the services of Gray and Osborne to design the proposed improvements.

Lead Agency: City of Normandy Park

Status: Design

Schedule: Estimated start of construction 2025
(to be confirmed)

Budget: \$800,000



11 Project# 24-4 Pump Station 6 Remote Telemetry Unit Upgrade

The District’s commitment to the ongoing reliability and security of its water systems extends to vital components like remote telemetry units (RTUs). The existing RTU at Pump Station 6 is approaching the end of its useful life, and the District is implementing an upgrade solution.

Lead Agency: Highline Water District

Status: Design and Procurement

Schedule: Estimated upgrade mid-2024

Budget: \$100,000

12 Project# 24-5 South 204th Street Water Main Relocation

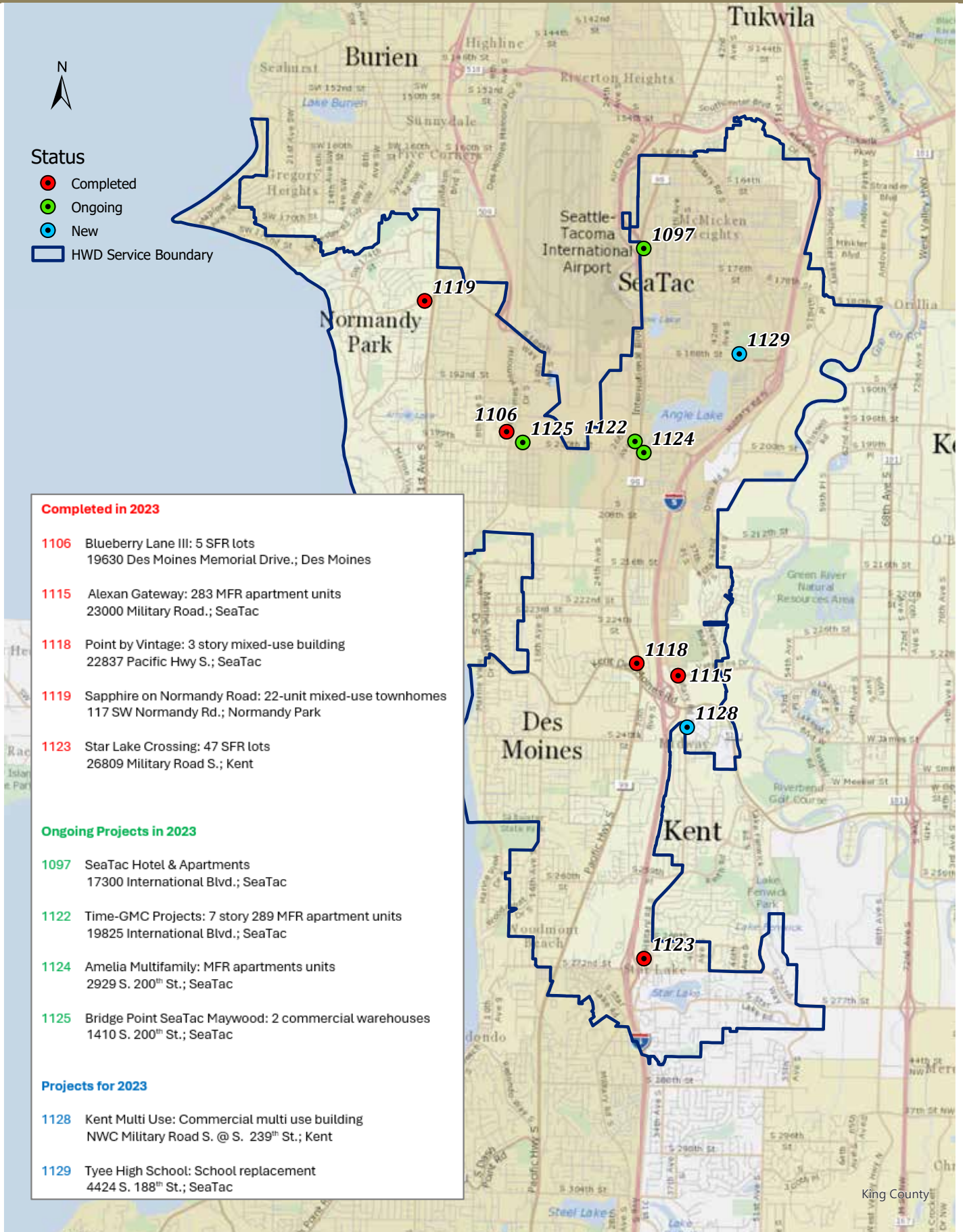
This ongoing partnership with the City of SeaTac will extend to the City’s upcoming road improvement project along S 204th St and 30th Ave S in the Madrona neighborhood. The District will replace approximately 4,000 linear feet of water main in the project corridor concurrently with the City’s expansion and upgrade to roads, sidewalks, and stormwater infrastructure. The District retained the services of Pertee Engineering to assist in the design of the water infrastructure improvements.

Lead Agency: City of SeaTac

Status: Design

Schedule: Estimated start of construction 2025 (to be confirmed)

Budget: \$2.3 million



2024 Goals, Objectives, and Work Plan

Key Goals Identified for 2024 include:

1. Commitment to a Quality Workforce

Hire and retain top talent by providing staff opportunities for personal growth and success to ensure a versatile and robust work force.

- Provide cross training for staff.
- Ensure all applicable staff meet professional growth requirements.
- Update District standards and procedures for staff guidance.
- Ensure staff have all necessary tools and equipment to work efficiently and effectively.

2. Commitment to Water Quality

Provide continuous and healthy drinking and fire protection water that meets or exceeds all federal and state drinking water quality standards.

3. Commitment to Customer Service

Provide excellent customer service to internal and external customers.

- Enhance customer payment experience by implementing a payment portal upgrade.
- Enhance customer communication by updating District Website, implement new after-hours answering service, publish Lead Service Line inventory map portal on web.
- Maintain professional working relationships with outside agencies through continued networking.

4. Commitment to Fiscal Responsibility

Comply with Government Accounting Standards Board (GASB) guidelines.

- Maintain GAAP procedures and internal controls.
- Complete financial software upgrade and provide training to staff.
- Provide an ethical work environment.

5. Commitment to Reliable Infrastructure and Water Delivery

Ensure the District's infrastructure is well maintained and capable of reliable water service.

- Enhance Security and mitigation efforts.
- Fulfill infrastructure maintenance and improvement programs as identified for 2024.



Our mission is to provide high quality water and excellent customer service while effectively managing District infrastructure for a reliable water system today, and for future generations.

This Annual Report is proudly provided by Highline Water District

Visit us:

23828 30th Avenue South
Kent, Washington 98032
www.highlinewater.org

2023 Board of Commissioners:

Daniel Johnson (President)
Kathleen Quong-Vermeire (Secretary)
Polly Daigle
Todd Fultz
Vince Koester

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