

**Platte Canyon
Southwest Metropolitan
Water & Sanitation
Districts**

Maintenance Goals - 2021

Objective

Schedule all water and wastewater facility maintenance tasks for Platte Canyon, Southwest Metropolitan, Bow Mar, Columbine, Lochmoor, and Valley utilizing labor, equipment, and material in the most efficient and cost effective manner possible.

Schedule Development Tasks

Step 1

Generate work schedules from the Infrastructure Management Software program (Infor) for each District by month.

- Hydraulic Sewer Cleaning
- Sewer Main Television Inspection
- Root Cutting/Sawing Maintenance
- Chemical-Applied Root Treatment
- Grease Interceptor Inspection
- Water Main Flushing & Testing
- Fire Hydrant Maintenance
- Water Valve Maintenance
- Pressure Reducing Valve Maintenance
- Air-Vacuum Valve Maintenance
- Pump & Lift Station Maintenance

Schedule Development Tasks

Step 2

Apply maintenance work standards to the maintenance tasks.

■ Hydraulic Sewer Cleaning	-	3,250 feet per day
■ Sewer Main Television Inspection	-	3,500 feet per day
■ Root Cutting/Sawing Maintenance	-	2,250 feet per day
■ Chemical-Applied Root Treatment	-	2,500 feet per day
■ Grease Interceptor Inspection	-	16 per day
■ Water Main Flushing & Testing	-	30 per day
■ Fire Hydrant Maintenance	-	27 per day
■ Water Valve Maintenance	-	35 per day
■ Pressure Reducing Valve Maintenance	-	5 per day
■ Air-Vacuum Valve Maintenance	-	10 per day
■ General Scheduled Maintenance	-	1,320 hours per year
■ General Unscheduled Maintenance	-	3,956 hours per year
■ General Maintenance Administration	-	1,956 hours per year

General Maintenance Tasks

Scheduled

- Pump Station Inspection & Maintenance
- Lift Station Inspection & Maintenance
- Vehicle Maintenance
- Safety and Staff Meetings
- Hydrant Pressure Monitoring

General Maintenance Tasks

Unscheduled

- Customer Service
- Utility Locates
- Building & Landscape Maintenance
- Water and Sewer Service Inspections
- Warranty Inspections – Facilities
- Messenger Service
- Corrective Maintenance
- Overlay Operations

General Maintenance Tasks

Maintenance Administration

- Reporting
- Training
- Scheduling

Schedule Development Tasks

Step 3

Adjust tasks and manpower to achieve most efficient and cost effective use of manpower, equipment, and materials

Exhibit A

Hourly Maintenance Labor Distribution (2016-2021)

DISTRICT	2016	2017	2018	2019	2020 ¹	2021 ²
Platte Canyon Maintenance						
Regular Full-time	3,845	3,887	3,775	3,312	3,707	4,207
Regular Overtime	96	108	207	125	32	114
Temporary – Seasonal	0	0	0	0	0	0
Total Hours	3,941	3,995	3,982	3,437	3,739	4,321
Southwest Metro Maintenance						
Regular Full-time	7,237	7,524	7,230	7,673	7,784	8,218
Regular Overtime	159	138	140	270	206	183
Temporary – Seasonal	0	0	0	0	0	0
Total Hours	7,396	7,662	7,370	7,943	7,990	8,401
Bow Mar Maintenance						
Regular Full-time	542	360	397	196	354	370
Regular Overtime	15	19	17	19	17	17
Temporary – Seasonal	0	0	0	0	0	0
Total Hours	557	379	414	215	371	387

¹ Estimated actual hours worked

² Hours necessary to complete tasks listed in Exhibit C

Exhibit A (cont.)

DISTRICT	2016	2017	2018	2019	2020 ¹	2021 ²
Columbine Maintenance						
Regular Full-time	367	354	372	320	402	471
Regular Overtime	9	4	10	16	12	10
Temporary – Seasonal	0	0	0	0	0	0
Total Hours	376	358	382	336	414	481
Valley Maintenance						
Regular Full-time	486	464	586	605	448	427
Regular Overtime	19	38	31	20	30	28
Temporary – Seasonal	0	0	0	0	0	0
Total Hours	505	502	617	625	478	455
Regular Hours	12,477	12,589	12,360	12,106	12,695	13,693
Seasonal Hours	0	0	0	0	0	0
Overtime Hours	298	307	405	450	297	352
TOTAL HOURS	12,775	12,896	12,765	12,556	12,992	14,045

Exhibit B

Proposed 2021 Maintenance Schedule

	Platte Canyon	Southwest Metro.	Bow Mar	Columbine	Valley	Total (Feet)
Sewer Maintenance						
Television Inspection	102,652	204,920	19,334	32,980	27,738	387,624
Hydraulic Cleaning	33,365	365,421	528	17,471	16,085	432,870
Root Cutting	34,837	6,123	0	0	7,818	48,778
Root Treatment	13,553	1,287	361	1,026	1,196	17,423
Grease Interceptors	140	412	--	12	--	564
Water maintenance						(Units)
Valves	1,171	3,171	133	--	--	4,475
Fire Hydrants (service)	489	1,557	59	--	--	2,105
Fire Hydrant (painting)	270	679	0	--	--	949
Distribution System Flushing	148	491	3	--	--	642
Pressure Regulating Valves	11	20	--	--	--	31
Air-Vac Valves	14	82	--	--	--	96

Exhibit C - Summary

- Total Manhours
- Maintenance Activities
- Scheduled Manhours
- Comparison of Scheduled to Available Hours