

Platte Canyon
Southwest Metropolitan
Water & Sanitation
Districts

Maintenance Goals - 2020

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 (2015-2020)

DISTRICT	2015	2016	2017	2018	2019 ¹	2020 ²
Platte Canyon Maintenance						
Regular Full-time	3,635	3,845	3,887	3,775	3,324	4,158
Regular Overtime	150	96	108	207	88	135
Temporary – Seasonal	0	0	0	0	0	0
Total Hours	3,785	3,941	3,995	3,982	3,412	4,293
Southwest Metro Maintenance						
Regular Full-time	7,657	7,237	7,524	7,230	7,661	7,241
Regular Overtime	201	159	138	140	223	181
Temporary – Seasonal	0	0	0	0	0	0
Total Hours	7,858	7,396	7,662	7,370	7,884	7,422
Bow Mar Maintenance						
Regular Full-time	214	542	360	397	180	468
Regular Overtime	12	15	19	17	9	13
Temporary – Seasonal	0	0	0	0	0	0
Total Hours	226	557	379	414	189	481

¹ Estimated actual hours worked

² Hours necessary to complete tasks listed in Exhibit C

Exhibit A (cont.)

DISTRICT	2015	2016	2017	2018	2019 ¹	2020 ²
Columbine Maintenance						
Regular Full-time	237	367	354	372	368	378
Regular Overtime	15	9	4	10	22	14
Temporary – Seasonal	0	0	0	0	0	0
Total Hours	252	376	358	382	390	392
Lochmoor Maintenance						
Regular Full-time	63	19	35	30	134	0
Regular Overtime	10	0	0	0	4	0
Temporary – Seasonal	0	0	0	0	0	0
Total Hours	63	19	35	30	138	0
Valley Maintenance						
Regular Full-time	559	486	464	586	675	563
Regular Overtime	22	19	38	31	19	22
Temporary – Seasonal	0	0	0	0	0	0
Total Hours	581	505	502	617	694	585
Regular Hours	12,365	12,496	12,624	12,390	12,342	13,173
Seasonal Hours	0	0	0	0	0	0
Overtime Hours	400	298	307	405	365	365
TOTAL HOURS	12,765	12,794	12,931	12,795	12,707	13,173

Exhibit B

Proposed 2020 Maintenance Schedule

	Platte Canyon	Southwest Metro.	Bow Mar	Columbine	Lochmoor	Valley	Total (Feet)
Sewer Maintenance							
Television Inspection	120,305	186,144	12,959	18,317	0	40,855	378,580
Hydraulic Cleaning	38,545	196,126	10,057	9,858	0	31,320	285,906
Root Cutting	32,890	3,364	9,161	2,276	0	6,490	54,181
Root Treatment	16,742	883	760	339	0	4,427	23,831
Grease Interceptors	140	412	--	12	--	--	564
Water maintenance							(Units)
Valves	1,160	3,171	134	--	--	--	4,465
Fire Hydrants (service)	491	1,557	59	--	--	--	2,107
Fire Hydrant (painting)	225	878	59	--	--	--	1,162
Distribution System Flushing	148	494	3	--	--	--	645
Pressure Regulating Valves	11	19	--	--	--	--	30
Air-Vac Valves	14	80	--	--	--	--	94

Exhibit C - Summary

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