

City of Sweet Home Public Works Department

**DEPARTMENT
FUNDING
SOURCES:**

Enterprise Funds

- Water Fund
- Wastewater Fund
- Storm Water Fund

Gas Tax

- Street Maintenance

General Fund

- Parks System

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To Honorable Mayor, City Councilors, and Citizens!

This document is intended to provide a brief description of the various work areas as well as a brief overview of the activities undertaken by staff within the Department of Public Works in calendar year 2015. The accomplishments for the past year are reflective of specific tasks required by the various divisions to meet established “benchmarks” and/or to ensure adequate and appropriate operation of public infrastructure. They are also necessary to achieve identified “Strategic Directions” for the City of Sweet Home as an organization. The entire Department is made up of a group of experienced, intelligent, dedicat-



ed professionals that have chosen careers not typically associated with riches, fame and glory. They take great pride in the jobs they do and the community they serve, of which they are members.

Although the challenges for the Department are many, the challenges that await us all as a municipality are just

as great. The physical and fiscal conditions of our aging water, wastewater, and storm water drainage systems continue to burden our citizenry in the form of increased rates over the coming years. Couple this with the increased pressures to adequately maintain our streets on ever decreasing revenues and public facilities with tight tax bases; we will all have our work cut out for us. Yes, the challenges are great and many, but with good people, many great things are achievable as the successes identified throughout this report can attest.

Business Office / Administrative Division (4 FTE)

This division works in conjunction with the Finance Department in support of the overall financial operations of the City and is the primary location of which citizens have contact with the organization, be it in person or telephone. We are responsible for customer support, utility billing and account maintenance, De-

partmental personnel, information services technological support, collections, Passports, Notary Public, and Departmental Administrative support.



City of Sweet Home

Engineering / Building Inspection Program (BIP) (4.02 FTE)



Framing Structure

The functions of the Engineering Department for the City of Sweet Home underlie almost all public works activities consistent with our local community. Like other municipalities large and small, our local engineering group is involved with our streets, bridges, alleys, sewers, storm drainage, water supply and distribution, wastewater treatment, public buildings, parks, lights, traffic engineering,

parking, and solid waste handling. In addition, we are directly involved in (or play an advisory or oversight role for) other activities such as gas and electric utilities, public transportation, and communications.

Similar to, and in most cases in conjunction with engineering, the local Building Inspection Program (BIP) provides important and necessary functions to the

City as an organization as well as to the community as a whole.

This group is tasked with providing the regulations, forms, procedures, examinations, inspections, and where necessary, the enforcement of local and State codes/ordinances in relation to the construction, maintenance, and alterations of houses, buildings, and/or other structures within our community.

Streets Division (4.46 FTE)

Did You Know?

- *The average PW employee tenure with the City exceeds 10 years continuous service.*

Work completed within this area is primarily funded by the Gas Tax and is completed by those assigned as the street crew. 2015 has been another busy year for this work group as they not only deal with streets and right-of-way requirements, this group is also the primary group that completes the

work that needs to be done, but does not otherwise fall into any particular categories such as collection or distribution. With tight budgets and a growing expectation of needs throughout the City, the maintenance division has an ever increasing number of inter-departmental service requests placed upon

them, a majority of which are completed by this work group.

Maintenance functions include, but are not limited to, asphalt patching, striping, signage, street sweeping, brush removal, crack sealing, and traffic control.

Fleet Services (1 FTE)



City "Rolling Stock" Equipment.

Work completed within this area is funded by all funds and is primarily completed by the Mechanic. The mechanic performs maintenance on over 90 vehicles and 90 pieces of equipment as well as providing building maintenance support to City Hall, Public Library, the treatment plants, etc.

Fleet Services provides service on heavy equipment, mid-size trucks, automobiles, gas powered equipment, and welding fabrication. Each vehicle/equipment is on a 3 month rotating schedule for routine scheduled maintenance program.

Water Distribution (5.71 FTE)

Work completed within this area is primarily funded by the Water fund and completed by those assigned to the distribution crew.

The distribution crew is dedicating to providing clean, fresh, and safe water to the citizens of Sweet Home. All work in this area is overseen by State (OHD, Oregon Health Department) Certified Operators.

As a part of this process, activities crew members perform include customer service, including service installation and repair, meter replacement, and maintenance, backflow prevention, and general related tasks in construction, repair, and maintenance of the City's Distribution System.

The municipal water distribution system includes approximately 65 miles of

water main lines, 341+ fire hydrants, and four (4) water storage reservoir at three separate locations.



Wastewater Collections (6.66 FTE)

Work tasks completed within this work area are funded by the Wastewater fund and employees assigned here are referred to as the collections crew. The primary duty of the collection crew is to provide regular maintenance, inspections, and repairs to the sanitary sewer collections system.

Type of maintenance includes annual cleaning of over 64 miles of sewer mainline ranging in diameter size of 6-inch up to 24-inch pipe.



Vector Crew at 12th & Kalmia

Did You Know?

- PW staff make up 35% of entire City organization.
- PW budget exceeds 53% entire City Operating budget.

Storm water Drainage (1.14 FTE)

Work task completed within this area are primarily funded by the Storm water fund and employees assigned here are referred to as the storm crew.

Protecting water quality in local lakes, streams, rivers, and wetlands is an essential part of the City storm water system & manage-

ment plan. Unchecked and untreated storm water runoff results in accelerated stream flows, destruction of aquatic habitat, modified natural hydrologic patterns, and elevated pollutant concentrations all of which negatively impact local drinking water sources, water recreation, and the fishing industries

of Oregon's cities.



City of Sweet Home

Treatment Plant Operations (Professional Services)



Municipal Water Treatment Facility

As the title implies, this is where the Municipal Water is supplied to the community according to strict requirements by State and Federal guidelines.

The wastewater that is collected at the waste treatment facility is treated and released as effluent back to the environment within permit requirements per strict rules and regulations.

The regular routine opera-

tion and maintenance of the Water Treatment Facility (WTP) as well as the Wastewater Treatment Plant facility (WWTP) is the responsibility of our contract partners CH2M-Hill, Inc.

This partnership is in its ninth year of a ten year commitment as has proven to be beneficial to the community as well as the City as an organization. So much so that the agree-

ment was extended an additional fifteen years.

Additional treatment plant information can be found within the "Appendix Supplement" document that accompanies this report.

Did You Know?

- *In an average 8 hour workday, only about 5 1/2 hours are available for "production".*

Parks / Facility Maintenance (1.23 FTE)

Work completed in this area is funded by that portion of the general fund allocated to Park Maintenance. Work in this area is primarily completed with one employee, one park caretaker (P/T), with significant help from within the maintenance division staff listed above.

The public parks and facilities focused on with this work group include the general grounds maintenance and upkeep of approximately 91 acres across eleven parks as well as various public buildings and grounds.

Our public parks provide quiet space, play areas, walking areas, open space,

and refuge for wildlife and preservation of sensitive habitat. All of this requires regular and on-going maintenance and upkeep.



Weddle Bridge

Interdepartmental Support

Although the primary focus of the Maintenance Division is to actively maintain and operate the infrastructure & assets of the community and provide the vital utility services to citizens of our community, we are often called upon by other sections of the organization for assistance. We take

pride and enjoyment in our abilities to provide this service and support to the entire organization.

We provide assistance to the public parks and buildings maintenance, Police Department, Tree Commission, School District, State and County Road Departments, Chamber of Commerce, and Beautifica-

tion Committee, to name a few.

Key Stats and/or Other Important Information

Additional Key stats and other information can also be found within the Appendix Supplement documents that accompany this report.

Customer Service / Business Office

- * One retirement
- * 35% UB customer transactions are Credit/Debit Card related (+9)
- * 20% UB customer transactions require no personal interaction (+3)
- * 93 “Leak Adjustment” requests = \$28,867 in total leak adjustment off books
 - * 40% of total \$ to 11 of 93 requests

Engineering / BIP Functions

- * 384 Building Permits Issued - Total Valuation \$7.81 Million
- * 82 PW Permits processed (+9)

Event Support

- * 272 Labor hours providing support to Civic Events, OJ, Parade, Etc.
 - * Of which 129 labor hours support Beautification Efforts

Treatment Plant Production

- * WTP
 - * 388.381 Million Gallons Water produced
- * WWTP
 - * 442.220 Million Gallons waste processed

Maintenance Issues

- * Street Crew (Gas Tax)
 - * 73% of Crew time on Gas Tax activities
 - * 19% of Crew time on Storm water activities
- * Distribution Crew (Water Fund)
 - * 88% of Crew time on Water activities
 - * 5% of Crew time on Buildings / Facility Maintenance
 - * 6% of Crew time on Street activities
- * Collections Crew (WW Fund)
 - * 78% of Crew time on Collections activities
 - * 13% of Crew time on Storm water activities
 - * 5% of Crew time on Water activities
- * Maintenance Department Wide (Total Labor Hours)
 - * 32% of labor hours on Water related activities
 - * 31% on Street/R.O.W. related activities
 - * 19% on wastewater related activities
 - * 10% on Storm water related activities



PUBLIC WORKS

- Create It
- Build It
- Maintain It
- Sustain It



MISSION STATEMENT

City of Sweet Home
Public Works Department

Our mission is to provide prompt and courteous services of Water Treatment and Distribution, Wastewater Collection and Treatment, Engineering, Streets & Storm water, and Facilities Maintenance to the citizens of Sweet Home. It is also our intention to respond to their requirements (present and future) in the safest, most effective and efficient manner possible while striving to constantly promote employee growth and community involvement!

2015 Annual Report

City Hall
1140 12th Avenue
Sweet Home, OR 97386
Phone: 541-367-6243
Fax: 541-367-5113



This annual report is presented in remembrance of our friend, co-worker, and long time City employee Pat Wood. Many of the accomplishments completed by the Department of Public Works over the past 20+ years, and 2015 specifically, is due to Pat's ingenuity, hard work, and professionalism he brought with him every day. He leaves a strong and positive legacy for our Department to emulate and carry forward into the future. Pat will be missed!

Directory of Public Works Services

ADMINISTRATION

541-367-6243

UTILITY BILLING

541-367-5128

ENGINEERING

541-367-6977

BUILDING INSPECTION

541-367-7993

TREATMENT PLANT

541-367-4846

EMERGENCY AFTER-HOURS

541-367-5181

CONTACT INFORMATION:

Michael J. Adams, PWD

madams@ci.sweet-home.or.us

Joe Graybill, Staff Engineer

jgraybill@ci.sweet-home.or.us

Cindi Robeck, Office Manager

crobeck@ci.sweet-home.or.us

Scott LaRoque, Project Manager

Scott.laroque@ch2m.com





**City of Sweet Home
Public Works Department
2015 Annual Report**

“Appendix Supplement”

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Cost Summary By Task Water Distribution

Task	Activities	Labor Hours	Labor Cost	Eqp Cost	Mat Cost	Con Cost	Overhead	Total Cost
Development Inspection-260	1	1.00	\$36.12	\$7.50	\$0.00	\$0.00	\$0.00	\$43.62
Hydrant Repair/Maintenance	8	33.00	\$971.87	\$240.00	\$0.00	\$0.00	\$0.00	\$1,211.87
Hydrant System Flushing/Maint	41	122.25	\$3,737.72	\$843.75	\$0.00	\$0.00	\$0.00	\$4,581.47
Investigation/Information/Report	3	1.00	\$36.11	\$3.75	\$0.00	\$0.00	\$0.00	\$39.86
Irrigation System Repair / Maint.	20	45.51	\$1,482.91	\$3.75	\$0.00	\$0.00	\$0.00	\$1,486.66
Locates-210	392	189.50	\$6,545.66	\$1,586.25	\$0.00	\$0.00	\$0.00	\$8,131.91
Main Line Valves / Excercise	5	171.00	\$5,359.24	\$1,796.25	\$0.00	\$0.00	\$0.00	\$7,155.49
Meter Box Maintenance	30	80.75	\$2,560.06	\$600.00	\$1,115.29	\$0.00	\$0.00	\$4,275.35
Meter Read / Re-Reads	339	536.75	\$19,089.43	\$2,253.75	\$0.00	\$0.00	\$0.00	\$21,343.18
Meter Repair	108	150.75	\$4,807.06	\$1,336.25	\$11,476.60	\$0.00	\$0.00	\$17,619.91
Meter Replacement Program	64	76.00	\$2,360.19	\$695.00	\$8,754.72	\$0.00	\$0.00	\$11,809.91
Reservoir Maintenance	21	74.75	\$2,430.86	\$822.50	\$0.00	\$0.00	\$0.00	\$3,253.36
Shut offs / Reconnects	927	490.50	\$17,098.79	\$4,245.00	\$155.00	\$0.00	\$0.00	\$21,498.79
Vehicle Maintenance-270	1	1.00	\$31.87	\$2.50	\$0.00	\$0.00	\$0.00	\$34.37
Water Leak Investigation	80	74.25	\$2,523.86	\$588.75	\$155.00	\$0.00	\$0.00	\$3,267.61
Water Main Repair	4	89.50	\$2,780.33	\$2,687.50	\$0.00	\$0.00	\$0.00	\$5,467.83
Water Quality	25	35.75	\$1,272.40	\$285.00	\$0.00	\$0.00	\$0.00	\$1,557.40
Water Service - New	41	144.75	\$4,896.92	\$2,883.75	\$4,714.25	\$0.00	\$0.00	\$12,494.92
Water Service Repair/Replace	33	315.75	\$10,393.39	\$6,630.00	\$767.69	\$0.00	\$0.00	\$17,791.08
Water System Maintenance	38	145.00	\$4,781.24	\$3,171.25	\$440.38	\$0.00	\$0.00	\$8,392.87
Water Treatment Plant	1	4.00	\$144.46	\$315.00	\$0.00	\$0.00	\$0.00	\$459.46
Tasks:	21	2,182	2,782.76	\$30,997.50	\$27,578.93	\$0.00	\$0.00	\$151,916.89
			\$93,340.46					

Cost Summary By Task Wastewater Collections

Task	Activities	Labor Hours	Labor Cost	Eqp Cost	Mat Cost	Con Cost	Overhead	Total Cost
Development Inspection-360	1	2.00	\$98.54	\$0.00	\$0.00	\$0.00	\$0.00	\$98.54
Sewer Line Cleaning	65	561.00	\$19,923.26	\$7,103.75	\$0.00	\$0.00	\$0.00	\$27,027.01
Sewer Line Repair	1	2.00	\$98.54	\$0.00	\$0.00	\$0.00	\$0.00	\$98.54
T.V. Inspection - Sanitary	83	646.50	\$22,203.91	\$43,480.50	\$0.00	\$0.00	\$0.00	\$65,684.41
Wastewater Treatment Plant	1	3.00	\$108.35	\$247.50	\$0.00	\$0.00	\$0.00	\$355.85
Tasks:	5	151	1,214.50	\$50,831.75	\$0.00	\$0.00	\$0.00	\$93,264.34
			\$42,432.59		\$0.00		\$0.00	

Cost Summary By Task Stormwater Activities

Task	Activities	Labor Hours	Labor Cost	Eqp Cost	Mat Cost	Con Cost	Overhead	Total Cost
Catch Basin Cleaning	14	163.00	\$5,886.75	\$8,610.00	\$0.00	\$0.00	\$0.00	\$14,496.75
Open Drainageway Maint	20	267.25	\$8,935.56	\$3,425.00	\$0.00	\$0.00	\$0.00	\$12,360.56
Storm Clean-up Issues	5	29.75	\$1,010.16	\$422.50	\$0.00	\$0.00	\$0.00	\$1,432.66
Storm Line Cleaning	2	13.75	\$497.04	\$168.75	\$0.00	\$0.00	\$0.00	\$665.79
Storm Line Repair	22	376.75	\$12,596.89	\$7,596.25	\$0.00	\$0.00	\$0.00	\$20,193.14
Vehicle Maintenance-570	1	2.00	\$63.96	\$30.00	\$0.00	\$0.00	\$0.00	\$93.96
Tasks: 6	64	852.50		\$20,252.50		\$0.00		\$49,242.84
			\$28,990.34		\$0.00		\$0.00	

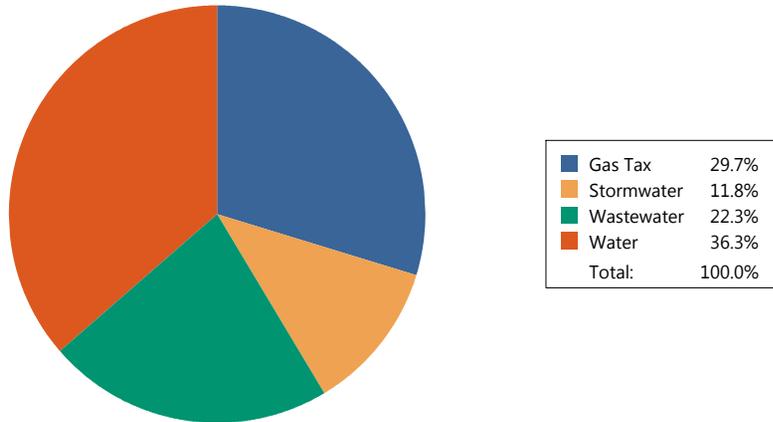
Cost Summary By Task Gas Tax

Task	Activities	Labor Hours	Labor Cost	Eqp Cost	Mat Cost	Con Cost	Overhead	Total Cost
Bridge Repair/Maintenance	1	9.00	\$315.90	\$105.00	\$0.00	\$0.00	\$0.00	\$420.90
Curb/Sidewalk Repair	2	6.00	\$219.10	\$36.25	\$0.00	\$0.00	\$0.00	\$255.35
Dead Animal Removal	2	1.50	\$52.25	\$11.25	\$0.00	\$0.00	\$0.00	\$63.50
Entrance Sign Landscape & Maint	7	16.75	\$540.30	\$87.50	\$0.00	\$0.00	\$0.00	\$627.80
Hard Surface Street Repair	46	484.75	\$16,093.64	\$4,850.00	\$0.00	\$0.00	\$0.00	\$20,943.63
Landfill Maintenance	3	28.50	\$1,007.85	\$645.00	\$0.00	\$0.00	\$0.00	\$1,652.84
Leaf Pick-up-411	2	6.00	\$185.32	\$188.75	\$0.00	\$0.00	\$0.00	\$374.07
Mowing/Spraying R.O.W.	96	347.50	\$11,708.73	\$2,682.50	\$0.00	\$0.00	\$0.00	\$14,391.23
Street / Alley Maintenance	35	146.50	\$5,057.20	\$3,375.00	\$0.00	\$0.00	\$0.00	\$8,432.20
Street Signing	32	136.25	\$4,395.82	\$427.50	\$231.49	\$0.00	\$0.00	\$5,054.81
Street Sweeping/Flushing	72	395.25	\$13,151.41	\$27,843.75	\$0.00	\$0.00	\$0.00	\$40,995.16
Traffic Control	14	133.75	\$4,501.13	\$1,026.25	\$0.00	\$0.00	\$0.00	\$5,527.37
Traffic Marking/Painting	11	142.50	\$4,789.92	\$1,587.50	\$0.00	\$0.00	\$0.00	\$6,377.42
Trash / Debris pick up in R.O.W.	37	68.50	\$2,182.17	\$77.50	\$0.00	\$0.00	\$0.00	\$2,259.67
Tree/Brush Trimming	27	268.00	\$9,083.59	\$4,948.75	\$3,102.00	\$0.00	\$0.00	\$17,134.34
Vehicle Maintenance-470	1	0.50	\$15.99	\$0.00	\$0.00	\$0.00	\$0.00	\$15.99
Tasks:	16	388	2,191.25	\$47,892.50	\$0.00	\$0.00	\$0.00	\$124,526.29
			\$73,300.30		\$3,333.49		\$0.00	

Cost Summary by Task Type

Task Type	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Overhead Cost	Total Cost	%
2 Gas Tax	2,191.3	\$73,300.30	\$47,892.50	\$3,333.49	\$0.00	\$0.00	\$124,526.29	29.7%
3 Stormwater	852.5	\$28,990.34	\$20,252.50	\$0.00	\$0.00	\$0.00	\$49,242.84	11.8%
4 Wastewater	1,214.5	\$42,432.59	\$50,831.75	\$0.00	\$0.00	\$0.00	\$93,264.34	22.3%
5 Water	2,782.8	\$93,340.46	\$30,997.50	\$27,578.93	\$0.00	\$0.00	\$151,916.89	36.3%
Task Types: 4	7,041.0	\$238,063.70	\$149,974.25	\$30,912.42	\$0.00	\$0.00	\$418,950.37	

Cost Summary by Task Type



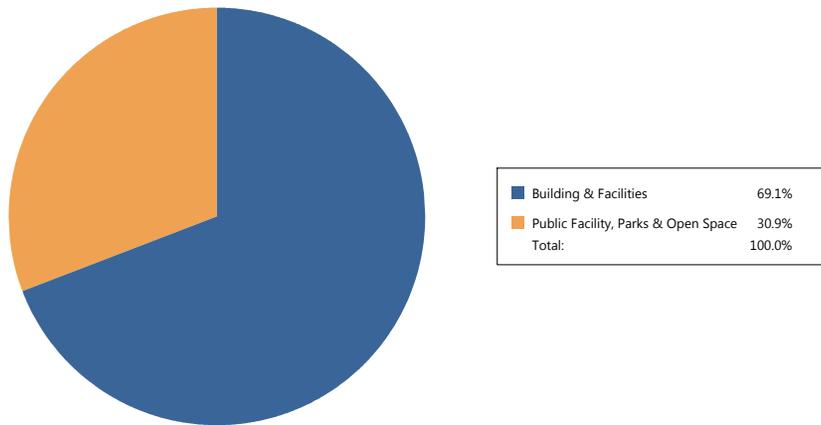
Cost Summary By Location Parks Maintenance

Location	Labor Hours		Labor Cost	Equipment	Material	Contractor	Overhead	Total Cost	%
	Regular	OT		Cost	Cost	Cost	Cost		
Ashbrook Park	85.5	0.0	\$2,756.51	\$7.50	\$0.00	\$0.00	\$0.00	\$2,764.01	5.68%
Boat Ramp	43.0	0.0	\$1,386.75	\$0.00	\$0.00	\$0.00	\$0.00	\$1,386.75	2.85%
Clover Memorial Park	115.0	0.0	\$3,729.44	\$30.00	\$0.00	\$0.00	\$0.00	\$3,759.44	7.73%
Community Center	13.3	0.0	\$667.87	\$27.50	\$162.36	\$0.00	\$0.00	\$857.73	1.76%
Northside Park	110.5	0.0	\$3,696.59	\$602.50	\$0.00	\$0.00	\$0.00	\$4,299.09	8.84%
Outdoor Event Center	33.5	0.0	\$1,037.00	\$190.00	\$0.00	\$0.00	\$0.00	\$1,227.00	2.52%
Sankey Park	783.0	6.5	\$25,949.89	\$2,278.75	\$3,274.99	\$0.00	\$0.00	\$31,503.63	64.80%
Skate Park	40.5	0.0	\$1,306.13	\$0.00	\$0.00	\$0.00	\$0.00	\$1,306.13	2.69%
Strawberry Park	44.5	0.0	\$1,516.06	\$0.00	\$0.00	\$0.00	\$0.00	\$1,516.06	3.12%
Locations:	9	6.5	\$42,046.23	\$3,136.25	\$3,437.35	\$0.00	\$0.00	\$48,619.83	

Cost Summary by Task Type General Fund

Task Type	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Overhead Cost	Total Cost	%
1 Building & Facilities	1,009.5	\$35,471.78	\$2,527.50	\$363.85	\$0.00	\$0.00	\$38,363.13	69.1%
14 Public Facility, Parks & Open Space	509.0	\$16,456.39	\$706.25	\$0.00	\$0.00	\$0.00	\$17,162.64	30.9%
Task Types: 2	1,518.5	\$51,928.17	\$3,233.75	\$363.85	\$0.00	\$0.00	\$55,525.76	

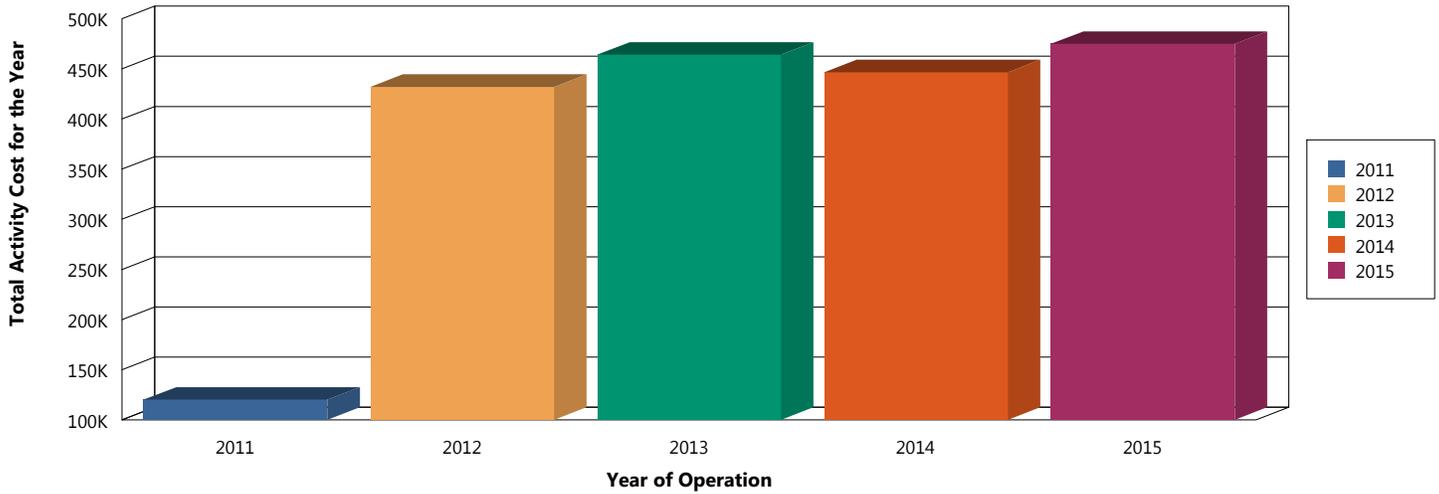
Cost Summary by Task Type



Annual Activity Summary

Year	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Overhead Cost	Total Cost
2011	2,988.6	\$57,851	\$50,874	\$9,237	\$2,116	\$0	\$120,077
2012	11,295.3	\$270,522	\$151,284	\$10,175	\$0	\$0	\$431,981
2013	8,724.0	\$285,158	\$164,958	\$14,111	\$0	\$0	\$464,227
2014	7,533.7	\$251,714	\$149,886	\$45,096	\$0	\$0	\$446,696
2015	8,573.0	\$290,441	\$153,242	\$31,276	\$0	\$0	\$474,959
Total	39,114.6	\$1,155,687	\$670,243	\$109,894	\$2,116	\$0	\$1,937,940

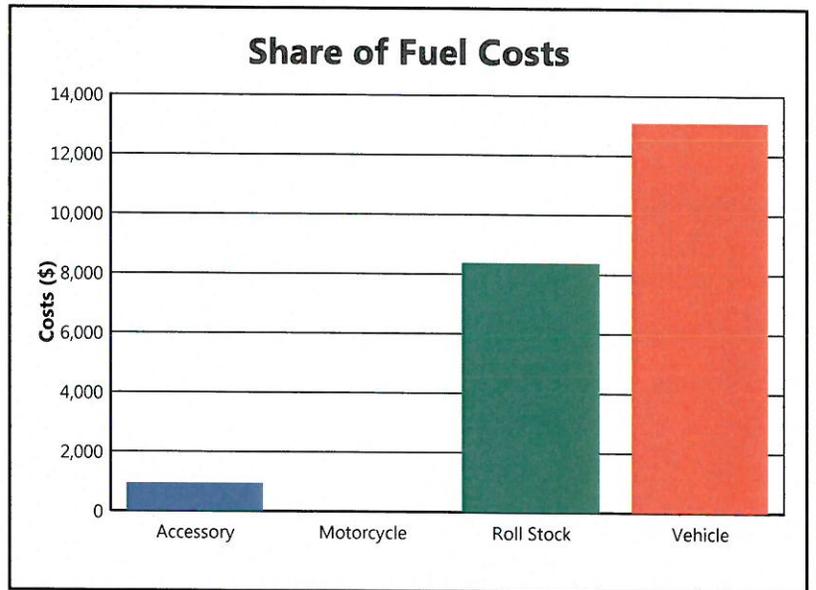
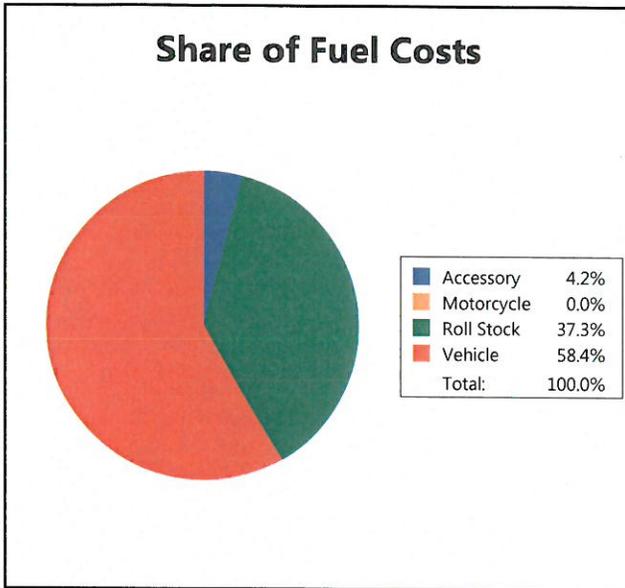
Annual Activity Summary



Fuel and Odometer Log Summary

Summary Listing Grouped By Equipment Type

Name / Code	Odometer Log Entries	Fuel Quantity	Fuel Cost	Percentage
Accessory	47	439.17	\$947.97	4.23%
Motorcycle	1	2.50	\$4.65	0.02%
Roll Stock	166	3,996.31	\$8,374.35	37.34%
Vehicle	349	5,935.49	\$13,097.41	58.41%
4	563	10,373.47	\$22,424.38	





CH2M – City of Sweet Home
2014-2015 Annual Report
Water and Wastewater Operations

Prepared by
Scott LaRoque, Project Manager

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Introduction

CH2M HILL is pleased to present the 2014-2015 annual report to our client and partner, the City of Sweet Home (the City). Content of this report is in reference to activities from July 1, 2014 through June 30, 2015. The completion of our work in 2015 marks another year of quality service we've provided to the citizens of Sweet Home. This report highlights some of last year's accomplishments.



Staffing

CH2M HILL provides many hours of training for job, safety, and quality control aspects of operations and management. CH2M HILL also supports associates' efforts to obtain and hold State of Oregon certifications for water treatment and wastewater treatment-related operations as required by State law. This includes paying for training, travel, and other related costs. This helps ensure improved associate retention and improves recruitment efforts in what has become a highly competitive job market.

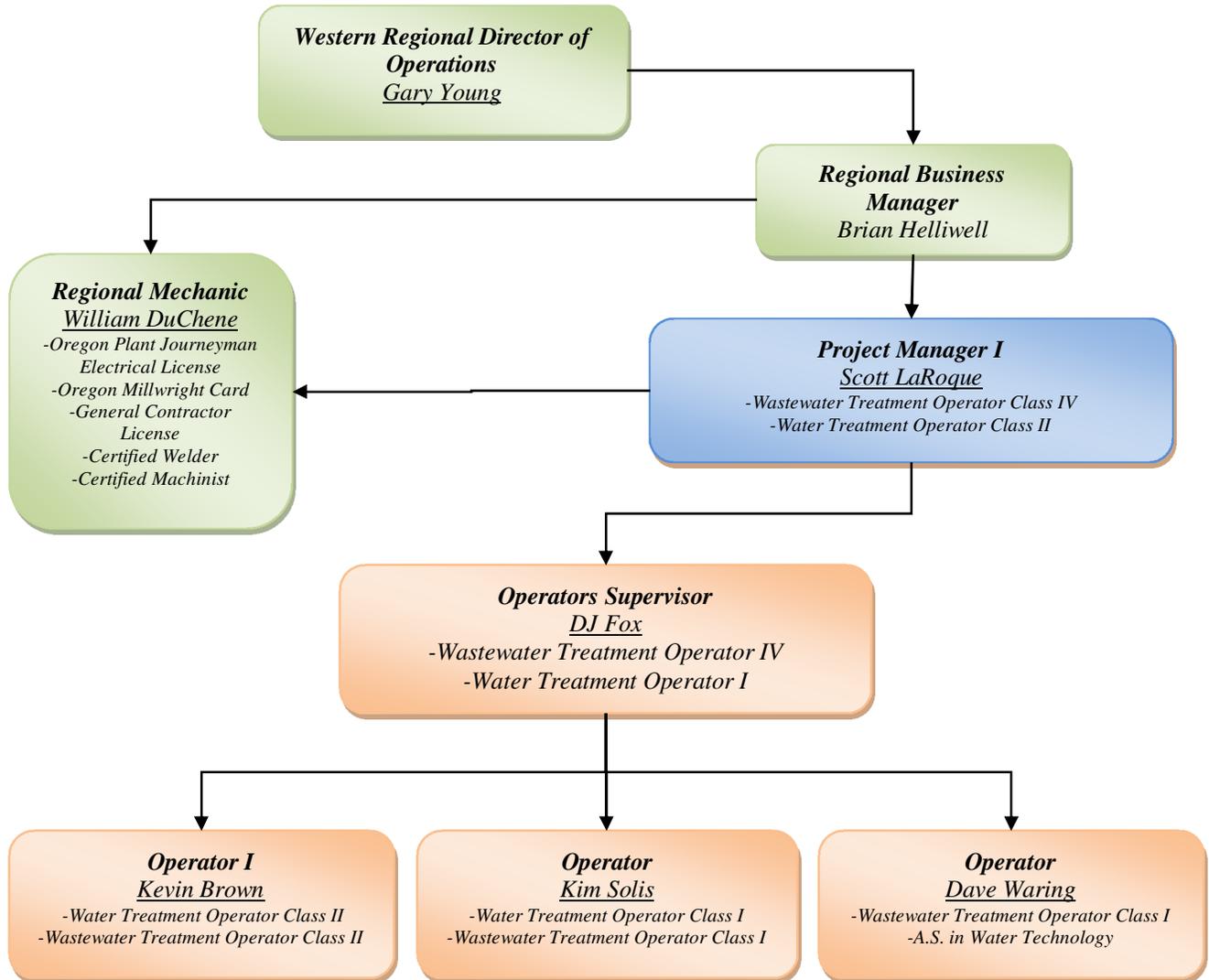
In addition to onsite training, all staff also participated in numerous other training, both onsite and offsite. Onsite training includes associates from Lebanon and Dallas. This ensures that operations continue uninterrupted during vacations and/or illnesses.

The Sweet Home organizational chart is detailed in Exhibit 1 on the following page.



Exhibit 1

Organizational Chart – Sweet Home, OR



Associates are supported by CH2M HILL's Technical Services Group and Regional Operations and Maintenance Specialists. This support includes:

- **Consulting Services.** Process troubleshooting, facility startup, performance testing, and system improvement recommendations.
- **IT Solutions and Services.** Computer hardware, software, and network solutions and upgrades.
- **Asset Services.** Condition assessments using proprietary software; determining facility asset operating longevity, life-cycle cost, and risk; and estimating repair and replacement costs and capital replacement costs.
- **Optimization Services.** Optimization that lowers variable costs, benchmarking against database of more than 100 facilities, and providing a Web-enabled portal for data access and analysis.

Management Systems

CH2M HILL's delivery of services revolves around management systems that ensure our team is meeting the requirements defined in the Services Agreement. Exhibit 2 outlines these management systems.

Exhibit 2

CH2M HILL Management Systems

CH2M HILL Management Systems	
Management Program	Description
<i>Capital Improvement Planning</i>	<i>Recommendation and implementation (as requested/ funded) of system improvements</i>
<i>Chemical Management</i>	<i>Establishment of chemical usage and management plan</i>
<i>Communication Management Systems</i>	<i>Documentation provided according to client's format and schedule</i>
<i>Community Involvement</i>	<i>Activities to demonstrate good corporate citizenship in our community</i>
<i>Compliance and Regulatory Interface</i>	<i>Regulatory compliance planning, coordinating with agencies, and tracking of compliance</i>
<i>Computerized Maintenance Management System (CMMS)</i>	<i>Software system used to track costs as well preventive and corrective maintenance activities</i>
<i>Computerized Operations Data Systems</i>	<i>Software system used to track process control data for water and wastewater treatment processes</i>
<i>Emergency Preparedness and Response</i>	<i>Coordination with local agencies and preparedness for emergencies</i>
<i>Associate Training and Development</i>	<i>Program for training and development of O&M personnel</i>
<i>Energy Management</i>	<i>Establishment of energy conservation plan</i>
<i>Facility Appearance Plan</i>	<i>Standards applied to facility, grounds, and personal appearance</i>
<i>Everyday Excellence</i>	<i>Associate training to ensure highest-quality, customer-focused services</i>
<i>Procurement Procedures</i>	<i>Negotiation of best value for goods and services, procured locally or through alternate suppliers</i>
<i>Project Evaluation</i>	<i>Corporate review of facilities and systems to ensure conformance with highest industry and CH2M HILL standard practices</i>
<i>Quality as a Business Strategy</i>	<i>Management and leadership system to guide and focus service delivery</i>
<i>Quality Assurance/Quality Control</i>	<i>Assurance of data quality and reliability for water treatment processes</i>
<i>Safety and Security</i>	<i>Site and facility security and adherence to associate safety standards</i>
<i>Standard Operating Procedures</i>	<i>Documented standard approaches for treatment process operation and onsite activities</i>
<i>Warranty Protection</i>	<i>Tracking and support for new equipment warranties</i>

Safety Management

Safety is a fundamental approach to how we conduct business. We are recognized leaders in the field of safety, and we apply this experience and knowledge for the benefit of the City, our associates, our subcontractors, and the community. We always intend to provide our associates with a safe and healthful work environment and to comply fully with all applicable federal, state, and local regulations regarding safe practices.

The safety of our associates, the communities we serve, and our environment are the three single most important considerations in the day-to-day delivery of our services.

A proactive approach to identifying and addressing potential hazards is critical to the success of our Safety Management Program. All associates are trained to look for and to report unsafe conditions and acts. The Project Safety Team completes a monthly inspection and documents any unsafe conditions or acts, and CH2M HILL specialists perform a quarterly walk-through of all facilities. Any hazards we identify as a result of these efforts, either formal or informal, are mitigated immediately. We use our CMMS program to issue and track work orders for hazards requiring repairs; in the interim, these areas are blocked using temporary means such as cones. We make associates aware of hazards in our weekly tailgate sessions.

The Sweet Home facility has completed seven years without lost time safety incident, totaling over 93,000 man hours without injury or illness resulting in days away from work. The team received an award for another perfect safety year, which it has received annually since 2006.

Wastewater Treatment Operations



Description of Facilities

CH2M HILL operates and maintains the City's wastewater treatment plant (WWTP). The City's WWTP liquid train consists of secondary treatment (aeration basins), secondary clarification, slow sand filtration, sodium hypochlorite disinfection and sulfur dioxide de-chlorination. Solids handling consists of waste activated sludge, supernatant separation, and solids conditioning with use of belt dewatering press. Final disposal of the sludge cake is at Wasco County Landfill.

Process Control Measures

On the next page, Exhibit 4 accurately displays how rainfall correlates to the amount of flow treated at the wastewater treatment plant.

Exhibit 4

Previous WWTP flow and rain totals by contract year

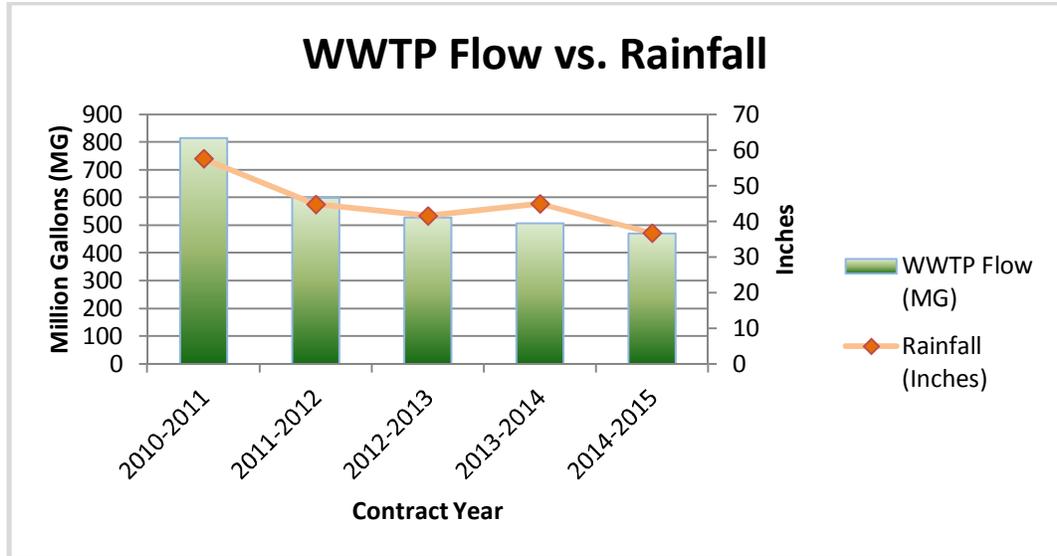
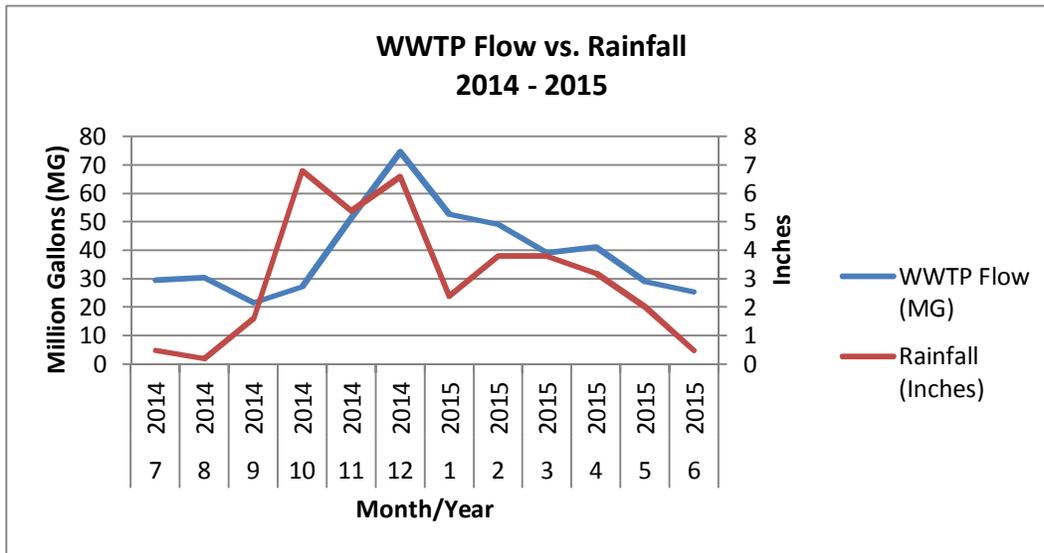


Exhibit 5 provides a further breakdown of the rainfall and flow for the 2014-2015 contract year. Due to improvements made by the City of Sweet Home in the collection system, the effect of rainfall on flow received at the wastewater treatment plant has been noticeably less than in years past, though solids loading has remained relatively stable.

Exhibit 5

WWTP flow and rainfall breakdown by month

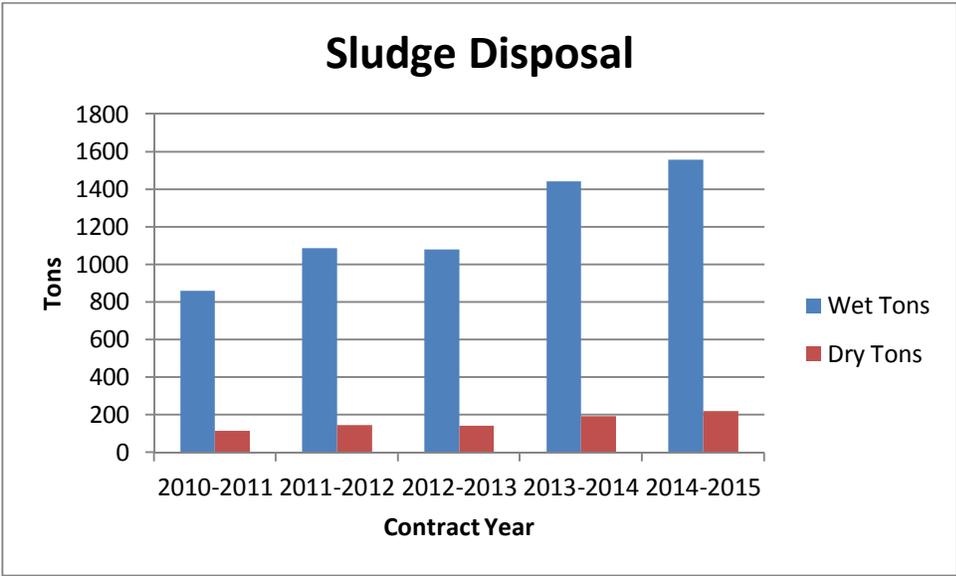


Sludge Disposal

Solids removed from the wastewater treatment process is collected and stored in a holding tank onsite. From there, the solids are de-watered via a belt press before being disposed of into a dumpster. Once the de-watered solids, called sludge cake, fills a 20-yard dumpster it is hauled to Wasco County Landfill, near The Dalles, for final disposal. The belt press de-waters the sludge to an average of 14.3% solid material, meaning that the majority of waste hauled from the plant is water. Below, Exhibit 6 which shows 2014-2015 hauling totals as well as previous contract years. A noticeable increase of sludge was hauled offsite during 2014-2015 for the cleanout of the solids holding tank. Not shown on Exhibit 6 is the additional 38.5 dry tons of material pumped from the tank during the cleanout. The cleaned-out material was sent to Heard Farms in Roseburg, OR for additional processing.

Exhibit 6

Total tons of sludge hauled during previous contract years



Water Treatment Operations



Description of Facilities

Facility ID #	OR41 00851
No. of Connections	3,064
Type of Treatment	Conventional Filtration
Method of Disinfection	Sodium Hypochlorite (on site generation)

The source water for the Sweet Home Water Treatment Plant is Foster Lake. The City's intake is located in the face of Foster Dam, about one mile east of the treatment facility. The City of Sweet Home holds water rights for water withdrawn from the South Santiam Drainage Basin. Currently the City has water rights allocated up to 13.1 cfs, of which 11.11cfs (7.2MGD) is certified. The water plant averages ~1.1 MGD production to keep up with demand from the population of 9,065.

Water flows from the Foster Dam intake to the raw water holding pond before being pumped to one of three filter trains where polymer, aluminum chlorohydrate, and soda ash are added. The filtered water flows by gravity to the clear-well for chlorine disinfection. After meeting contact-time requirements, the water is pumped into the 49th St. reservoir. As the water is pumped from the clear-well and into the distribution system, fluoride is added.

Exhibit 7

Outstanding Performer Certificate awarded by Oregon Health Authority



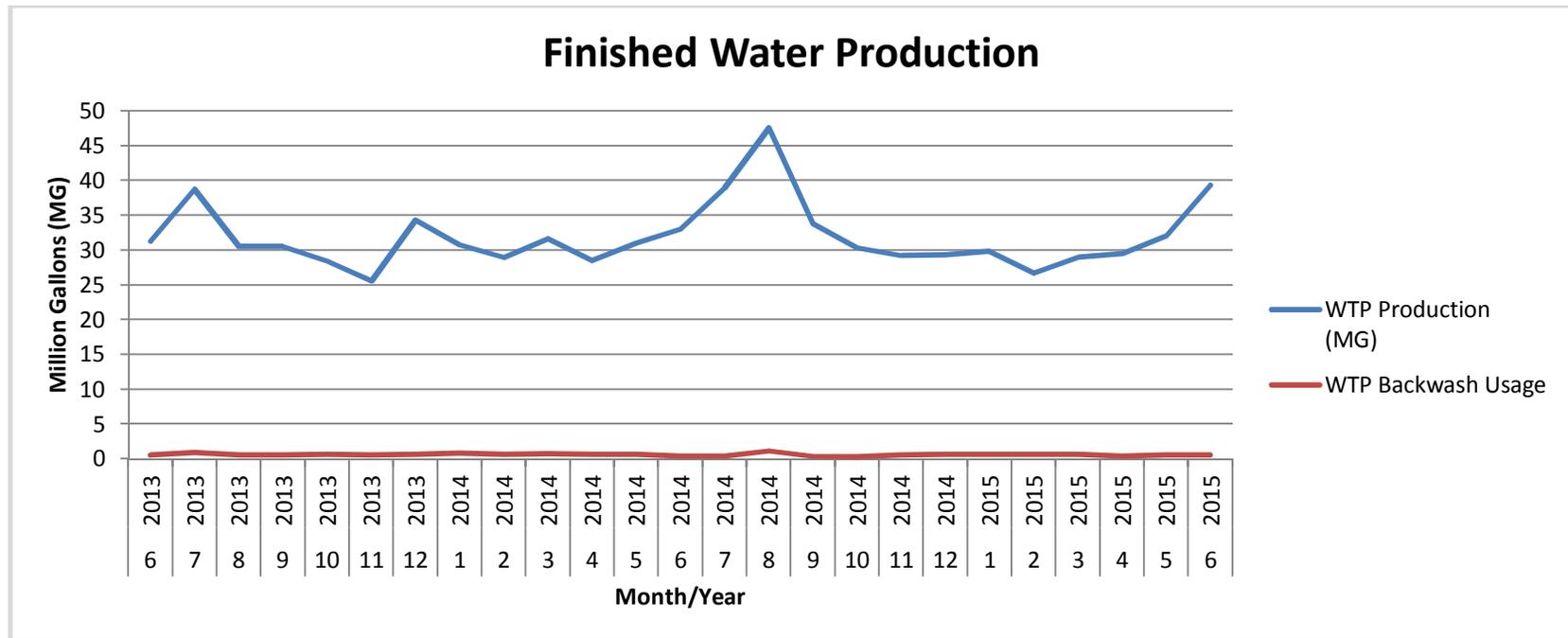
In May 2015 the water system was inspected by the Oregon Health Authority (OHA) as part of their normal schedule. The inspection is focused on record keeping, laboratory practices, sample collection, operation of facilities (treatment plant and reservoirs), and safety. OHA was unable to find any deficiencies, therefore the City was recognized as an Outstanding Performer (see Exhibit 7 above).

Process Control Measures

Total finished water production and backwash water usage is shown in Exhibit 8 on the next page. Backwash water is used to clear debris buildup in the filters. Finished water from the distribution system is used to backwash the filters, therefore it is advantageous to fine tune filter chemical dosages in order to use less chemicals and minimize the number of backwashes necessary.

Exhibit 8

Previous finished water production and backwash water usage, breakdown by month



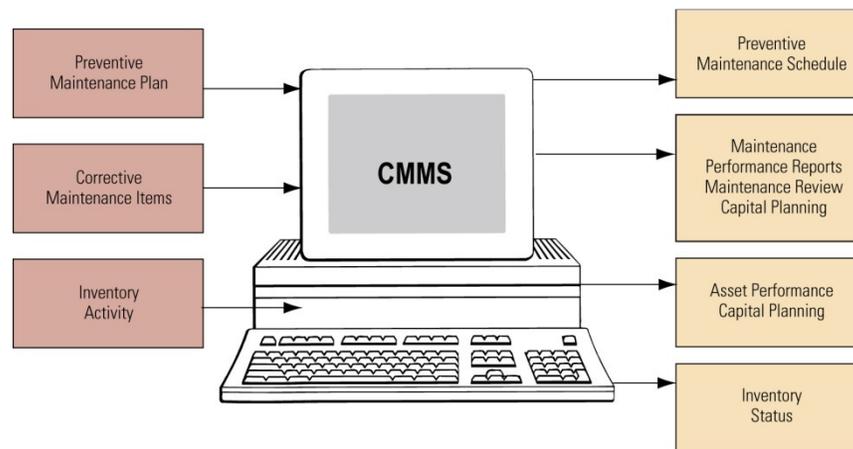
Maintenance

Maintenance and CMMS

CH2M HILL emphasizes proper equipment and facility maintenance as part of our management approach. Our maintenance program begins with a thorough audit and analysis of equipment condition, warranty status, and repair records. We use data that we gather from the analysis to populate our CMMS and to establish baselines for ongoing maintenance services site-wide. The CMMS serves as the key tool for guiding and tracking all onsite maintenance activities as shown below in Exhibit 9.

Exhibit 9

Sophisticated Data Management Systems Support CH2M HILL's Maintenance Program



Maintenance Services and Activities

CH2M HILL classifies maintenance activities at the sites we manage into three major categories:

Preventative Maintenance

Preventive maintenance (PM) is defined as those routine and/or repetitive activities required or recommended by manufacturers and/or internal standards to maximize the service life and reliability of the equipment, vehicle, facility, or any component thereof. Proper PM is the critical first line of defense against deterioration and failure.

Predictive Maintenance

Under CH2M HILL's predictive maintenance (PM) program, major electrical equipment is scheduled for testing using infrared thermography equipment annually to confirm that components are in working order with no loose or faulty connections. Readings are recorded in the CMMS. Additional PM activities include more detailed equipment condition assessments, and vibration monitoring.

Corrective Maintenance

Corrective Maintenance (CM) encompasses activities required for operational continuity, safety, and performance. The status of CM work orders is maintained using the CMMS, and work is scheduled within groups of equipment to save time and reduce labor costs. Exhibit 10 shows repair cost for the 2014-2015 and former contract years. Exhibit 11, on the next page, is a list of some of the major repair items for the 2014-2015 contract year.

Exhibit 10
Repair Cost Tracking

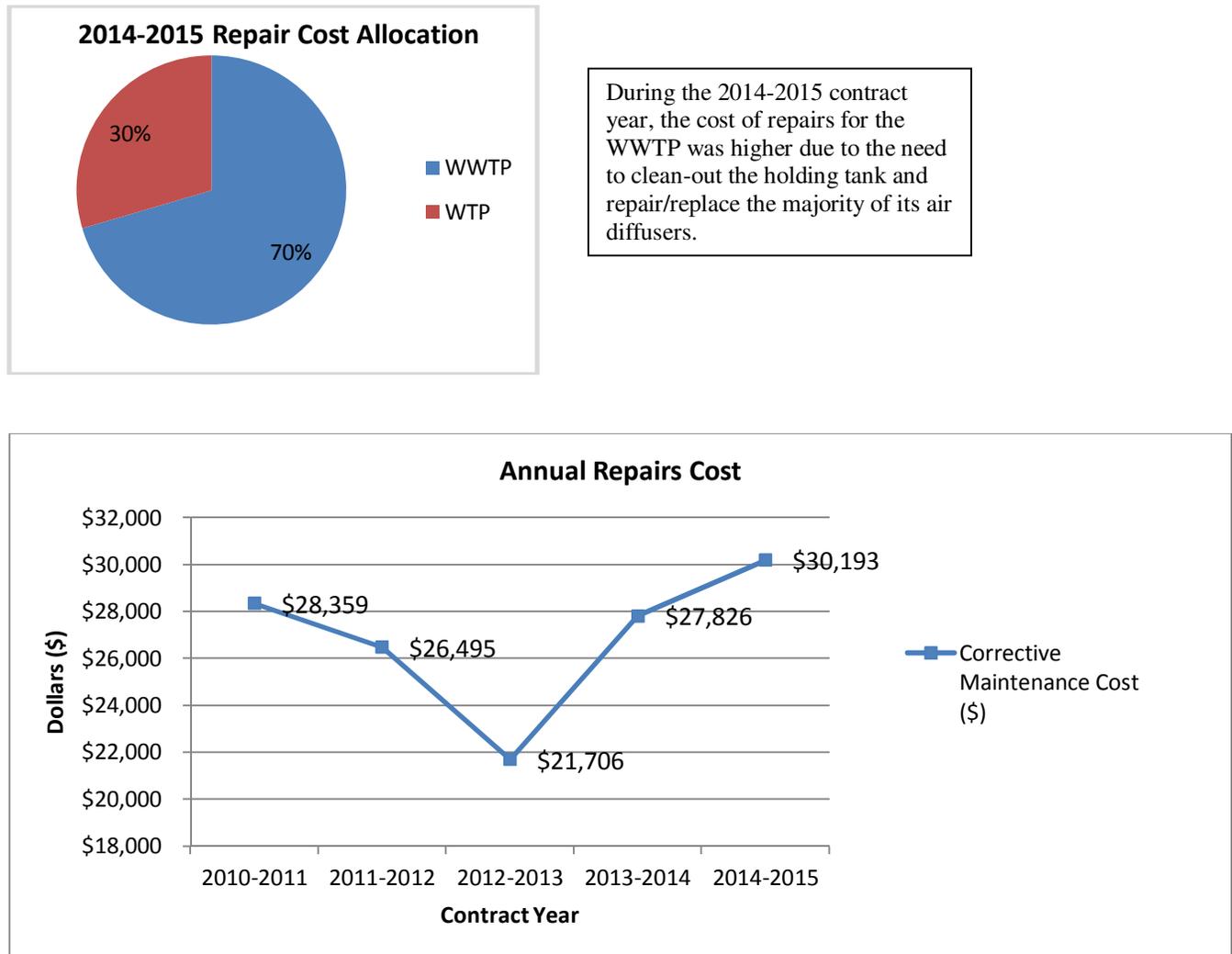


Exhibit 11

Major repair items, 2014-2015 contract year

Facility	Description
WWTP	Temporary Operations equipment for Holding Tank Clean out
	Install 3 dome hatches for access to Holding tank
	Troubleshoot/Repair polymer mixer for belt press
	RAS pump #1 rebuild
	RAS pump #1 impeller replacement
	Replacement HMI on Digester control panel
	Sand filter pump pull, replacement
	Outdoor lighting controller replacement
WTP	Replace Hypochlorite pump
	Troubleshoot SCADA control issues/errors
	Troubleshoot starter control for Finished Water Pump
	Re-map Fire system sensors after failure
	Replace 3 hypochlorite dosing monitors
	Filter blower Soft-Start re-installation, troubleshooting

Capital Improvement Projects

As part of the service provided to the City of Sweet Home, CH2M HILL evaluates capital assets and makes recommendations for annual improvement projects. These approved projects are funded by the City of Sweet Home with labor frequently provided by CH2M HILL personnel. With project labor provided by CH2M HILL, thousands of dollars were saved by the City of Sweet Home without the need to hire outside contracted labor to complete the projects. Below, the capital projects completed during the past contract year are listed:

- *Purchase of Siemens Programming for WTP*
- *Installation of gutter leaf guards for WTP*
- *Replacement of Vers-a-matic solids pump for WWTP*

Community Involvement

Community involvement is an essential part of the way CH2M HILL does business. Our associates take pride in giving back to the community where they live and work. CH2M HILL associates determine which projects they want to be involved in and seek input from the City for any special projects where they can help. Specific examples of community involvement activities CH2M HILL is proud to be a part of include:

- Donated scholarship funds to the Sportsman's Holiday Court
- Participated as interviewers for Sweet Home High School's Mock Interviews
- Joined the Sweet Home Community Foundation Board
- Volunteered to help with the Sweet Home Sweetheart run
- Hosted an "After Hours" event at the WTP through the Chamber of Commerce
- Served free hotdogs and drinks @ The annual Safety Fair
- Served free hotdogs and drinks @ The annual Harvest Festival



2015 Sweet Home Sweetheart Run

Summary

CH2M HILL is committed to the City of Sweet Home and its citizens by providing the best service at the lowest reasonable price. Our priority is to provide the City of Sweet Home with the assurance that the best interests of the City and community are being met. Our objectives are to provide the community with plentiful & clean potable water and to protect the receiving waters of the community. In performing above the expectations of our agreement, we are proud to continue our relationship with the City of Sweet Home so that all can benefit from a lasting partnership.



*Sweet Home Team
Left to right – Back: Dave Waring, Scott LaRoque, Kevin Brown. Front: D.J. Fox, Kim Solis*