



2016 Achievements

Prepared: February 3, 2017

**ADMINISTRATION and FINANCE
2016 ACHIEVEMENTS**

1. Board of Commissioners Support
 - Informed and advised the West Sound Utility District (WSUD) Board of Commissioners on policy matters and current WSUD projects, programs and issues.
 - Prepared agendas and agenda packets for eighteen (18) WSUD Board meetings and five (5) Sewer Advisory Committee meetings. The Board approved fifty-five (55) Resolutions in 2016.
 - Provided to the Board of Commissioners weekly updates of the status of projects, tasks and assignments conducted by the District staff.

2. 2015 Annual Reports
 - Prepared and electronically filed in a timely manner with the Washington State Auditor's Office the 2015 Annual Reports for WSUD and the South Kitsap Water Reclamation Facility (SKWRF), which included financial reports, notes and schedules.
 - Annual Reports were prepared by the Finance staff in-house with no support from an outside contract accountant.
 - Implemented new Governmental Accounting Standards Board No. 68 and 71 for both the District and SKWRF.

3. Budget Status Reports
 - Prepared monthly fund balance summary and budget status reports for twelve (12) funds.
 - Prepared a comprehensive 2015 end-of-the-year and 2016 mid-year budget status reports with focus on showing the status of the water and wastewater utilities fund balances.

4. 2017-18 Biennial Budget
 - Prepared the 2017-18 the District's and SKWRF's biennial budgets. The two-year cycle enhances the financial planning of water and sewer utility programs, operation and capital projects while improving the overall efficiency of the budget process.
 - Prepared thirty (30) budget books and tab sets for proposed budget and final budget books for the Board of Commissioners, City of Port Orchard and District staff.
 - Updated excel spreadsheets over the course of the year.
 - Entered final budget data in Springbrook.
 - Researched water and sewer rate comparison from other municipalities.

5. Personnel/Payroll
 - Processed monthly payroll in 2016 for WSUD staff with no reported payroll errors.
 - Maintained and reconciled employee benefits.

- Set up DRS & Deferred Comp training and coordinated PEBB enrollment for all staff
 - Managed random drug testing of WSUD staff.
 - Advertised employment opportunities and coordinated the hiring process.
 - Prepared and filed 2015 ACA reporting.
 - Coordinated DRS establishment of separate retirement – deferred comp reporting for District and SKWRF.
 - Compared to sick leave used by District staff in 2015, reduced the amount of annual sick leave used in 2016 by nearly 2.5 days per employee.
6. Accounting/Recordkeeping
- Maintain recordkeeping to properly capture the information needed for WSUD’s quarterly tax reporting and account for payroll across all funds.
 - Reconciled the general ledger to the monthly County Treasurer’s report.
 - Implemented new procedure for tracking wages for Employment Security reporting.
 - Monitored and recorded cash receipts in all funds and transmitted this information to the County Treasurer.
 - Replenished and reconciled petty cash accounts.
7. Accounts Payable
- Continued to enhance the Accounts Payable process by having warrants issued in conjunction with Board meetings rather than on a weekly basis.
 - Updated vendor’s files in Springbrook and established seventeen (17) new vendor accounts.
 - Reconciled all credit card accounts monthly and oversaw these account expenses.
 - Processed 1,484 vouchers in the amount of \$4,683,496.
 - Completed 2015 reversal entries and 2016 accrual entries.
 - Managed purchase orders and rolled over open 2015 POs to 2016 in Springbrook.
8. Security Exchange Commission (SEC) Disclosure
- Calculated 2015 debt service coverage ratios filed a 2015 SEC disclosure report and submitted to Municipal Securities Rulemaking Board (MSRB).
9. Fixed Assets (FA)
- Completed eight (8) District capital improvement projects. Capitalized items total \$1,070,908, while a total of \$232,429 was capitalized as repairs.
 - SKWRF completed two capital improvement projects, expensing the deck coating and digester lid project in the total amount \$100,417.
 - The District surplused two vehicles with net proceeds totaling \$15,140. The District purchased one pickup and one sports utility vehicle.

10. Utility Billing Adjustment
 - Processed seventy-nine (79) batches with twelve (12) liens, twenty-six (26) Non-Sufficient Funds (NSF) checks, sixty-four (64) leaks, one hundred and thirty-three (133) balance transfers, one hundred and forty six (146) waive late fees, and one hundred and eighteen (118) other adjustments.
 - Assisted with ERU calculations and consumption reports.
11. Records Management
 - Records management work included identifying, classifying, prioritizing, storing, securing, archiving, retrieving, tracking and destroying of records.
 - Thirty-five (35) new WSUD and SKWRF Financial Books are created each year with more than two hundred (200) WSUD and one hundred (100) SKWRF accounts payable folders and labels.
12. VueWorks
 - Assisted with VueWorks' implementation for fixed asset management.
 - Worked on the equipment attributes and report set up.
 - Researched the equipment information and entered them into the attributes.
13. Other Financial Services
 - Transitioned from Bank of America to Keybank for banking services
 - Completed mandatory Bureau of Labor statistical survey
 - Calculated bond reserve requirement for year 2016.
 - Updated asset information for the insurance pool and reviewed SKWRF appraisal report.
 - Managed fleet and other District credit cards.
 - Completed monthly excise tax filings.
 - Responded to requests from outside agents (e.g., 2016 Census government survey, State Auditor's Office, Bloomberg credit agent, and City of Port Orchard).
 - Arranged Commissioner's travel itineraries and processed twelve (12) travel per diem requests.
 - Customer Refunds – processed one hundred thirty-six (136) checks totaling \$23,770, and processed corresponding adjustments to customer accounts. Refunds occurred after closing customers' accounts.
 - Updated, formatted, assembled Administrative Code Manual (including revised Personnel Manual), Developer Extension Manual, Safety Manual and twenty-two (22) job descriptions.
14. WSUD Website
 - Continued to work on enhancing the WSUD Website and updating content including one hundred seventy-five (175) new website additions. The following is updated on a

continual basis to ensure that the public has current information: calendar of events, project status, utility rates and payment process, Board meeting (agendas, minutes and resolutions), directory, fillable forms, water flushing, employment opportunities, office schedule, achievement report, administrative code book, budgets and financial reports. Created eleven (11) new sliders and five (5) information postings for the Webpage.

15. Legal Services

- In addition to providing legal assistance for Board agenda items, legal counsel assisted General Manager on review of contracts and issues with other governmental entities.
- Legal services continued to decline due to the GM performing more personnel management, contract development and research. Since 2010, cost has been cut in half (\$12,000 in savings in 2016).

16. SKWRF Property

- A multitude of SKWRF property title issues were discovered resulting in the State Department of Veterans Affairs still retaining title to several parcels of the sewer treatment plant property.
- Five new quit claim deeds were prepared and executed by Veterans Affairs, City of Port Orchard, Kitsap Transit and West Sound Utility District to clean up this title problems and fully convey the various parcels to the City and WSUD as joint owners of the 6.14 acres of SKWRF property.

17. Energy Savings

- One of the major operating expenses of the District is energy cost (gas and electric services) for lift stations, pumps, street lighting and the Administration and Operation buildings.
- The District has continued to realize energy savings through the recent conversion of lighting to LED units and District minimizing the outsourcing of the District Facilities' HVAC systems (\$20,000 in savings in 2016).

18. 2016 Water/Sewer Bond Refunding

- Worked with our municipal investment management firm, DA Davidson, on the advance refunding of a portion of the District's outstanding 2009 Water and Sewer Revenue and Refunding Bonds.
- Refunded \$1,944,757 of revenue bonds with Kitsap Bank.
- District will realize a savings of \$202,490 from this refunding transaction.

CUSTOMER SERVICE 2016 ACHIEVEMENTS

West Sound Utility District’s Customer Services Department provides water and sewer utility account, billing, collections and customer support services for WSUD’s 6,412 water utility accounts and 3,514 sewer utility accounts.

1. Customer Service Statistics for 2016 (figures represent annual counts):

<u>Task/Activity</u>	<u>Number</u>
○ Doors Tagged for Shut Off	547
○ Shut Offs	60
○ Past Due Notices by Mail	1,553
○ New Connections Contractor	24 - Sewer, 26 - Water
○ Change in ownership/final billing	377 accounts
○ Snowbird accounts	33 customers
○ Ready to serve accounts	20 customers
○ Budget Billing accounts	47 customers
○ Automatic Clearing House Customers (Checking)	379 customers
○ Credit Card (CC) Auto Pay Accounts	326 customers
○ Customers paying online (PayTrace)	2,605 transactions - \$376,688
○ Customers paying CC at front counter	1,654 transactions - \$254,573
○ Assisting Customers with Phone CC payments	275 transactions
○ Total Credit Card transactions	6,795 totaling \$986,537
○ Doxo paperless billing	785 users
○ Phone Calls	900 (average per month)
○ Walk in customers per day (average)	10 (average per day)
○ Properties liened	13 - totaling \$11,794
○ Lien Satisfactions	34 - totaling \$33,533
○ Service Orders Placed	1,821
○ Returned mail reprocessed	485 (lower due to Doxo)
○ Leak Adjustments	68

2. Customer Service Operations

- Worked on the reorganization of project files.
- Audited and updated customer accounts, including correction of billing cycles, service billing rates (focus on multi-family accounts) and customer contact information.
- Notices to customers for any water and sewer service interruptions.
- Worked continuously to reduce the number of utility shut offs and liens placed on property owners.

- Increased customer awareness of District website for information, payment options, forms for customer use and meeting information.
3. Customer Service Staff Cross Training
 - Customer Service staff has continued to work on being cross trained. Deena Carpenter attended the Springbrook Conference in August.
 4. WSUD Newsletter
 - Prepared an annual newsletter in April that was sent out to all WSUD customers to report on the status of the District's capital projects, utility rates and customer service issues.
 5. Water Consumption for 2016 SKWRF Budget
 - In concert with the City of Port Orchard, a report of commercial accounts is created each year to establish the number of equivalent residential units (ERU's) used by the WSUD and City for sewer service. This calculation determines the percentage of revenue generated from WSUD and the City to pay to SKWRF for sewer treatment services for its customers.
 - The ERU count for the District decreased slightly from 5,705 in 2015 to 5,623 in 2016, while the City of Port Orchard's ERU count increased from 5,509 to 5,580.
 6. Monthly Water Consumption Report
 - The water consumption report classifies customers by residential, agricultural, commercial, institutional, multifamily and special contracts.
 - Calculated the number of customers under each class and the amount of water used by them during that month.
 - Provided an end-of-the-year report with an average usage for each customer class in cubic feet, gallons, ERUs and customers.
 7. VueWorks Program
 - Customer Services staff worked to expand use of VueWorks, which included meter locations, change in ownership, service address changes and informational letters to WSUD customers.

INFORMATION TECHNOLOGY 2016 ACHIEVEMENTS

In 2016, the Information Technology Department strived to provide Help Desk Services, File and Print Services, Server Administration, Network Services, Security Services, Email Services, Data Backup and Recovery Services, Website Development, Video Surveillance, Application Support Services, and Project Implementations for the West Sound Utility District and Port of Bremerton so each organization receives custom support that compliments their users, data and applications. These services are provided while working three (3) days a week at West Sound Utility District and two (2) days a week at the Port of Bremerton. During 2016, the GIS Specialist position was moved under IT Services providing map services for all the department as well as application development with the ESRI mapping software and VueWorks CMMS Program.

1. Help Desk Services

- A total of 313 Helpdesk tickets were submitted via the web portal and/or email. This total volume of tickets does not include emails and questions addressed directly to IT staff and/or the daily operations of the Network as a whole.
 - 252 of the tickets related to general IT Support and IT projects.
 - 61 of the tickers related to VueWorks and Mapping Support.
- Support for computers, printers, scanners and desktop applications.
 - The IT departments manages sixty-two (62) computers/laptops/tablets, five (5) multi-function printer/scanners/faxes devices, and ten (10) directly connected printers.
 - Upgraded desktop printers for Heidi Hill, Tracy Fantz and Karen Vargo.
 - Upgraded six (6) computers for Tracy Fantz, Michael Wilson, Heidi Hill, Karen Vargo, Debbie Raymond and Deena Carpenter.
 - Upgraded two (2) monitors at the reception desk for Customer Service.
 - Upgraded the Customer Service fax machine with a MFP printer/scanner/fax device. The new MFP allows customer services to print documents for customers without walking to the back office to retrieve the print job.
 - Upgraded the laptop the GIS Technician uses for field data collection.
 - Upgraded the tablet the on-call SCADA tech uses to access the system remotely.
- Continued users' support for in-house applications, internet application (i.e., web based training, banking access, and access to other government agencies' applications).

2. File and Print Services

- Continued support for networked printers and multi-function printers with access to networked drives for scanned documents.
- Continued management of network mapped drives to provide access to user files/folders.
- Upgraded the SKWRF file server to Guest VM hosted on the Hyper-V server located at the SKWRF.

3. Server Administration Services

- Continued support for the Districts (6) Hyper-V host servers, (17) virtual and physical servers.

- Installed one (1) new Hyper-V host server) at the District Offices that support multiple application servers and network resources.
- Upgraded the hard-drive storage capacity on two of the Hyper-V host servers.
- Upgraded the Hyper-V servers, application servers, and file servers that were on an old version of Microsoft Servers Operating System to the current version Server 2012 R2.
- Continued support for Microsoft Windows Server Operating Software Server 2012 and 2012R2.
- Started the conversion of the server table in the server room to a server rack. The rack provides stacking of the new server hardware form factors and will provide better access for maintenance.

4. Network Services

- Continued support for the Wave Broadband Metro Fiber Ethernet Circuit. The circuit is a bundled package for the District's Internet, Phone and SKWRF PTP services.
- Continued support for the District's firewalls – one is located at the Administration Building and the other is located at the SKWRF.
- Continued support for all the managed switches located at the District Offices and SKWRF.
 - There are four (4) Extreme Summit switches that provide network switching for the SKWRF's Data network.
 - There are four (4) Cisco switches that provide network switching for the District Offices data network.
 - The switches are configured with Vlans that change periodically when new devices are added throughout the year.
 - Added a 4rd switch at the District Offices to support the growth of devices connecting to the system.
 - Added a 4th switch at the SKWRF to support the growth of devices connecting to the system. The switch is to be installed first quarter 2017.
- Continued support for the District's wireless access points.
 - The District Offices have six (6) access points and the SKWRF has two (2) access points.
 - The access points provide separated and secured connectivity for both District and guest wireless devices.
 - Upgrade to access points from Xirrus Brand N access points to Ubiquiti Networks AC access points. The access is faster and provides more performance, in addition there are no yearly maintenance fees.
 - Added two (2) wireless access points at the SKWRF to provide wireless access to the company data and guest services.
- Continued support for District's eleven (11) Viper Radios. The Viper Radio Network was maintained by the SCADA team which provided 99.9% uptime throughout the year without any third party support.
- Upgraded the wireless bridge that connects the Salmonberry Well sites with the maintenance building. The upgrade increased the bandwidth of the link by fifteen (15) additional megabytes which allowed the installation of multiple cameras at the Salmonberry Well Sites.

- Added a wireless link from Salmonberry Ground to Salmonberry Elevated to provide adequate band to connect a camera back to the District Offices.
 - Provide routing services for the SKWRF to allow secure communications between the corporate network and the SCADA network. The configuration follows Department of Homeland Security “best practices”.
 - Added three (3) mobile cellular radios in the fleet trucks that allows the staff to connect to District resources while in the field.
5. Video Surveillance Services
- Continued support for the Axis Camera system.
 - There are eleven (11) security cameras installed at the District Offices and Well sites.
 - There is one security camera installed at the SKWRF monitoring the RV Dump.
 - Added multiple cameras at the Salmonberry Well Site and Elevated Tank.
 - Completed a physical security assessment of our well sites that provide their current states and recommendations for improvements.
6. Email Services
- Continued support for the Microsoft Exchange Server 2010. The server requires security patches and updates be applied weekly to ensure a stable environment.
 - 2016 stated the process of testing and upgrading to Exchange 2016 and should be finished by June, 2017.
 - Continued support for all the mail boxes for employees, commissioners, and services accounts used by the District.
 - Continued support for remote access for users’ mail boxes via the web/mobile devices.
 - Continued support for the Barracuda Mail archiver. The archiver allows the District to meet the State’s Public Records policies.
 - Continued support for Security Mail Services from Barracuda. The service scans all email to and from the district for spam, viruses, and other items of concern such as SS numbers, bank accounts, and Credit Card Numbers.
7. Backup and Recovery Services
- Continued support for Barracuda Backup server located at the Administration Building.
 - The server backs up the District and SKWRF data on scheduled nights throughout the week and then replicates the data to offsite locations. As data grows, the total volume of data is monitored so the District does not run out of local storage.
8. Application Support Services
- The District runs multiple applications that operate 24/7 to conduct business on a daily basis. Each application requires upgrades/service packs, user accounts management, system and data management.
 - Continued support for Springbrook Finance and Utility Billing software.
 - Continued support for the Spiceworks Helpdesk module.
 - The software provides a helpdesk ticket system, monitoring system, and inventory system for the district.

- The portal allows users to submit help tickets and keeps them informed of the progress of their individual issues. In addition, it allows the IT Manager to issue work orders to assigned staff members of each technology.
 - Continued support for the Cues Granite Sewer Conditioning software. Upgraded the latest version of the software.
 - Continued support for Microsoft SharePoint document server.
 - Continued support for VUEworks/ESRI CMMS application.
 - Created a schedule to ensure that the three (3) critical layers (Parcels/KCAddress/UGA layers) provided by the county are updated to our system on a monthly basis. The county updates these layers daily and prior to the change the District map was only updated once a year
 - Updated the “New Service Requests” layer by adding forty-one (41) parcels to the system.
 - Verified and validated fifty (50) active layers that are used by the VueWorks application.
 - Began cleaning up and standardizing the developed data sets, this helps prevent duplicate and erroneous entries.
 - Jacob worked with Dale to familiarize himself with the current GIS data collectors.
 - Provided map services developing maps for maintenance and administration.
 - Continued development rollout of the SKWRF PM Work Orders.
 - Continued support for the Water System SCADA.
 - The system completed its fifth full year of operation. During that time, the SCADA team continued maintenance and operation of the system with minimal contractor support.
 - Continued support for the Cues TV Truck and Flush Truck.
 - Continued support for the SKWRF application server.

9. Communication Services

- Continued support for the Shoretel Phone System. The phone system provides communication services for both District Offices and the SKWRF.
- The SKWRF has a total of eighteen (18) phones that include staff desktop phones, location phones, and wireless phones.
- The District Offices have a total of twenty-six (26) phones that include desktop and conference phones.
- Signed a 5-year support agreement for NCA for support with includes in-version upgrades and trouble issues.

10. Cellular Tower Leases

- The District leases space to three (3) wireless cellular carriers on the Salmonberry Elevated Reservoir and the Fircrest Standpipe. The three (3) carriers have minimal impact on the District’s daily operations.
 - Sprint Wireless is located on the Salmonberry Standpipe.
 - T-Mobile and ATT Wireless are located at the Salmonberry Elevated Reservoir.
- The District generated approximately \$63,000 in tower lease revenue in 2016 which was used to fund water utility capital improvement projects.

11. Website Development
 - Completed development and provided on-going support of the District website.
12. Anti-Virus Services
 - Continued support for Kaspersky Antivirus for workstations and servers. The Kaspersky agent and client are installed, run and monitored on all District Microsoft Windows devices.
13. Professional Development and Training
 - Attended the Interop Conference.
 - Attended the Spicework's Conference.
14. Professional Services
 - Billed the Port of Bremerton \$50,404 for contract IT services.

PORT OR BREMERTON

1. Help Desk Services
 - A total of 481 Helpdesk Tickets were submitted via the web portal and/or email. This total volume of tickets does not include emails and questions addressed directly to IT staff and/or the daily operations of the Network as a whole.
 - Continued support for computer client applications, printers and scanning.
 - The IT departments manages fifty-five (55) computers/laptops/tablets, four (4) Multi-function printer/scanners/faxes devices, three (3) network printers, and six (6) directly-connected printers.
 - Reformed computers to assign to new users.
2. File and Print Services
 - Continued support for networked printers and multi-function printers with access to networked drives for scanned documents.
 - Continued management of networked mapped drives to provide access to user files and folders.
3. Server Administration Services
 - Continued support for Microsoft Windows Server 2008r2 and Windows 2012.
4. Network Services
 - Continued support for the Ports two (2) WatchGuard Firewalls – one located at the Administration Building and the other at the Bremerton Marina.
 - Continued support for all the managed switches located at the airport and marinas.
 - There are ten (10) Netonix switches that provide network switching for the guest wireless System
 - There are ten (10) Cisco switches that provide network switching for the Port's data network.
 - Continued support for the all WiFi systems at the Airport and Marinas

- The port owns and operates twenty-three (23) access points located at the Airport and Marinas.
 - The access points provide separated and secured connectivity for both Port and guest wireless devices.
 - Continued support for Ports high capacity broadband links
 - The marinas have two (2) links connecting the Port Orchard Marina and Bremerton Marina and wireless bridge on the Bremerton Boardwalk that connects the marina docks and the Harbor Masters office.
5. Video Surveillance System
- Continued support for the Airport and Marina Camera systems
 - The Marinas have eighteen (18) security camera views that provide twenty-seven (27) different views of the properties.
 - The Airport has ten (10) security cameras views that provide twelve (12) different views of the Airport and Terminal Building.
 - Installed an Axis Camera Management Station at the Bremerton Airport. This station will provide all monitoring and storage for video from the Airports cameras.
 - Continued installing Axis Cameras throughout the marinas.
 - Installed and trained user to use the Camera Management Station software to review recordings.
6. Email Services
- Continued support for the Microsoft Exchange Server 2007. The server requires security patches and updates be applied weekly to ensure a stable environment.
 - 2016 stated the process of testing and upgrading to Exchange 2016 and should be finished by June, 2017.
 - Continued support for all the mailboxes for employees, Commissioners and service accounts used by the Port.
 - Continued support for Security Mail Services from Barracuda. The service scans all email to and from the district for spam, viruses, and other items of concern such as SS numbers, bank accounts, and Credit Card Numbers.
 - Continued support for remote access to users' mail boxes via the web/mobile devices.
7. Backup and Recovery Services
- Continued support for Barracuda Backup server located at the Administration Building.
 - The server's backup the Port's data on scheduled nights throughout the week and then replicates the data to offsite locations. As data grows, the total volume of data is monitored so the Port does not run out of remote storage.
 - Continued support for the Barracuda mail archiver. The archiver allows the Port to meet the State's Public Records policies.
8. Application Support Services
- Continued support for Microsoft Dynamics Finance Software.
 - Provide remote access services for the Synergy technicians.
 - Continued support for FSM software.
 - Provide remote access services for FSM technicians to maintain the FSM software.

- Continued support for the FAS Asset software
 - Continued support for the Spiceworks Helpdesk module. The portal allows users to submit help tickets and keeps them informed of the progress of their individual issues. In addition, it allows the IT Manager to issue work orders to assigned staff members of each technology.
 - The software provides a helpdesk ticket system, monitoring system, and inventory system for the district.
9. Anti-Virus Services
- Continued support for Kaspersky Antivirus for workstations and servers. The Kaspersky agent and client are installed, run and monitored on all Port Microsoft Windows devices.
10. IT and Project Management
- Created the scope and over saw the installation network data cables in the Airports Flight Center upstairs offices.
 - Created the 2017 Budget Narrative.
 - Led the IT Department with the Marina Camera Project.
 - Oversaw the installation of the Axis Cameras in Bremerton and Port Orchard.

WATER and WASTEWATER OPERATIONS 2016 ACHIEVEMENTS

GEOGRAPHIC INFORMATION MAPPING (GIS)/MAPPING SERVICES

1. GIS
 - Continued to develop and train the SKWRF staff on how to enter data and utilize VueWorks in their day-to-day operations.
 - Updated all GIS layers and associated data, including newly-installed water and sewer assets.
 - Provided support, training and mapping for the Customer Service and Finance Departments.
 - Provided infrastructure mapping for customer utility inquiries.
 - Collaborated with Kitsap County, City of Port Orchard, Engineers, Customers and staff.

MAINTENANCE CREW

1. Sewer Main Cleaning
 - Cleaned and televised 63,600 lineal feet of sewer main. VueWorks CMMS generated two hundred twelve (212) work orders to clean and televise the sewer mains. The crew performed the work and then closed the work orders. WSUD's aggressive preventative maintenance program has kept the District in regulatory compliance.
2. Water Main Flushing
 - Flushed one hundred and eight (108) miles of WSUD water main in 2016. Annual water main flushing has kept water quality calls to a minimum.
3. Veterans Park and Powell Reservoir Interior Cleaning and Inspection
 - WSUD Operations staff cleaned and inspected the Veterans Park and Powell Reservoirs. Annual maintenance of the reservoirs has kept water quality concerns to a minimum and provided the opportunity to evaluate the condition of the tank interior. Cost savings was \$8,000.
4. Salmonberry Ground and Powell Reservoir Exterior Cleaning
 - WSUD operations staff power washed the exterior of the reservoirs saving \$10,000 in contract services.
5. Assistance to the IT Department
 - Installed broadband link equipment between the maintenance building and well sites.

- Installed security cameras at the Lund Facility and well sites.
 - Installed Cradle Point cellular data radios in field vehicles.
6. Emergency Generators
 - District personnel performed the annual maintenance to all WSUD emergency generators. Performing the maintenance by WSUD personnel saved \$9,000.
 7. Continued the Fire Hydrant Repair / Replacement Program
 - Replaced five (5) hydrants on Maple and Roosevelt streets, repaired the hydrant on Lund Ave. The District is comprised of several different brands of fire hydrants and most of them are of significant age. The annual repair/replacement program will bring reliability for fire flow and fire hydrants will be consistent with District Standards and Specifications.

OPERATIONS CREW

1. Responded to one hundred fifty-two (152) calls after normal working hours.
 - Timely response and great communication have brought a high level of service to our customers.
2. Replaced one hundred (100) Residential Water Meters
 - Replacing failed water meters captures potential lost revenue.
3. Installed one hundred (100) Radios on Water Meters
 - Installing radios accelerates the meter reading process and improves safety when they are located in areas that dangerous for the meter reader to access.
4. Installed four (4) New Water Services
 - New connection fees will contribute the much needed funding for capital improvement projects.
5. Utility Locates
 - Responded to eight hundred twenty-six (826) requests for utility locates from the UCC Center. This is an increase of 8% over the previous year.
6. Water Leak Repairs
 - Repaired fourteen (14) leaks in the water distribution system, most leaks were located in the service line between the water main and meter. Prompt repair of leaks has saved water, prevented damage, and established a high level of reliability for our customers.

7. Construction Inspections
 - WSUD Inspector participated in seven (7) Water Capital Improvement Projects. Project supervision verifies that the construction performed is according to District Standards and Specifications.
 - WSUD Inspector participated in two (2) Sewer Capital Improvement Projects. Project supervision verifies that the construction performed is according to District Standards and Specifications.
 - Collaborated with The City of Port Orchard on sixteen (16) capital improvement projects.
8. Developer Extension Projects
 - WSUD Inspector participated in six (6) Developer Extension projects and supervised twenty-four (24) new sewer connections. The daily inspection of projects assured all work remained in compliance with District standards.
9. Safety Training
 - The District Safety Officer conducted eighteen (18) safety-training sessions for the field staff. Consistent training has resulted in no injury claims during the 2016 calendar year.
 - Hosted driver safety training for WSRMP
10. Grease Interceptors
 - Inspected two hundred and forty-two (242) grease interceptors. Performing scheduled inspections, then following up with non-compliant customers has kept fats, oils and grease (FOG)-related issues to a minimum.
11. Federal/State Regulatory Requirements
 - Collected three hundred (300) routine coliform, seventy-six (76) fluoride, nine (9) nitrates, four (4) disinfection byproducts, four (4) radionuclide, eleven (11) well raw water samples and received satisfactory results for all testing. Operating within the regulatory requirements prevented additional procedures, testing and expense.
12. Well Test Pumping
 - Performed monthly well soundings and test pumping of all wells throughout the year to quantify well performance. The District's Hydrogeologist uses the data acquired to prepare the annual Water Resource Monitoring report.
13. Enhanced Security at the Salmonberry Well Field
 - Installed security cameras, posted additional signage, repaired fencing and removed vegetation has provided a higher level of security for our water system.

CROSS CONNECTION CONTROL SERVICES

1. Annual Summary Report
 - Prepared the Annual Summary Report. Reporting is a requirement of The Washington State Department of Health and is a summary of all known backflow assemblies in WSUD's water system. Completion of the report has kept the District in compliance with the regulatory agency.
2. Backflow Assembly Reports
 - Recorded all backflow assembly reports when submitted by Washington State Approved Backflow Assembly Testers. Contacted the owners of backflow assemblies to request the submittal of a test report for their device.
3. Staff Backflow Assembly Tester
 - WSUD on-staff backflow assembly tester performed annual testing and reporting on twenty-two (22) devices within District facilities. He also identified the need for additional backflow devices in six locations, installed and tested them. Performing these services in-house rather than by contract has saved the District \$800 annually.

CAPITAL OUTLAY

1. 2016 Dodge Pickup Truck (\$31,700)
 - Purchased a 2016 Dodge pickup truck for the field staff. The Operations/Maintenance vehicles are on a 10-year depreciation schedule. Following the depreciation schedule ensures that vehicles remain reliable as the staff responds assignment, project and customer's needs.
2. Replaced Fluorescent Lighting with Light-Emitting Diode (LED) Lighting throughout the Lund Facility (\$25,309)
 - Received a Conservation Grant Agreement from PSE for \$13,549 leaving a balance of \$11,760. The energy savings will have a payback of the balance in 1.9 years.
3. Replaced Well 14 Submersible Pump (\$21,500)
 - The pump failed during operation in October and required immediate replacement. The well provides 350 GPM to our system and is critical to our operation.
4. Installed Cathodic Protection System in Salmonberry Ground Reservoir (\$18,600)
 - The system will extend the life of the tank coating and prevent corrosion of the steel.

STAFF/PERSONNEL

1. Certification Achievements
 - Robert Williams - Wastewater Collection Personnel 1
 - Ian Reeber - Wastewater Collection Personnel 1
 - Ian Reeber - Water Distribution Manager 1
 - Dale Webb - Cross Connection Control Specialist
2. Summer Help Program
 - Tyler Hale
 - Worked from June through July and planned to attend Olympic College.
 - Bryant Rosenquist
 - Worked from June through August and planned to attend Olympic College.
3. Internships
 - Doug Ridgeway
 - Attended Clover Valley College and studied Environmental Science. Doug split his time between the SKWRF, sewer collection systems and the water system.
4. Committees and Associations
 - Dale Webb
 - Second term as SORT Committee Chair
 - Brent Winters
 - Water Purveyors Association of Kitsap (WaterPAK)
5. Community Service
 - Participated in the South Kitsap Helpline food and toy drive for children.
 - Participated in the East Port Orchard School Field Trip tour of District facilities.

CAPITAL PROJECTS

1. Demolition of Karcher Springs Reservoir (\$24,135)
 - After District acquired sixteen (16) acres of property from the Washington State Department of Veterans Affairs in 2015 at no cost to the District, the District contracted to demolish the old wooden reservoir structure on the site and also worked to restore the natural habitat.
2. Repaint Fircrest Standpipe Exterior, Clean and Inspect the Interior (\$80,600)
 - Recoating the exterior will extend the life of the primer twenty (20) years. Regular cleaning and inspection will allow us to promptly address any potential corrosion issues.

3. Repaint Powell Reservoir Exterior (\$79,300)
 - This tank has been recoated both inside and out. Performing this preventative maintenance will ensure we get the full one hundred (100) year life expectancy from the asset.
3. Well #1 / #5 Reservoir Replacement Project (\$721,750)
 - The pumping station contributes ninety-five (95) million gallons per year or 16% of the annual total system production and the equipment has reached the end of life. The capital project began in the fall of 2016 and it will be completed in the summer, 2017. The project will provide a new reservoir, aerator, and booster pump station.
4. Well #18 Rehabilitation (\$34,700)
 - Well #18 provides 500 GPM to our system and the specific capacity has declined since it was drilled in 1992. The rehabilitation process involved video inspection, scrubbing the screen and pumping / surging the formation outside the screen.
5. Low Pressure Sewer System (\$120,100)
 - Replaced sixty-nine (69) EOne Pumps in the low-pressure system. The low-pressure sewer system is comprised of three hundred forty-two (342) pumps located on Beach Drive, Watauga Road and inside the Del Tormey development. The pumps have reached the end of their fifteen-year life. All pumps will have been replaced by the end of year 2018.
6. Manhole Relining (\$25,000)
 - Two manholes located on Arnold Ave. had extreme I&I issues due to degradation of the structure. The process prevented disruption to the customers and did not require excavation of the road. Relining the manholes rather than replacing them saved \$50,000.
7. Street Lighting (water utility) Street Lighting Program
 - The District worked with Puget Sound Energy to convert three hundred and seventy-three (373) sodium vapor street lighting fixtures over to LED units at a cost of \$90,989.
 - The District received a grant from PSE in the amount of \$22,596.
 - With an annual cost savings of \$19,600 for the conversion of the street lighting, the adjusted payback period is 4.65 years.

SOUTH KITSAP WATER RECLAMATION FACILITY 2016 ACHIEVEMENTS

OPERATIONS AND MAINTENANCE

1. Community Wastewater Education Program
 - Staff coordinated and provided demonstrations/tours with South Kitsap School District 5th graders.
 - Provided positive interaction and understanding of the utility and the benefit provided to the community.
2. Reclaimed Water
 - Formal Suspension of the Reclaimed Water Distribution Program.
 - SKWRF will retain active permit for production and distribution.
 - Program terminated due to negative cost to benefit ratio.
 - Financial assessment was conducted which concluded that the cost to provide reclaimed water to the Veterans Home in 2014/15 was \$16.68-\$17.14/ccf, compared to the District's cost to produce potable water was \$4.07/ccf.
3. Biosolids
 - Prepared and filed reports for annual Biosolids production to all required regulatory agencies.
 - Completion HDR Engineering Report addressing current and future Management of SKWRF Produced Biosolids and Classification.
 - Final determination that the Facility would suspend looking further into production of Class A Biosolids in the near future as it would not provide economic benefit for ratepayers.
4. National Pollutant Discharge Elimination System (NPDES) Permit
 - Continued development and enrichment of working relationship with the Department of Ecology Municipal and Biosolids Managers.
5. Pacific Northwest Clean Water Association (PNCWA) Board
 - Two staff members participated in Olympic Section of the Pacific Northwest Clean Water Association as President and Secretary/Treasurer.
 - Various SKWRF staff have been involved and represented the facility for over six years.
 - Provided for positive representation of the Facility in a regional capacity.
6. SCADA Improvements
 - Continued improvements to primary sensing, alarm, and reporting by replacing outdated sensing devices and installation of additional sensing devices.

- Provides Operations staff with enhanced information; allowed for improved process control thereby improving efficiencies in process and long term reduction of operational costs.
7. Solids Handling
- Continued improvements with solids handling process and equipment.
 - Continued working on a program to improve efficiencies in the operational aspects.
 - Continued work in this area will provide for better operational efficiencies and reduced operating costs.
 - Included Capital Project in 2017-2018 Budget to decommission existing Dewatering Centrifuge and replace with a Screw Press. This will provide for lower operational and maintenance costs to the facility for production of Biosolids.
8. Energy Conservation
- Continued with energy conservation measures in 2016. Focus was on the continuation of optimization and operational efficiencies.
 - Staff completed a conservation project, which included replacement of lighting fixtures and bulbs with LED technology.
 - This conversion program cost was \$16,200 which 54% was grant funded for \$8,747 and the energy savings will have a payback of the balance in 1.6 years.
9. Regulatory
- Met submittal requirements of all reports and data in accurate timely manner.
 - All laboratory proficiency-testing requirements were performed and completed successfully.
 - Laboratory accreditation re-issued by Ecology for 2016 without any provisional requirements.
 - Ecology performed a full Laboratory audit on the SKWRF Laboratory in 2016.
 - In 2016, the SKWRF Laboratory in house performed over 12,000 analyses. The value does not include collection and sample preparation for samples shipped and or transported to outside laboratories.
10. MBR
- Continued endeavor to extend the life of the membranes and support structures, which are at the end of their useful life.
 - 2017-2018 Budget prepared in 2016 includes as a capital project replacement of the membranes and support structures; scheduled for 2018.
11. Staff/Personnel
- SKWRF had an Intern in 2016, Mr. William Olin. William received various training opportunities along with hands on experience in the plant and laboratory. This training

and hands on experience assisted him in his educational goals of achieving a Bachelor of Science in Environmental Science.

- SKWRF continued with the summer help program which provides college students with a summer job while providing the facility with a full-time grounds person and assistance within the plant during the busy vacation time of the year.
- Staff continued with professional growth fulfillment. In 2016, SKWRF staff obtained online training via Webinars and other local training and conference events as applicable.
- Certification Achievements
 - All SKWRF staff maintained First Aid/CPR compliance.
 - All staff maintained Fork Lift Compliance.
- Shane Colglazier
 - Completed a Wastewater self-study course through Sacramento State College.
 - Attended a training session at Green River Community College for Wastewater Treatment Certification Review. Shane successfully tested and obtained his Wastewater State of Washington Certification in 2016.
- Wes Morrell
 - Attended Washington Operator Workshop, received continuing education credits for professional growth.
- Bryan Gallagher
 - Attended a one-day training session on the use of Microsoft Excel; received continuing education credits for professional growth.
- Kevahn Steinke
 - Attended a one-day training workshop in Tacoma and also attended WEFTEC in New Orleans and received continuing education credits for professional growth.
- Lance Hunt
 - Attended the Pacific Northwest Clean Water Association Annual Conference; received continuing education credits for professional growth.

12. Operations/Maintenance

- Continued with the established program to increase process efficiency and optimization.
- Continued with acquisition of additional analyzers, tools and equipment to aid in reduced labor demands and increased efficiencies.
- Continued cross training in some areas to provide for versatility in staff and additional onsite support.
- Continued the build out of VueWorks preventative maintenance system.
- Continued to address outdated equipment and make improvements where applicable.
- Staff completed 2,005 work orders in 2016.
- Work orders completed equated to approximately 2,000 man-hours per year or equivalent of a full-time employee.

13. Plant Administrative Areas

- Continued work on centralized O&M manual, drawing and map room area for all Facility-related equipment and process documents.

- Continued with updating and culling of outdated/ irrelevant plant information on nonexistent equipment.
 - Continued process of digitizing the Operation and Maintenance Manuals.
 - Provided for ability of staff to acquire information and cross-reference with VueWorks work orders more readily.
14. Sewer Advisory Committee (SAC)
- Conducted five (5) SAC meetings in 2016 and provided updates and information on the SKWRF capital projects, budget information and status of the SKWRF issues.
 - Communicated the work that staff had accomplished in process optimization.
 - Continued providing information to the SAC of long-term goals to be addressed (i.e., facility capacity, Class A Biosolids, MBR cassette failures, equipment replacement, reclaimed water, long range capital outlay, capital projects and facility improvements).
15. Safety
- Continued monthly safety meetings/training. Continued with identifying, addressing and reducing potential safety hazards/ issues in various parts of the facility.
 - Provides for overall safety and reduction of incidents and injuries.
16. Leachate
- SKWRF received approximately 1.92 million gallons of leachate in 2016.
 - Received revenue of \$124,800 into SKWRF Capital Improvement Fund.
 - Leachate is a miscellaneous revenue, which contributes to the SKWRF Capital Improvement Fund. Revenue generated assists with ongoing the Facility's capital projects.
17. SKWRF Property
- Worked to resolve the multitude of property title problems through the execution of five new quit claim deeds.
 - SKWRF property is now under the joint ownership of the City of Port Orchard and WSUD.

CAPITAL OUTLAY AND CAPITAL IMPROVEMENT PROJECTS

1. Equipment Replacement
- SKWRF staff replaced several items within the Facility. Some items were Waste gas components and control panels, Human Machine Interface panels and meters.
 - Staff also continued with replacement of steel doors with corrosion resistant Aluminum doors. Two doors completed in 2016.
 - Staff began rehabilitation of the 1984 grit pumps. Work to be completed in 2017.
 - Ongoing process to replace worn, obsolete and/or defective equipment.

2. Instrumentation
 - SKWRF continued with acquiring and installation of additional primary sensing devices.
 - Provides more information and enhanced ability to track and monitor equipment and processes within the Facility to assist in optimization efficiencies and reduced costs.
 - This is an ongoing process to modernize and provide for efficient operation.

3. Secondary Hydraulic Modeling Study
 - Work completed by a consulting firm to provide a complete and objective picture describing both performance and application conditions for the evaluated alternatives (i.e., MBR membrane replacement, secondary clarifier modifications and/or construction of an additional clarifier).
 - Study also helps determine a near-term rating assessment of the feasibility of operating only the activated sludge facilities for the next ten (10) years.
 - In 2016, findings and recommendations provided to the SAC to assess financial and growth impacts to the City and District.

4. Class A Biosolids Feasibility Study
 - SKWRF staff worked with a consulting firm on various aspects of the Facility producing and marketing Class “A” Biosolids in the South Kitsap Community.
 - Study completed in 2016. Information, recommendations and associated financial implications were provided to the SAC regarding the future management of SKWRF Biosolids.

5. Waste Gas Flare Relocation
 - SKWRF staff relocated and rebuilt the facilities Waste Gas Flare.
 - Addressed worn and obsolete components of the Waste Gas Flare system; accommodated for the location of the new storage building to be constructed.

6. Storage Building
 - The following attributes were completed in 2016:
 - Building design
 - Permitting (Building, storm water and electrical)
 - Site preparation
 - Piling installation for structural support
 - Footings and foundation
 - Building drainage system
 - Power feed conduit
 - Remainder of work to be completed in 2017 by an outside contractor.
 - SKWRF staff performed afore mentioned work less building design and piling installation. This portion of the project consumed a good amount of staff time due to the complexity of the project.

7. HVAC System Modification
 - SKRWF initiated the contract for the CIP Project HVAC Modifications at the end of 2016.
 - Work to be performed within the first quarter, 2017.
 - This project will provide for a more efficient and reliable heating/cooling system for the Laboratory and Administrative Building.
8. Deck Coatings
 - Coatings applied in 2016 after several years of intense research and trials.
 - Coatings performed extremely well through the winter.
 - Coatings installed to address water intrusion through the elevated concrete walkways, which caused water infiltration into building areas.
9. Door Replacement (Two doors)
 - Replacement of corroded steel door and frame with anodized aluminum.
 - Replacement of doors within the Facility to match new styles installed in the 2006 upgrade. Doors also allow for an increased safety factor as sidelights have been incorporated into the doors to allow for viewing objects or persons that are in the swing path. This will be an ongoing project until all doors and frames have been replaced.
10. Manhole Repair
 - SKWRF contracted to have a manhole rehabilitated in 2016 which was in poor condition. This manhole is subjected to high amounts of hydrogen sulfide gasses and displayed signs of spalling.
 - The manhole was cleaned / grouted and coated with an impervious lining to eliminate future degradation of the manhole.
11. Boiler Repair and Modification
 - In 2016, SKWRF contracted to have the two original 1984 Boilers reconditioned.
 - Boilers were re-tubed and updated controls installed.
 - With the fire tubes removed, a detailed inspection of the internal wet side of the boiler performed.
 - While the modification will not improve any efficiencies, this work will extend the life and defer replacement of the Boilers by at least twenty (20) years.
12. Deferred/Carryover Capital Projects
 - Projects to be addressed in 2017/2018 are:
 - Exterior Coatings - deferred until completion of the 2017 CIP Dewatering Centrifuge Replacement Project.
 - Storage Building - portions were completed in 2016 and anticipate final completion in 2017.