CITY OF OAK CREEK WATER & SEWER UTILITY

OFFICIAL NOTICE

PLEASE TAKE NOTICE that the Water and Sewer Utility Commission will meet at the Oak Creek Water & Sewer Utility, 170 West Drexel Avenue, Oak Creek, Wisconsin, 53154 on Tuesday, December 8, 2015, at 10:00 am.

The purpose of this meeting will be to discuss the topics listed on the attached agenda.

It is possible that members of and possibly a quorum of members of our governmental bodies of the municipality may be in attendance at the above-stated meeting to gather information; no action will be taken by any governmental body at the above-stated meeting other than the governmental body specifically referred to above in this notice.

PUBLIC NOTICE

Please Note: Upon reasonable notice, a good faith effort will be made to accommodate the needs of disabled individuals through sign language interpreters or other auxiliary aid at no cost to the individual to participate in public meetings. Due to the difficulty in finding interpreters, requests should be made as far in advance as possible, preferably a minimum of 48 hours. For additional information or to request this service, contact the Oak Creek City Clerk at 768-6511 or write to the ADA Coordinator at the Health Department, City Hall, 8040 South 6th Street, Oak Creek, Wisconsin, 53154.

DATED, at Oak Creek, Wisconsin, this the 3rd day of December, 2015.

/s/ Michael J. Sullivan
General Manager

s:openmtg.KE

AGENDA
WATER AND SEWER UTILITY COMMISSIONERS
CITY OF OAK CREEK

TIME	DATE	LOCATION
10:00 am	Tuesday December 8, 2015	Headquarters Building 170 West Drexel Avenue

1.0 OPENING OF MEETING
- 1.1 Roll Call
- 1.2 Minutes Approval - Regular Meeting 11-10-15

2.0 FINANCIAL MATTERS
- 2.1 Project Payment Approvals
- 2.2 Voucher Approval
- 2.3 Utility Investments
- 2.4 Interfund Loan
- 2.5 2016 Capital Budget Approval

3.0 ADMINISTRATIVE & OPERATIONS REPORTS
- 3.1 Aldermanic Report
- 3.2 Plant Operations Report
- 3.3 Distribution Operations Report
- 3.4 Administrative Operations Report
- 3.5 Engineering Operations Report
- 3.6 Manager's Report

4.0 PROJECT APPROVALS

5.0 MISCELLANEOUS MATTERS
- 5.1 Chemical Bids
- 5.2 Amendment Number 1 to the Professional Services Agreement with CH2M for Construction Administration of the CT Tank Compliance Project
- 5.3 Amendment Number 3 to the Ramboll Environ Environmental Services Agreement for the CT Tank Compliance Project

6.0 CLOSED SESSION
- 6.1 Closed session in accordance with Section 19.85 (1) (g) of the Wisconsin State Statutes to confer with legal counsel concerning strategy to be adopted by the Commission with respect to the CT Tank Compliance Project.
- 6.2 Reconvene into open session
- 6.3 Take action, if required

7.0 ADJOURN

s:wpdocs.agenda.com/ke

2016 CAPITAL BUDGET

SUMMARY SHEET

Capital Budget Financed by Operations:

Administrative and General	$	-
Distribution		193,650.00
Engineering		-
Treatment Plant		270,000.00
Capital Improvement Projects		4,055,000.00
Projects in Progress		7,944,950.00
Total 2016 Capital Budget	**$**	**12,463,600.00**

2016 CAPITAL BUDGET

		Total	Water	Sewer
Administration		$ -	$ -	$ -
Distribution	Computer and POSM Upgrades	18,650.00	-	18,650.00
	Headquarters Security Gate Openers Replacement	12,500.00	8,750.00	3,750.00
	Hydrant Painting	37,500.00	37,500.00	-
	Sewer Machine Dump Site	50,000.00	-	50,000.00
	Orchard Way Reservoir Cleaning	9,000.00	9,000.00	-
	2006 Vehicle Replacement	26,000.00	26,000.00	-
	Backhoe Replacement Reserve	20,000.00	20,000.00	-
	Tandem Dump Truck Reserve	20,000.00	20,000.00	-
	Subtotal	193,650.00	121,250.00	72,400.00
Engineering		-	-	-
Treatment Plant	Sealer Replacement	5,000.00	5,000.00	-
	Backflow Preventer	5,000.00	5,000.00	-
	Electrical Valve Operator Replacement	30,000.00	30,000.00	-
	Valve Replacement	45,000.00	45,000.00	-
	Insertion Mixer Replacement	60,000.00	60,000.00	-
	Dehumidification Equipment Replacement	125,000.00	125,000.00	-
	Subtotal	270,000.00	270,000.00	-
Projects	Full Water System Master Plan	300,000.00	300,000.00	-
	5th Avenue Water Main Extension (Construction Only)	145,000.00	145,000.00	-
	Well No. 1 and Well No. 3 Abandonments	450,000.00	450,000.00	-
	Raw Water Security Upgrades	50,000.00	50,000.00	-
	CT Tank Compliance Project Design	150,000.00	150,000.00	-
	Forest Hill Water Main Relay Project (Construction Only)	260,000.00	260,000.00	-
	CT Tank Compliance Project	2,000,000.00	2,000,000.00	-
	Sanitary Sewer Lining	700,000.00	-	700,000.00
	Subtotal	4,055,000.00	3,355,000.00	700,000.00
TOTAL		$4,518,650.00	$3,746,250.00	$772,400.00

Five Year History

Year	Total	Water	Sewer
2015	$ 1,875,000.00	$ 1,758,500.00	$ 116,500.00
2014	9,205,450.00	8,476,750.00	728,700.00
2013	3,024,800.00	2,613,360.00	411,440.00
2012	1,074,810.00	905,310.00	169,500.00
2011	3,266,000.00	2,919,500.00	346,500.00

2016 CAPITAL BUDGET

ADMINISTRATIVE AND GENERAL

		$ -
TOTAL ADMINISTRATIVE AND GENERAL BUDGET		**$ -**
	Water	-
	Sewer	-
		$ -

2016 CAPITAL BUDGET

DISTRIBUTION

Computer and POSM Upgrades $ 18,650.00

This system is 6 years old, and the upgrades would include:

- Due to the limitations of the current version of software, records are split up into 21 different databases (by sewershed), making it cumbersome to efficiently report on the city-wide system. Sewershed records will be brought together into one database for more efficient reporting of the whole system.
- Currently, any GIS updates must be sent and converted by the POSM software company in order to work inside the program. The new version of software will not require this action. All edits will sync with the software directly.
- GIS staff has begun adding a hyperlink to the video footage of each sewer main. If continued, this will be a maintenance nuisance. The new upgrade will eliminate the need to do this. It will automatically link to the GIS sewer mains.
- Hardware being replaced is a new Rackmount Computer and POSM USB Hardware Video Encoder.

Sewer 18,650.00

Headquarters Security Gate Openers Replacement 12,500.00

The security gate openers at 170 West Drexel Avenue are more than 15 years old and have been rehabilitated several times. The system is susceptible to malfunction in snow and freezing rain conditions. Under this project, both security gate openers would be replaced. The existing gates and the card reader system would be reused. The same work was performed at the treatment plant in 2013, and the replacements have performed well.

Water 8,750.00
Sewer 3,750.00

Hydrant Painting 37,500.00

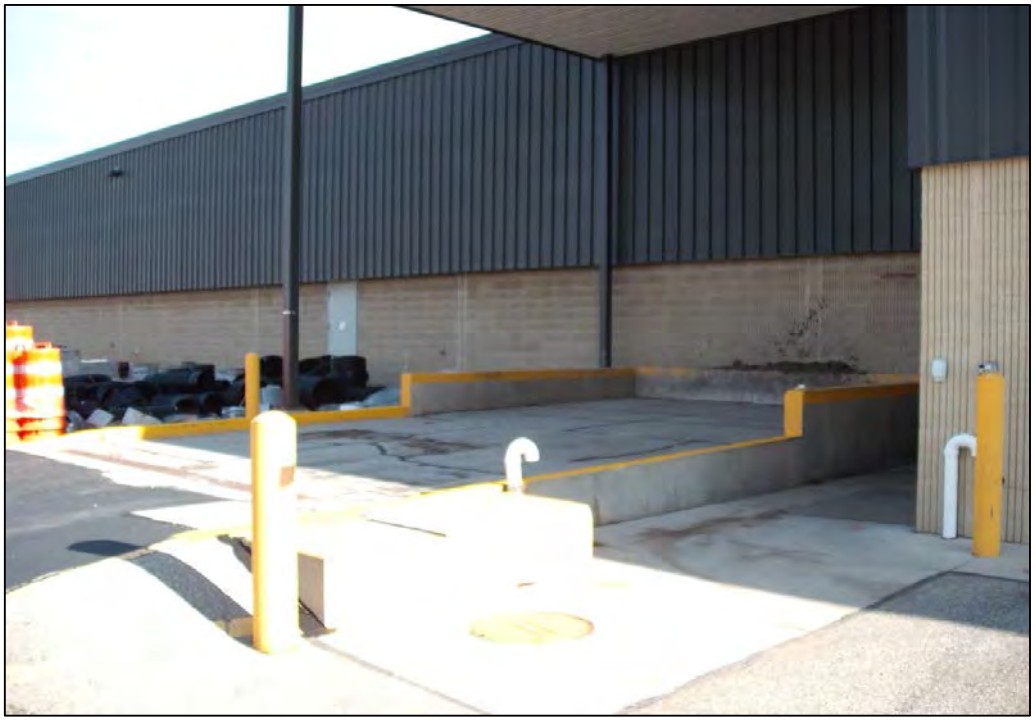
The Utility has always used summer help to paint the fire hydrants. After 20 plus years of being painted, it is recommended the painting be contracted with a firm that sand blasts, primes and paints the hydrants using an epoxy paint. Other utilities who have had this done have been contacted, and they are very pleased with the work. It is recommended that the Utility has approximately 300 hydrants painted in this manner. The suggested hydrants are located along Howell Avenue, Ryan Road, Rawson Avenue, Drexel Avenue, South 27th Street and 13th Street. Hydrants historically repainted along the roads listed have lasted 2 years before requiring a repainting again. Hydrants painted in the proposed manner are expected to last 5 to 7 years. Worker safety is also another concern as these roads are getting more traffic. The average number of hydrants painted per year is 650 hydrants; and the total cost to paint these hydrants for the year is an average of $9,700, including both labor and paint.

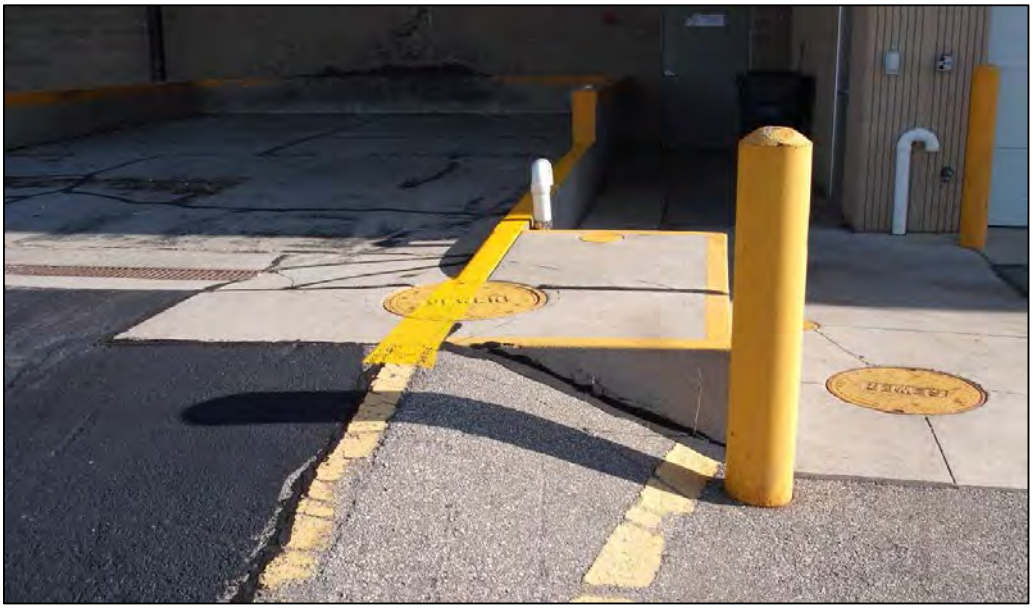
Water 37,500.00

Sewer Machine Dump Site 50,000.00

The Utility would like to update how emptying the sewer machine is done to bring this up to DNR standards. The sewer machine is also used for hydro excavating, which requires it to be emptied of any sewer debris before using. This project includes a dumping station pad, a solids settling tank, and a connection to the existing sanitary sewer system. The settled solids will be disposed of in the existing dumpster.

Sewer 50,000.00





Orchard Way Reservoir Cleaning 9,000.00

The Orchard Way Reservoir was placed into service in 1996 and has never had the exterior professionally cleaned. This item would be for cleaning the exterior of the reservoir.

Water 9,000.00

2006 Vehicle Replacement 26,000.00

This vehicle is currently a van used for doing locates. It is 10 years old and has over 90,000 miles on it. The new vehicle would be a 1/2 ton, 2 wheel drive pickup truck.

Water 26,000.00

Backhoe Replacement Reserve 20,000.00

The John Deere backhoe 310SE is a 1998 model with over 5,100 hours on it. Replacement cost today is approximately $100,000. This account would begin building reserves to apply toward a purchase that would be anticipated in the year 2018.

Water 20,000.00

Tandem Dump Truck Reserve 20,000.00

The Freightliner tandem dump truck is a 2000 model with 36,900 miles and 4,200 hours on it. Replacement cost today is approximately $117,000. This account would begin building reserves to apply toward a purchase that would be anticipated in the year 2020.

Water 20,000.00

TOTAL DISTRIBUTION BUDGET **$ 193,650.00**

Water	121,250.00
Sewer	72,400.00
$	193,650.00

2016 CAPITAL BUDGET

ENGINEERING

		$ -
TOTAL ENGINEERING BUDGET		**$ -**
	Water	-
	Sewer	-
		$ -

2016 CAPITAL BUDGET

TREATMENT PLANT

Sealer Replacement		$ 5,000.00
The existing sealer for Quanti-Tray MPN is 10 years old. This unit is used to approximate the quantity of pathogens in the raw water. The new sealer would be put in operation and the old sealer would be kept as a backup.		
Water	5,000.00	
Backflow Preventer		5,000.00
The backflow preventer for the lower Kathabar dehumidification unit is located 18 feet above the floor. Staff would like to have the unit relocated to the floor, making maintenance and testing safer.		
Water	5,000.00	
Electrical Valve Operator Replacement		30,000.00
The current electrical operators on filters 1-4 effluent valves are experiencing intermittent failures. These operators were installed in the late 1980's.		
Water	30,000.00	
Valve Replacement		45,000.00
The 24" backwash waste valves on filters 1-4 are leaking. These valves are original 1974 equipment. Filters 1 and 2 waste valves would be replaced this year. The 20" backwash supply valve on filter 4 would also be replaced.		
Water	45,000.00	
Insertion Mixer Replacement		60,000.00
Staff proposed replacement of the existing coagulant mixers in 2013. Bids were considerably greater than budgeted, and the project was postponed. Repair of the existing mixers was investigated. Turn around for the repair exceeded 10 weeks. While the plant uses 1 mixer and has another as a backup, the repair turn around time is unacceptable.		
Water	60,000.00	
Dehumidification Equipment Replacement		125,000.00
The filter room dehumidification unit is showing signs of severe corrosion. This unit is the original equipment from 1974. The lower Kathabar unit was rehabilitated in the year 2009.		
Water	125,000.00	
TOTAL TREATMENT PLANT BUDGET		**$ 270,000.00**
	Water	270,000.00
	Sewer	-
		$ 270,000.00

2016 CAPITAL BUDGET

CAPITAL IMPROVEMENT PROJECTS

Full Water System Master Plan $ 300,000.00

The last full water system master plan for the Utility was completed in 2002 by Kaempfer & Associates. Subsequently, Strand Associates completed an update to Kaempfer's master plan in 2008 which only covered the water distribution and transmission portions. Because of the economic downturn and lack of development, Strand also completed an update to Chapters 4 and 6 of their 2008 master plan. Thus a full water system master plan from treatment to distribution and transmission has not been done since 2002, in large part because of the Utility's agreement with Waukesha to provide water. The prospect of Waukesha presents many unknowns and has not been approved by the Great Lakes Council at this point in time. This should not deter the Utility in planning for the future. This document will include a section on planning scenarios regarding Waukesha water. It will also include a wire to water study and pipeline replacement plan. The full scope of the project is as follows:

- Water Treatment Plant Evaluation
  - Existing processes
  - Treatment goals and objectives/regulations
- Standard Water Distribution System Evaluation
  - System inventory and facility/equipment condition assessment
  - Population projection and growth
  - Water system demands
  - Data collection and testing
  - Additional required capacity
  - Wholesale supply control
  - Water system hydraulic modeling
    - > Static evaluations
    - > Extended period evaluations
    - > Existing system evaluations
    - > Recommended improvements
    - > Wholesale/Waukesha scenario
- Water Age Modeling
- Energy Efficiency Study (Wire to Water)
- Conservation Plan (PSC Component)
- Pipeline Replacement Plan

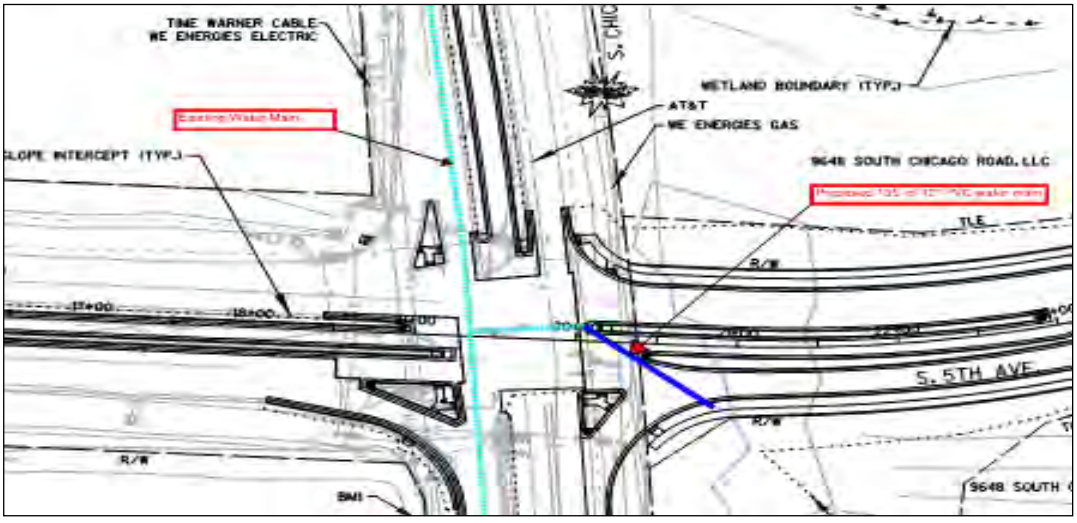
Water 300,000.00

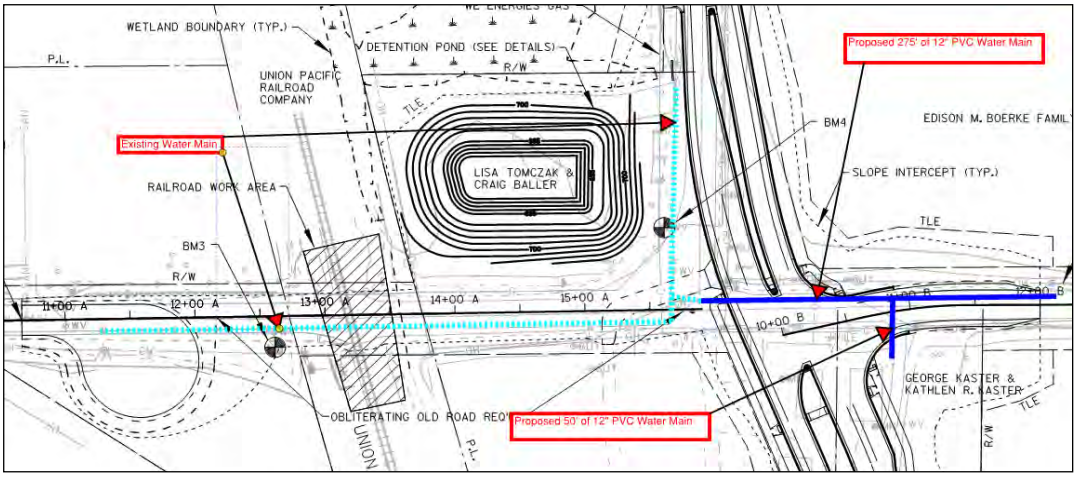
5th Avenue Water Main Extension (Construction Only) 145,000.00

This project includes extending approximately 450' of 12" water main ahead of the WisDOT 5th Avenue Extension paving project. The WisDOT project will connect STH 100 with 5th Avenue as shown in the diagram below. The Utility does not have any infrastructure that is in conflict with the proposed project; however, it makes sense to extend the existing water main to locations where future utility work will minimize the disturbance to newly paved areas. WisDOT plans on bidding their project in April of 2016. Consequently, the Utility project must be constructed in March 2016 in order to finish ahead of the paving project.

5th Avenue Paving Project Alignment

Water Main Extensions

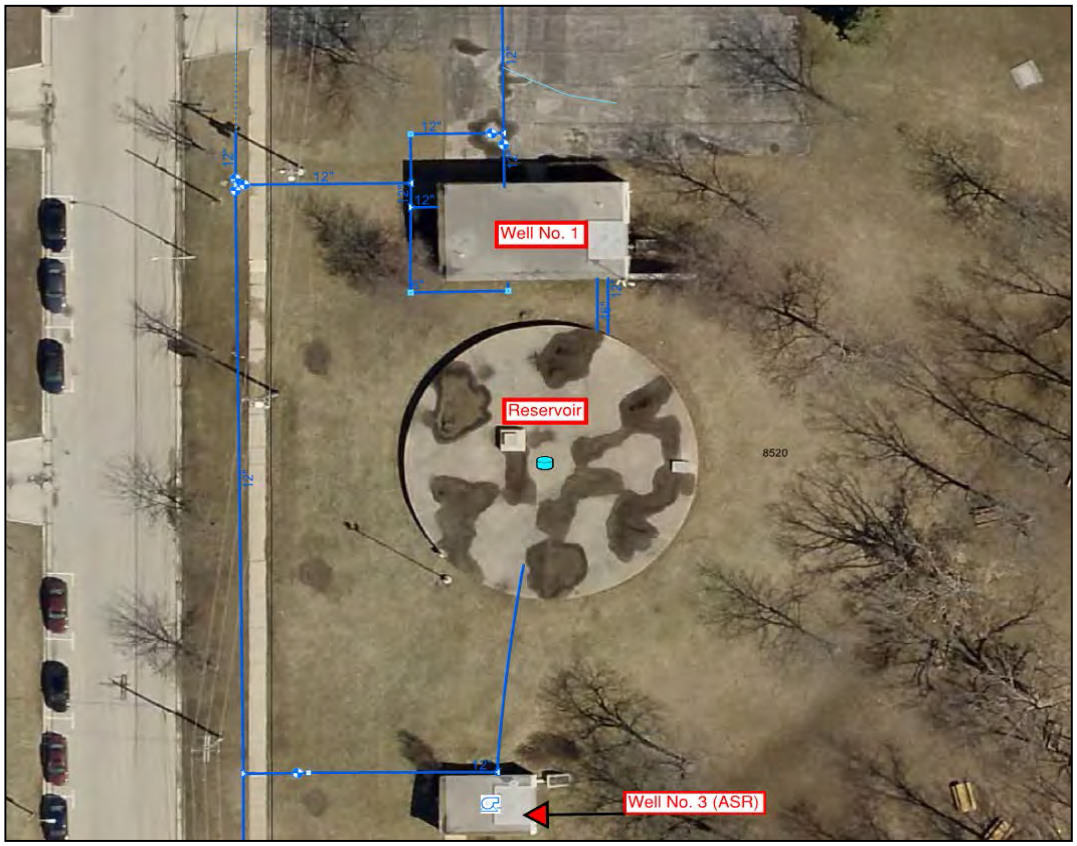




Water 145,000.00

Well No. 1 and Well No. 3 Abandonments 450,000.00

The existing complex consists of two deep aquifer wells, a 500,000 gallon reservoir, and a pump station used to pump from the reservoir to the distribution system. This is the site of the former aquifer storage and recovery (ASR) project. It is also the site of the first water supply for the City of Oak Creek. This project consists of abandoning Well No.'s 1 and 3. Engineering considered several alternatives with regard to this design:



In all of the alternatives, well no.'s 1 and 3 will be abandoned. The water quality in these wells is known to be of poor quality with high concentrations of iron and manganese. The pump for well no. 1 has previously been removed and well no. 3 is not being maintained to current standards. WDNR regulations require abandonment of unused wells. Their use as an emergency back-up will provide a minimal volume of water over a very short period of time.

Alternative 1 - Reinstate the facility as an in-line storage and booster facility - *$450,000*
This alternative consists of the following improvements:

- Abandoning well no.'s 1 and 3
- Conduct a groundwater study (WDNR regulatory compliance)
- Reservoir and well pumping stations roof repairs including WDNR required membrane installation and construction of a sloped roof
- Verify groundwater levels to insure the bottom of the reservoir is at least 2' above groundwater level

The only benefit that this facility can provide to the system is a very local fire flow improvement. However, the 2008 Master Plan Update indicates that the fire flow available in this area is well in excess of 3,500 gallons per minute. Therefore, there is no hydraulic benefit to reinstating this facility.

Alternative 2 - Abandon the facility in place to minimum WDNR standards - *$100,000*
This alternative consists of the following improvements:

- Abandoning well no.'s 1 and 3
- Abandoning interconnection piping between wells and other facilities

With this alternative, the reservoir and well houses will be left in place.

Alternative 3 - Abandon facility in place, demolish buildings and fill in reservoir - *$340,000*
The main construction components of this alternative include:

- Abandoning well no.'s 1 and 3
- Demolish the roof of the reservoir to 1' below existing grade
- Demolish well no.'s 1 and 3 pumping stations

Alternative 4 - Completely remove all structures, parking and access - *$450,000*
The fourth alternative consists of:

- Abandoning well no.'s 1 and 3
- Demolish the reservoir to 1' below proposed grade
- Demolish well no.'s 1 and 3 pumping stations
- Remove the parking and access areas and landscape
- Abandoning relevant piping
- Grading the area flat and landscaping

This alternative would satisfy the City of Oak Creek's request that all of these structures be demolished and the site be returned to park land.

Water	450,000.00

Raw Water Security Upgrades 50,000.00

The new Lake Vista Development has presented some security challenges for the Utility. Because access to the lake front will be much easier now with the removal of the fence line along the south side of the road and re-alignment of the road on the west end, proactive security measures need to be implemented in order to insure the raw water pumping station remains secure. By installing building-mounted and light pole-mounted cameras, Utility personnel can monitor activity in the areas of the raw water pump station and gate to raw water drive. Cameras will be mounted and light poles will be installed according to the concept drawings below:

Camera Set-Up at the Raw Water Pump Station

This mounting strategy should give Utility personnel close to a 360 degree view of the raw water pumping station. Thus, treatment plant operators will be able to determine and react to any threats in the area.

Camera Set-Up at the Gate

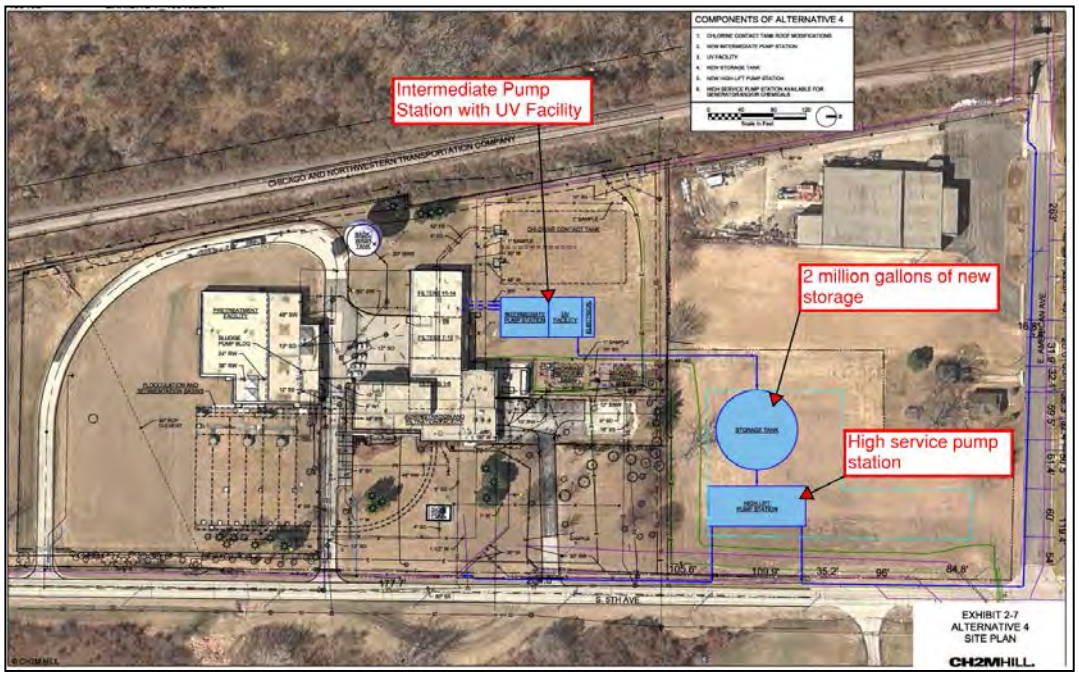
The original gate leading to the raw water pump station was located at 5th Avenue. Because of the alignment change to the road as shown below, the gate was moved east to a location as shown. The existing light pole just west of the new gate will provide a means to mount a camera to insure security is maintained at the entrance.

This project includes the installation of a light pole at the entrance to the raw water pump station with building-mounted and pole-mounted cameras.

Water 50,000.00

CT Tank Compliance Project Design 150,000.00

The Utility began design work on this project in 2014, which will correct code compliance issues with the existing CT tank. The project design is approximately 90% complete. With the acquisition of the property at 3953 E. American Avenue, additional design will be needed for its demolition as part of the project. The Utility is working with CH2M personnel on the details in the overall design which comprise the last 10% of the design work.



Thus, the final details of the plans for the improvements including a new intermediate pump station, new storage, and a new high lift pump station will be completed; and demolition plans will be added for the removal of the home at 3953 E. American Avenue.

Water 150,000.00

Forest Hill Water Main Relay Project (Construction Only) 260,000.00

The Utility has identified the stretch of water main in East Forest Hill Avenue between South Howell Avenue and South Verdev Drive to have exceeded the Utility Partnership for Safe Water goal of 0.15 breaks per year, per mile of pipe. In fact, this short 1,000' stretch of pipe has become one of the worst in the City of Oak Creek in terms of water main break frequency. Within the last 5 years, there has been 4 water main breaks in this stretch. Consequently, the Utility has had to patch this road on several occasions because of the high break frequency.

The City of Oak Creek has placed a high priority on re-paving this road. As part of a coordinated effort, the Utility would complete the water main relay and provide funds to the City of Oak Creek for paving the south half of East Forest Hill.

The design portion of the project is underway and should be completed in January. During the design process, alternatives for both open cut and water main lining were considered. Water main lining is a relatively new technology that consists of cast in place pipe (CIPP) with a thermoset epoxy resin; whereas the open cut method consists of digging the trench, laying the water main with the protection of an embankment or shoring, and covering the trench with backfill topped off with some type of restoration (usually top soil and seed, or pavement structure). In this case, the open cut method was determined to be the most cost effective.

Water 260,000.00

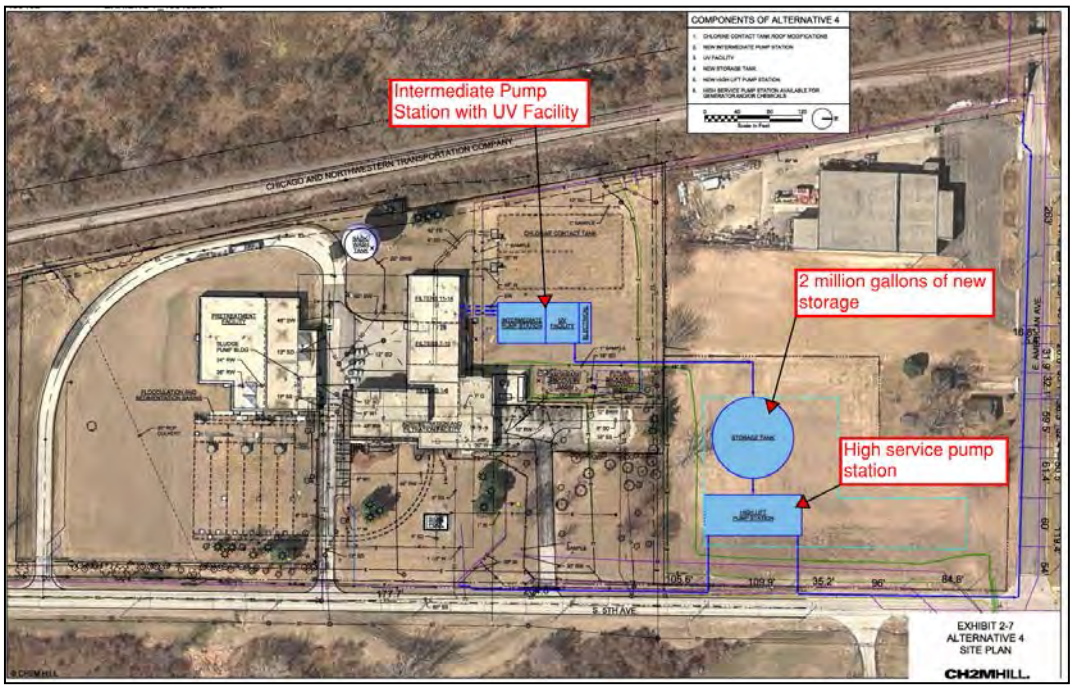
CT Tank Compliance Project 2,000,000.00

The purpose of this project is to construct improvements at the water treatment plant site to address WDNR code compliance issues with the existing chlorine contact (CT) tank. In 2008, the WDNR told the Oak Creek Water and Sewer Utility that all CT tank issues needed to be resolved within 10 years. That time is fast approaching.

The WDNR raised code compliance issues with the CT tank in December 2007, as outlined below:

- There is no means to take the CT tank down for a full inspection. A full drain-down inspection is required at least every 10 years.
- There is no overflow for the CT tank.
- The tank's existing base is below the ground water elevation.
- The pipes to and from the CT tank are not under continuous pressure higher than the groundwater elevation.
- The top of the CT tank is not 2 feet above normal ground elevation.
- The roof has no slope and likely no membrane.

In addition, the high lift pump station has a concrete wet well that is below groundwater and violates the same WDNR code as the CT tank. The WDNR also has recommended that plant storage and additional disinfection be considered at the plant.



Thus, the improvements under this project include a new intermediate pump station with UV disinfection, new storage (2 million gallons), and a new high service pump station. The project also will upgrade the aged electrical system. The electrical equipment is over 40 years old, does not meet all safety requirements and some spare parts are not available. New equipment is more reliable and safer, ensuring uninterrupted water service from this critical water supply asset.

Water 2,000,000.00

Sanitary Sewer Lining 700,000.00

This project consists of lining approximately 4,000' of sanitary sewer pipes throughout the system that have been identified to have structural defects in 3 or more portions of the pipe run. It also includes professional consulting services in the design of this project as well as a recommended capital improvement program over the next 5 years for sewer rehabilitation.

Using the Utility's POSM software, Engineering has determined that approximately $4,000,000 will be needed to rehabilitate the sanitary sewer system. This project addresses the most critical repairs needed.

Sewer 700,000.00

TOTAL CAPITAL IMPROVEMENT PROJECTS BUDGET **$ 4,055,000.00**

Water	3,355,000.00
Sewer	700,000.00
	$ 4,055,000.00

2016 CAPITAL BUDGET

	PROJECTS IN PROGRESS	Total Budgeted	Amount Remaining as of 12/31/15	Water	Sewer
13105	**Rowan Estates Water Main Relay**	2,500,000.00	258,993.38	258,993.38	-
14102	**Cedar Hills Subdivision Water Main Relay**	2,220,000.00	273,520.56	273,520.56	-
15101	**27th Street Hydrant Relocations and Water Main Relay**	1,500,000.00	724,734.80	724,734.80	-
15102	**Chlorine Contact Tank Design Services**	1,227,950.00	40,555.63	40,555.63	-
15103	**Elm Road Bypass**	30,000.00	30,000.00	30,000.00	-
16101	**East Forest Hill Avenue Water Main Design**	20,000.00	15,467.50	15,467.50	-
-	**5th Avenue Water Main Extension Design**	17,000.00	17,000.00	17,000.00	-
-	**Sanitary Sewer Spot Repairs**	200,000.00	189,698.39	-	189,698.39
-	**Fiber Optic Interconnect Project**	40,000.00	40,000.00	40,000.00	-
683	**Partnership for Safe Water Distribution Improvements**	40,000.00	40,000.00	40,000.00	-
688	**GIS Optimization Project**	10,000.00	10,000.00	10,000.00	-
690	**Elevator Repair - Plant**	20,000.00	20,000.00	20,000.00	-
691	**Laboratory Cabinet Replacement**	75,000.00	75,000.00	75,000.00	-
692	**Raw Water Pump #2 Rebuild**	35,000.00	35,000.00	35,000.00	-
693	**Chlorine Flow Meter Replacement**	10,000.00	10,000.00	10,000.00	-
	TOTAL PROJECTS IN PROGRESS BUDGET	**$ 7,944,950.00**	**$ 1,779,970.26**	**$ 1,590,271.87**	**$ 189,698.39**

PLANT OPERATIONS
November, 2015

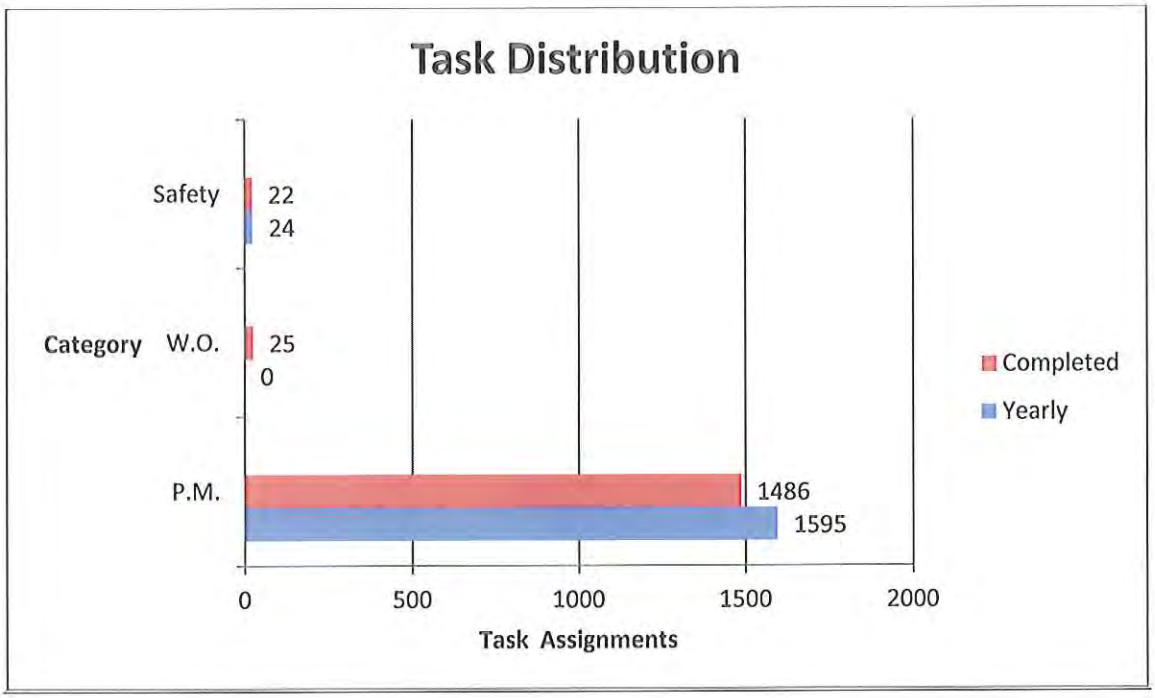
PUMPAGE REPORT	2015 (pumpage in gallons)	2014 (pumpage in gallons)	Percentage of Change
Monthly pumpage	205,531,000	189,412,000	+9.0
Monthly average day	6,851,000	6,314,000	+9.0
Monthly peak day	7,580,000 (11/8/15)	8,710,000 (11/15/15)	-13.0
Yearly pumpage	2,543,669,000	2,473,316,000	+3.0
Yearly average day	7,616,000	7,405,000	+3.0
Yearly peak day	13,150,000 (7/31/15)	11,450,000 (5/24/15)	+15.0
West zone pumpage	84,200,000	97,840,000	-14.0

WATER QUALITY REPORT	Raw Water	Finished Water
Average free chlorine		1.52 mg/l
Total chlorine		1.67 mg/l
Average alkalinity	109.2 mg/l	110.2 mg/l
Average pH		
Average fluoride	0.10 mg/l	0.73 mg/l
Average turbidity	1.91 N.T.U.	0.04 N.T.U.
Average temperature	47.3°F	
Hardness	137 mg/l	137 mg/l

Preventative Maintenance Tasks: Staff completed 136 preventative maintenance tasks, 3 miscellaneous work orders, and 2 safety sessions during the month.

Operator Position: Operator Krueger passed the Wisconsin Department of Natural Resources Surface Water Operators test administered in November. Operator Krueger has also completed both volumes I and II of the University of California Sacramento water operator course. Training will now be focused on plant operations.

Main Break Study: Operator Muschinski attended a table top exercise on 11-12 validating the protocol and procedures to be used for main breaks that qualify for the Center for Disease Control study.


Task Distribution
Safety
22
24
Category
W.O.
25
0
P.M.
1486
1595
Completed
Yearly
0
500
1000
1500
2000
Task Assignments

DISTRIBUTION & COLLECTION OPERATIONS

November 2015

Water Main Breaks: In the month of November there were three water main breaks.
On November 8th there was a report of a possible main break at 8950 South Shepard Avenue. A crew was sent to repair a 16" DIP that had two blowholes. The main was installed in 1964.

On November 24th there was a report of a main break at West Rawson Avenue and South 10th Street on a 20" DIP installed in 1965. The crew was able to isolate the leak without taking anyone out of service. On the 25th Mid City Plumbing was called in to assist with the repair due to the location of the break. There was a blowhole in the pipe.

On November 30th a crew was sent to 305 East Forest Hill Avenue to repair an 8" CIP that had a circumferential break.

Lateral Repairs:
On November 6th at 6312 South 27th Street a crew was sent to insulate a lateral that will be running through a retaining wall.

Abandonments:
On November 10th a crew was sent to 240 East Puetz Road, Fire Station 1, to abandon the water and sewer laterals so the building could be razed.

On November 20th a crew was sent to 8620 South Howell Avenue, the Library, to abandon the water and sewer laterals so the building could be razed.

Fire Hydrant Repairs:
On November 24th a crew was sent to 8620 South Howell Avenue to repair a leaking hydrant.

Valve Repair:
On November 5th a crew was sent to 120 Parkway Estates Drive to repair a leaking valve. The packing and bonnet bolts were replaced.

Sewer Repairs:
On November 17th a crew was sent to 6700 South 27th Street to hydro excavate over the 8" sanitary sewer line that was damaged during construction. When exposed, it was found that Cable Com hit the main boring in new cables. Cable Com is responsible for the repair.

On November 23rd at South 27th Street and West Drexel Avenue the Utility inspected the repair of a 10" sanitary sewer that Cable Com had bored a fiber line through.

On November 13th at 6912 South 27th Street the camera crew found a hole in the 8" sanitary sewer caused during construction work on 27th Street. The Utility is investigating to see who is responsible for the damage.

Miscellaneous:
On November 3rd and 4th Utility Service Workers Allard and Volbrecht attended a recertification training for NASSCO held at the Utility.

On November 12 Distribution Manager Schwartz, Utility Service Workers Struebing and Flatow participated in a round table exercise for the CDC low pressure events study.

On November 19th Utility Service Workers Volbrecht and Pier attended a seminar on sewer cleaning in Germantown.

DISTRIBUTION GOALS 2015

JOB DESCRIPTION	GOALS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
Meter Testing & Exchanges	400	42	191	78	60	10	11	9	6	39	50	39		535
New Installs	30	4	5	4	5	5	2	5	8	3	4	4		49
Cross Connection Inspections	200	39	104	41	36	7	29	78	40	116	24	55		569
Industrial Inspections		8	-	-	28	74	69	80	43	59	34	65		460
Orin Replacements	200	36	118	41	37	4	30	126	75	144	54	62		727
														-
Water Main Repairs		-	2	3	1	2	2	2	1	-	1	3		17
Water Lateral Repairs		1	1	1		2	1	1	1	4				12
Annual Hydrant Flushing	2,128				1,525	498								2,023
Semi-annual Flushing	215										215			215
Quarterly Flushing	74x4	74						77						151
Flush Emergency Connections	3													-
Watermain Crossings	63	63												63
														-
Hydrant Greasing - Caps	2,128	50			1,525	498								2,073
Hydrant Greasing - Packing	200													-
Hydrant Painting	500					94	297	307	222					920
Winterize Hydrants	58											72		72
														-
Clean Sewers	185,000	14,194.0	6,458.9	3,208.4	9,624.0	14,428.8	29,426.0	13,839.0	29,024.0	47,799.0	21,261.0	12,200.0		201,463.1
Camera Sewers	185,000	15,009.0	6,458.9	3,208.4	10,725.0	15,037.0	13,747.0	6,012.0	23,149.0	7,460.0	22,642.0	12,517.0		135,965.3
Check Problem Sewers	4x34	34			28			34			28			124
Check Remote Sewer Mains	40													-
Check Remote Water Mains	25													-
Operate Valves	1,000	4	5	8	4	15	6	10	65	73	203	49		442
Valve Boxes Repaired or Adjusted					4	4	2	4	6	2		3		25
Stop Boxes Repaired or Adjusted					8	8	6	3	9	5	4	6		49
Concrete/Asphalt/Landscaping						8	8	4	-	9	5			34
Grout Manholes	25			27										27
Repair Manhole Chimneys									5	1				6
Cathodic Protection Tests	11										11			11
Winterize Equipment														0
Summerize Equipment					1									1
Run All Equipment					10									10
MMSD Annual CMOM Report							Done							0
DNR eCMAR							Done							0
														0

ADMINISTRATIVE OPERATIONS
November 2015

Capital Budget:
Accounting Supervisor Stenzel prepared the Utility's capital budget for 2016.

Delinquent Notices:
Senior Accountant Leranth compiled a list of delinquent accounts to be placed on the City of Oak Creek's tax roll. The following table summarizes the accounts rolled to the tax bills for 2015, 2014 and 2013:

	2015	2014	2013	Variance 2015 vs. 2014	Variance 2014 vs. 2013
Number of customers rolled	701	736	760	(4.76) %	(3.16) %
Amounts rolled:					
Water	$ 226,688	$ 230,492	$ 243,703	(1.65) %	(5.42) %
Water penalties	22,751	22,827	24,092	(0.33)	(5.25)
Total	249,439	253,319	267,795	(1.53)	(5.41)
Sewer	70,270	70,295	73,586	(0.03)	(4.47)
Sewer penalties	7,052	6,922	7,227	1.88	(4.22)
Total	77,322	77,217	80,813	0.14	(4.45)
Metro	89,785	85,917	96,057	4.50	(10.56)
Metro penalties	8,948	8,391	9,336	6.64	(10.12)
Total	98,733	94,308	105,393	4.69	(10.52)
TOTAL	$ 425,494	$ 424,844	$ 454,001	0.15 %	(6.42) %

Meetings:
Accounting Supervisor Stenzel attended the Wisconsin Water Association Leadership Meeting held in Oshkosh on November 6.

Workload:
Other administrative tasks included the following:

1. Added 3 customer accounts.
2. Billed 3,242 water customers and 3,366 sewer customers.

Gallons Billed (in thousands):

	YTD 2015	YTD 2014	YTD 2013	YTD 2012	YTD 2011	Average
Residential	382,748	373,423	386,804	452,859	423,541	403,875
Commercial	417,471	404,850	391,715	423,232	484,068	424,267
Industrial	359,439	372,230	359,707	336,481	283,596	342,291
Public Authority	21,475	16,877	20,178	23,048	18,628	20,041
Wholesale	1,203,894	1,119,490	1,156,845	1,272,908	1,199,888	1,190,605
Total	2,385,027	2,286,870	2,315,249	2,508,528	2,409,721	2,381,079
% Incr (Decr)	4.3%	-1.2%	-7.7%	4.1%		

New Customers:

	YTD 2015	YTD 2014	YTD 2013	YTD 2012	YTD 2011	Average
Residential	22	20	28	32	41	28.6
Commercial	10	1	1	5	2	3.8
Industrial	1	0	0	0	0	0.2
Public Authority	3	1	0	0	0	0.8
Wholesale	0	0	0	0	0	-
Total	36	22	29	37	43	33
% Incr (Decr)	63.6%	-24.1%	-21.6%	-14.0%		

New Commercial Customers (YTD 2015): Liberty Property LTD, Panda Express Inc. (2 accounts), Meijer (2 accounts), Centennial Park, vacant office space in strip mall at 2345 W Ryan Road (separated from one unit into two units), Water Street Brewery, Kwik Trip (2 accounts)

New Industrial Customers (YTD 2015): Stella & Chewy's

New Public Authority Customers (YTD 2015): Fire Station #1, City Hall (2 accounts)

ENGINEERING OPERATIONS
November 2015

CT Tank Compliance Project/2016 Water Treatment Plant Improvement Project
General Manager Sullivan, Utility Engineer Pritzlaff, and Tony Myers (CH2M), working with Attorney Lawrie Kobza, submitted direct testimony to the Public Service Commission of Wisconsin on November 3, 2015. The remaining timeline is as follows:

Date	Action
December 3, 2015	City of Franklin and PSC rebuttal testimony submittal to PSC
December 22, 2015	All parties surrebuttal submittal to PSC
December 29, 2015	All parties sur-surrebuttal submittal to PSC

The City of Franklin's rebuttal is scheduled for submittal on December 3, 2015 at which time Oak Creek Water and Sewer Utility will draft its surrebuttal. This testimony will lead to a PSC hearing to be held in January and decision in February that determines how the project will proceed.

General Manager Sullivan, Utility Engineer Pritzlaff, City Attorney Karls, Attorney Larry Haskin, Environmental Attorney Art Harrington, and the Utility's consulting representatives from CH2M and Ramboll Environ met with WDNR representatives from the Safe Drinking Water Loan Program and Site Remediation group in order to determine WDNR requirements and a final course of action in the handling of contaminated materials at the site of the proposed water treatment plant improvements. The participation of these parties was critical to determining the schedule moving forward.

Safe Drinking Water Loan representatives indicated that the deadline for submittal of all project documentation is the end of March, which will facilitate a loan closing in June of 2016. This decision has accelerated the project by approximately 30 days.

The WDNR Site remediation representatives indicated that because the project requires approximately 13,000 cubic yards of material to be excavated as part of the project, its handling and disposal as contaminated materials would be an acceptable interim solution. Thus the project schedule can remain intact. However, they did express concern about contaminated materials elsewhere on the site in addition to the ground water in the area and its migration. Consequently, the Utility will have to install groundwater monitoring wells to analyze its chemical composition on a more long term basis and the site will remain open pending a full remediation analysis by the WDNR.

Attorneys Haskin and Harrington will concentrate their efforts on determining a path to Utility reimbursement for contaminated materials handling, so long as there is a reasonable chance of success in this area. In order to be successful, the Utility must provide some documentation as to who dumped the contaminated materials at the site in the first place. If that can be determined, the Utility will seek reimbursement from the responsible party.

Thus the Utility is proceeding with its final design and will advertise the project at the end of January 2016 with an anticipated construction start the second week of June 2016.

27th Street Hydrant Relocations and Water Main Relay Project

The bulk of the work for this project has been completed. All water main has been relayed, and hydrants moved according to the new 27th Street alignment. The only remaining work to be done includes lowering a few fire hydrants in order to bring them to the proper grade.

Memorandum

To: OCWSU Commissioners

CC: OCWSU Staff

From: Patrick Francis

Date: 12/2/2015

Re: Chemical Bids

The chemical quotes for 2016 are as follows:

Coagulant	**H1050A**
2016 Bid	***$0.2405/lb****
2015 Bid	$0.2470/lb
Est. Usage	400,000 lbs
Est. Cost	$96,200.00
Vendor	ChemTrade Chemicals

Disinfectant	**Sodium Hypochlorite**
2016 Bid	**$0.06990/lb***
2015 Bid	$0.07300/lb
Est. Usage	600,000 lbs
Est. Cost	$41,940.00
Vendor	Hydrite

Fluoride	**Hydrofluosilicic Acid**
2016 Bid	**$0.2290/lb***
2015 Bid	$0.2340/lb
Est. Usage	95,000 lbs
Est. Cost	$21,755.00
Vendor	Alexander

Potassium Permanganate	Carus Free Flowing
2016 Bid	**$3.55/lb**
2015 Bid	$3.55/lb
Est. Usage	7,000 lbs
Est. Cost	$24,850.00
Vendor	Hawkins Chemical

Milport low bid @ $1.99/lb not recommended, product impurities

Powdered Activated Carbon	
2016 Bid	***$1.083/lb****
2015 Bid	$1.04/lb
Est. Usage	50,000 lbs
Est. Cost	$54,150.00
Vendor	Hydrite

*Low Bid

Only Bid

Amendment Number 1 to the Professional Services Agreement with CH2M for Construction Administration of the CT Tank Complinace Project

Date: December 8, 2015

RECOMMENDATION: **That the Commission consider a motion to authorize the Utility Engineer to amend the professional services agreement with CH2M in order to provide construction administration services for the CT Tank Compliance Project in the not to exceed amount of $2,200,000.00.**

Construction administration services includes providing resident project representatives for inspection for over two years, contaminated soils handling training, shop drawing review, SCADA programming, and overall construction administration for the project. Typically, engineering fees for design, bidding, and construction administration are between 15% and 25% of the total project construction cost. In total, the engineering fees for this project will be approximately 13% of the total construction cost ($26 million).

In order to receive funding for the inspection portion of the project from the Safe Drinking Water Loan Program (SDWLP), the Utility is required to provide a not to exceed amount, approved by the Water and Sewer Utility Commission, to the State of Wisconsin Department of Natural Resources. This amount will then be incorporated into the total loan amount at closing.

Amendment Number 3 to the Professional Services Agreement with Ramboll Environ (CT Tank Compliance Project)

Date: December 8, 2015

RECOMMENDATION: **That the Commission consider a motion to authorize the Utility Engineer to amend the existing professional services agreement with Ramboll Environ in order to provide for additional environmental analysis of the site required by the WDNR Site Remediation group for the CT Tank Compliance project in the not to exceed amount of $18,000.**

Based on requirements set forth by the WDNR Site Remediation group, the Utility is required to provide additional soil borings and laboratory analysis to determine the composition of the soils. Additionally, the Utility is also required to construct groundwater monitoring wells in order to determine the ground water composition and its general direction of flow over a longer period of time.