



# SAN JACINTO RIVER AUTHORITY

## Woodlands Division MUD Report for December 2018

### WASTEWATER

Parameter	WWTF No. 1 (Outfall 001)		WWTF No. 2		WWTF No. 3	
	<u>Permitted</u>	<u>Reported</u>	<u>Permitted</u>	<u>Reported</u>	<u>Permitted</u>	<u>Reported</u>
Flow (avg.-high; MGD)	7.8 avg.	3.572-8.282	6.0 avg.	4.068-6.057	0.9 avg.	0.503 – 0.919
2-Hour Peak Flow (MGD)	18	17.900	15.56	11.160	3.6	1.800
CBOD5 (30 Day avg.; mg/l)	10	2.5	10	2.1	10	3.6
TSS (30 Day avg.; mg/l)	15	2.4	15	2.3	15	5.7
NH3-N (30 Day avg.; mg/l)	3	0.2	2.6	0.2	3	0.1
pH (min-max)	6.0 - 9.0	6.59-7.15	6.0 - 9.0	6.32-7.39	6.0 - 9.0	7.04-7.61
DO (minimum; mg/l)	4.0 (min)	7.75	4.0 (min)	5.73	6.0 (min)	7.89
Disinfection (max Cl2; mg/l)	0.1 mg/l	0.02	NA	NA	1 mg/l (min) 4 mg/l (max)	1.00 3.97
E.coli (max col/100 ml)	200	2.0	200	17	399	2.0

\* No Excursions

### WATER

Parameter	November 2018		December 2018	
	Groundwater	Surface Water	Groundwater	Surface Water
Average (gal/day)	5,622,000	4,313,000	4,981,000	4,435,000
Minimum (gal/day)	3,880,000	3,928,000	1,718,000	3,521,000
Peak-day (gal/day)	7,356,000	4,929,000	7,780,000	5,153,000
Monthly (gallons)	168,669,000	129,397,000	154,418,000	137,477,000
Percentage GW/SW	56%	44%	52%	48%
Average Avail. Capacity	65,031,000	NA	65,524,000	NA
Rainfall (inches)	6.89		11.11	
Total Usage	298,066,000		291,898,000	
Fiscal year-to-date blend	53% GW / 47% SW			

*(Total water usage decreased 12.26% compared to December 2017)*

Cumulative Total Water Usage: 1,408,291,000 gallons - December 2018

### ENVIRONMENTAL

Parameter	November 2018
Current Total Permits	461
Interceptor Inspections	135
Enforcement Action Taken	10

**PROJECT UPDATE**  
(As of December 31, 2018)

Item	Project Description	Project Highlights	Budget	Contract Amount	Total Contract Amount to Date *	Invoiced to Date	Estimated Completion Date
1	WPSP1 – Wastewater Treatment Facility No. 1 Solids Processing  <u>Bond funded</u>	The contractor was given Notice to Proceed on November 5, 2018. The contractor has been working to demolish the existing structures for the future building location, install valve pipe and piping, and install underground piping and duct banks.	Design \$630,000  Construction \$5,519,000	Design \$585,874  Construction \$5,179,793	\$5,765,667	\$638,412	Jul 2019
	WT1DW – Wastewater Treatment Facility No. 1 Additional Sludge Dewatering Unit  <u>Capacity funded</u>	This project will be completed in conjunction with WPSP1 (above). WT1DW is a capacity project providing the additional belt filter press for the project.	Design \$16,721  Construction \$1,190,000	Design \$17,208  Construction \$937,000	\$954,208	\$17,208	
2	WW1701 – Wastewater Treatment Facility No. 2 Disinfection System Improvements	The Contractor continues to complete the process of drying in the building and installation of interior components. Progress Meeting No. 13 will take place on January 8, 2018.	Design \$448,000  Construction \$6,500,000	Design \$439,245  Construction \$6,327,404	\$6,766,650	\$5,859,424	Jan 2019

Item	Project Description	Project Highlights	Budget	Contract Amount	Total Contract Amount to Date *	Invoiced to Date	Estimated Completion Date
3	WWFM5R – Lift Station No. 5 Force Main Replacement	Design of the project is ongoing. The consultant completed the 90% design on May 07, 2018. The 100% design submittal is underway; however, final completion is pending easement acquisition along McDonald Road. Easement acquisition is in progress. Completion of easement acquisition is anticipated to be complete by early summer 2019.	Design \$688,000  Construction \$4,510,000	Design \$527,496  Construction TBD	\$527,496	\$233,106	Mar 2020
4	WW1603 – Lift Station No. 5 Rehabilitation	Substantial Completion was awarded on June 5, 2018. The contractor has completed all punch list items. Final Completion issued December 31, 2018. Currently archiving items for closeout.	Design \$232,000  Construction \$1,100,000	Design \$50,130  Construction \$1,052,952	\$1,103,082	\$1,091,467	Aug 2018
5	WWBBGM – Rehabilitation of Bear Branch Gravity Main  <u>Bond funded</u>	The design consultant provided the 60% design submittal on August 2, 2018. Contractor access routes and construction staging sites have been identified and developed, and are being discussed with landowners. Also, have been coordinating with Cochran’s Crossing Village Association.	Design \$1,882,000  Construction \$16,299,000	Design \$994,459  Construction TBD	\$994,459	\$370,308	Apr 2020
6	WWF3LS – WWTF No. 3 Lift Station Rehabilitation	Electrical change-over is complete and Lift Station was placed into service on December 19, 2018. Partial Substantial Completion was also issued the same day and punch list items were generated.	Design \$237,000  Construction \$1,577,000	Design \$126,366  Construction \$534,711	\$661,077	\$420,874	Jan 2019

Item	Project Description	Project Highlights	Budget	Contract Amount	Total Contract Amount to Date *	Invoiced to Date	Estimated Completion Date
7	WWLS4R – Lift Station No. 4 Replacement (Crystal Lake Lane)	Contractor has completed the deep excavation and the wet well casing is at final elevation. Interior foundation of the wet well is complete. Contractor starting on at-grade foundations, mechanical, and plumbing installations.	Design \$266,000  Construction \$1,459,000	Design \$235,155  Construction \$1,265,827	\$1,500,982	\$924,642	Mar 2019
8	WWLS23 – Lift Station No. 23 Rehabilitation (Baker Hughes)	Diversion pumping is ongoing while contractor completes final electrical installations and SCADA equipment installations.	Design \$68,000  Construction \$372,000	Design \$103,012  Construction \$493,840	\$596,852	\$442,543	Feb 2019
9	WA17WL – Water Distribution – Looping Water Mains	Contractor has completed the installation of the water line along Ken Lakes Drive, partial substantial completion was given for this segment on August 28, 2018. Contractor has completed the work water line replacement work along Research Forest Drive, and a partial substantial completion was given for this work on October 9, 2018. Contractor has now completed the installation of the water line along Chipwyck Way/FM2978. A partial substantial completion has yet to be scheduled for this segment due to the holidays and weather/access. The replacement of the 12-inch water line crossing Panther Branch at Grogan’s Point has been added to this project. Design documents were completed and the project	Design \$198,000  Construction \$972,000	Design \$47,879  Construction \$387,599	\$435,478	\$318,376	Feb 2019

Item	Project Description	Project Highlights	Budget	Contract Amount	Total Contract Amount to Date *	Invoiced to Date	Estimated Completion Date
		advertised on December 14, 2018. The pre-proposal meeting was held on December 27, 2018 and proposals are scheduled to be received on January 15, 2019.					
10	WW17GR – Gravity Main Rehabilitation – Segments 35, 50, and 50A	Notice to Proceed was issued to contractor on December 17, 2018. Contractor has started mobilizing materials and equipment. Contractor to start video inspection of Segment 35 starting at The Woodlands Golf Course for the first phase of work.	Design \$60,000  Construction \$1,328,000	Design \$61,917  Construction \$1,277,079	\$1,338,996	\$61,396	Jul 2019
11	WWF1AB – WWTF No. 1 Replacement of Aeration Basin Nos. 1 and 2 <u>Bond funded</u>	The preliminary design kickoff meeting was held on April 12, 2018, and the design consultant was given Notice to Proceed on April 13, 2018. Preliminary design is ongoing. Currently, options for design are being evaluated and discussed.	Design \$1,191,000  Construction \$5,279,000	Design \$500,863  Construction TBD	\$500,863	\$224,327	Sep 2020
	WW1AB – WWTF No. 1 Replacement of Aeration Basin Nos. 1 and 2 <u>Capacity funded</u>	This project will be completed in conjunction with WWF1AB. WW1AB is a capacity project providing additional treatment capacity for the project.	Design \$117,000  Construction \$1,920,000	Design TBD  Construction TBD	\$0	\$0	

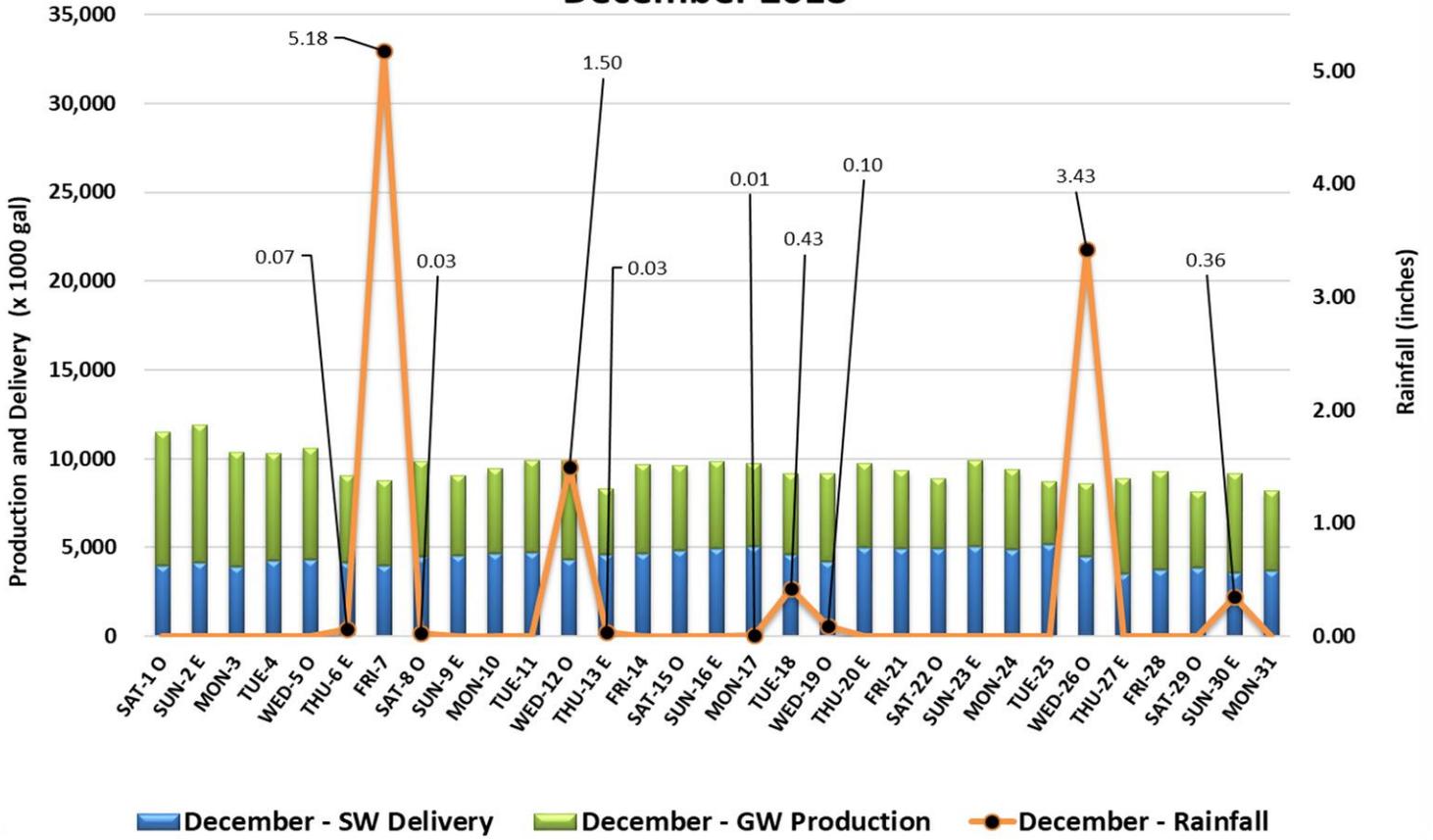
Item	Project Description	Project Highlights	Budget	Contract Amount	Total Contract Amount to Date *	Invoiced to Date	Estimated Completion Date
12	WARB34- Water Well No. 34 Inspection	The Contractor has removed all well components and will take to their facility for further disassembly and inspection.	Design \$0 Construction \$300,000	Design \$24,240 Construction \$29,115	\$53,355	\$34,344	Jan 2019
13	WA17SI – Water System Security Improvements	This project will enhance security for the Woodlands Division water facilities. Work at the water facilities is on-going and should be completed by early 2019.	Design \$0 Construction \$673,000	Design \$0 Construction \$673,401	\$673,401	\$535,051	Jan 2019
14	WWSES – Sanitary Sewer Transmission Assessment and Renewal (SSTAR) Program – Phase I Project	This Phase I project consists of planning-level engineering to identify and investigate areas of excessive infiltration and inflow in the wastewater collection system, while conducting a condition assessment of the collection system. Work is underway. The consultant has nearly completed field investigation to verify locations for flow monitoring equipment. The remainder of field investigation will be completed in January.	Planning \$1,510,000	Planning \$1,758,675	\$1,758,675	\$0	Aug 2020
15	WW2MCC - Wastewater Treatment Facility No. 2 Plant Process Water (PPW) Motor Control Center (MCC) Replacement	This project includes the engineering services for the final design and procurement assistance for WWTF No. 2 PPW MCC replacement. The Consultant provided the 60% submittal package for SJRA review and comments.	Design \$64,000 Construction \$322,000	Design \$52,151 Construction TBD	\$52,151	\$29,095	Sep 2019

Item	Project Description	Project Highlights	Budget	Contract Amount	Total Contract Amount to Date *	Invoiced to Date	Estimated Completion Date
16	WA4GT2 - Water Plant No. 4 Ground Storage Tank No. 2	This project is for the construction of a second ground storage tank at Water Plant No. 4. The 30% design submittal was received on December 19, 2018 and is under review by SJRA.	Design \$620,000  Construction \$3,413,000	Design \$244,436  Construction TBD	\$244,436	\$0	Dec 2020
17	WW19LS – Lift Station No. 13 Rehabilitation	This project is for the rehabilitation of Lift Station No. 13. Notice to Proceed for preliminary design was given to Kimley-Horn on November 5, 2018. A kickoff meeting was held on November 8, 2018. Work is underway. Kimley-Horn provided a draft Preliminary Engineering Report on December 31, 2018.	Design \$266,000  Construction \$1,460,000	Design \$74,633  Construction TBD	\$74,633	\$4,166	Sep 2020
18	WA19WR – Rehabilitation of Water Well Nos. 25 and 31	This project was designed in-house by SJRA to rehabilitate these two water wells. This project will not increase the capacity of the wells, but repair and replace worn or damaged components. Also, the well pump assemblies will be lowered by 100 feet at both locations. The project advertised for construction on December 21, 2018.	Design \$20,000  Construction \$440,000	Design \$42,280  Construction TBD	\$42,280	\$0	Oct 2019

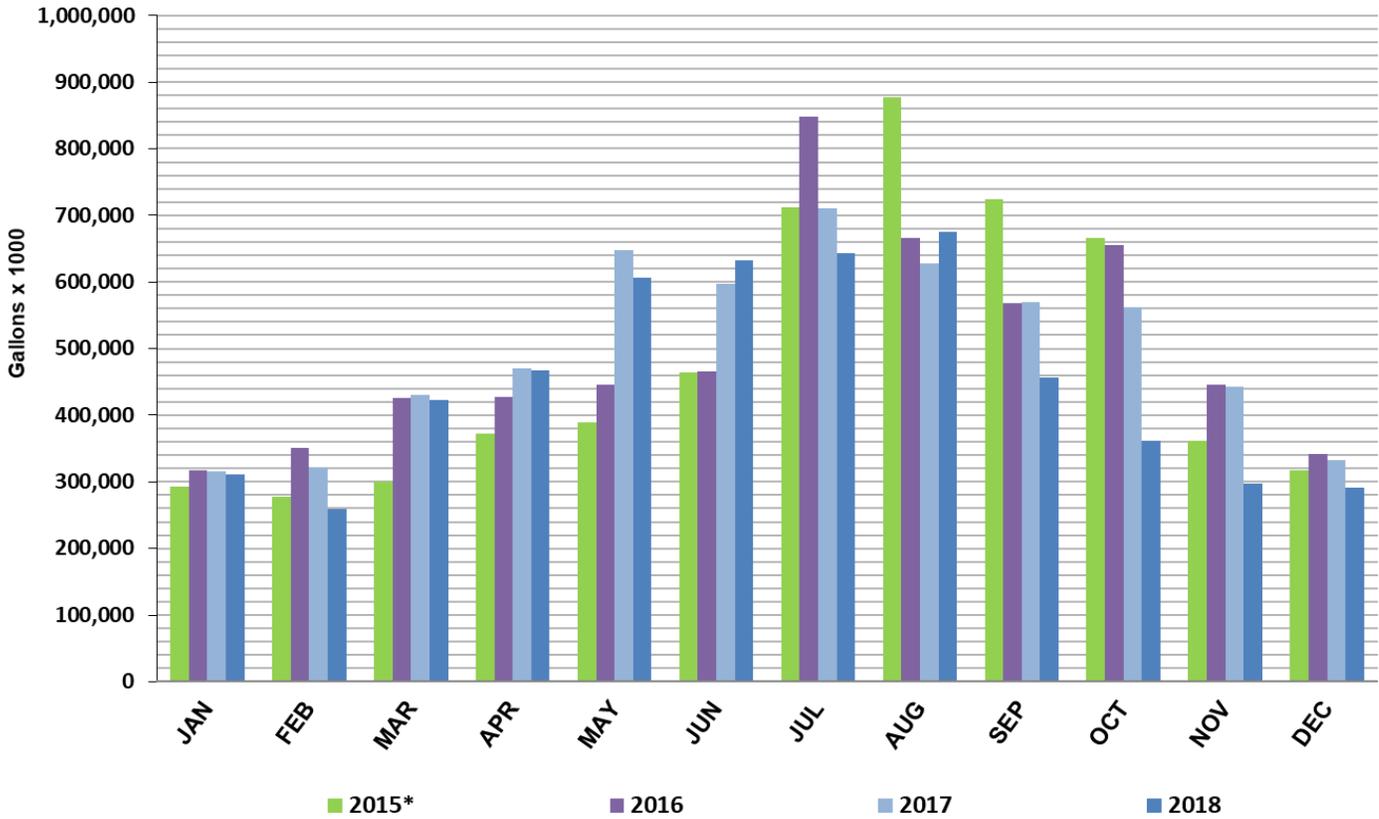
\* Note: Total Contract Amount to Date also includes costs of public advertisement for construction bids/proposals.

Project is complete and no further invoices are anticipated.

## Woodlands Production, Delivery and Rainfall December 2018



## Woodlands Production and Delivery 2015 - 2018



\*Introduction of surface water Sep 2015