



# Raw Water Enterprise Newsletter

## 3rd Quarter 2018 Newsletter

### San Jacinto River Authority

#### Lake Conroe & Highlands Division

## *Lake Conroe – Emergency Action Plan Tabletop Exercise*

On April 23, forty-six local and State officials representing a wide variety of emergency management and engineering personnel in both Harris and Montgomery Counties convened at the SJRA Lake Conroe campus for a “Tabletop Exercise” of the Lake Conroe Dam *Emergency Action Plan* (EAP). TCEQ, the State agency responsible for regulating dam safety in Texas, requires that this exercise be conducted at least once every five years. The excellent turnout for this year’s exercise was a clear reflection of the post Hurricane Harvey climate that we all live in now.

So what exactly is a Tabletop Exercise? FEMA calls it a “...focused practice activity that places participants in a simulated situation requiring them to function in the capacity that would be expected of them in the real event.” A number of goals were set for the exercise, including familiarizing relevant emergency personnel with the plan, its layout, content, and the responsibilities inherent within. The exercise also allowed for a discussion of general problems with the plan and brought to light a few changes that could be made to improve the plan.

This EAP, unlike many more traditional multi-hazard emergency response plans, has only one

fundamental goal – to prepare emergency officials to better respond and to reduce the risk for potential failure of the Lake Conroe dam. As such, the EAP identifies an expedited, effective response to situations that, if they ever occurred, could eventually result in dam failure. The EAP also clearly delineates the responsibilities of SJRA staff and area emergency management personnel who must respond during such events. SJRA staff must focus on identifying issues that might lead to eventual dam failure, mitigating them to the extent possible, and notifying key emergency management personnel of the risks. These emergency management agencies are then responsible for all public notifications, road closures, evacuations, and any other actions that may be necessary to protect the public.

It is important to note that dam failure is a highly unlikely event, especially for a large well-maintained facility like the Lake Conroe dam. But because the consequences of such a failure are so large, an EAP is required by the TCEQ for high-hazard facilities such as Lake Conroe. Two breach scenarios are identified in the EAP, 1) a so-called “Sunny Day Breach” where geotechnical or structural failure of the dam occurs when the lake is at normal pool and there

is no rain in the area; and 2) a “PMF Breach” where dam failure occurs under the most intense area rainfall conceivable over the entire watershed and when the lake is at its maximum storage elevation. Each of these two scenarios have different inundation areas downstream of the dam and are mapped accordingly.

Overall, the Tabletop Exercise was successful at achieving its objectives and strengthening the understanding and response capabilities of the emergency personnel who participated. The exercise fostered a number of lively and useful discussions that resulted in various follow-up actions that improved the EAP for Lake Conroe. SJRA is grateful for the participation and cooperation of the many emergency response agencies from this area including:

- Atascocita Fire Department
- City of Conroe Fire Department
- City of Conroe Public Works Department
- City of Humble
- Harris County Flood Control District
- Harris County Office of Homeland Security and Emergency Management
- Montgomery County Office of Homeland Security and Emergency Management
- Montgomery County Precinct 1 Constable’s Office
- National Weather Service
- Texas Commission on Environmental Quality
- Texas Department of Emergency Management
- Texas Department of Transportation
- Woodlands Fire Department



## Highlands - South Canal Improvements

Major improvements to the South Canal to add hydraulic capacity and increase reliability of the system have recently been completed. The SJRA design team finished the design of the improvements in late 2016 and a construction contract was awarded to Lecon, Inc. in February 2017 for over \$7,000,000. A short fourteen months later, the project was declared substantially complete on April 17, 2018, which allowed our major industrial clients on this system to increase their water demands to meet recent process expansion of their facilities.

Prior to these improvements, initial assessment and planning activities had identified multiple problems and bottle-necks this length of the canal system which limited its capacity and reliability, including canal levees with erosion, steep slopes, local slides, inadequate riprap, nutria damage, and significant siltation along various reaches of the canal. Ultimately, the final design of the project identified approximately 10,800 linear feet of improvements needed along the South Canal system, including replacement of various aged siphons and expansion of the canal/levee system in multiple areas. As a result of these improvements, the hydraulic capacity of the canal was increased by 10-20% and the potential for future operational difficulties was significantly reduced. These improvements were all completed within budget and on schedule.



*Above: Original Siphon No. 28 looking upstream toward the South Canal Transfer Pump Station*



*Above: New Siphon 28 structure looking downstream towards Jones Road*



## Raw Water Supply Master Plan-New Water Supply Strategies

The SJRA is currently in the process (and is now nearing completion) of a new Raw Water Supply Master Plan (RWSMP) that will guide the Authority efficiently and effectively meeting long-range water supply needs in Montgomery County and in the Highlands area of East Harris County. The transfer of raw water from Lake Livingston to Lake Conroe was discussed in the FY 2018 Second Quarter edition of this newsletter. This article discusses a few of the other selected strategies identified in the draft RWSMP and provides their projected unit cost of supply from these projects in 2017 dollars. (For reference purposes, the current SJRA system rate for raw water is approximately \$ 140.00 per acre foot and is projected to require an increase for calendar year 2019 to approximately \$151.50 per acre foot.)

### Catahoula Aquifer Supply

The Catahoula Aquifer is considered to be a very desirable option for future water supplies in Montgomery County. This aquifer is currently unregulated and is located in Montgomery County at elevations almost ½ mile below ground surface; therefore, is not considered part of the regulated Gulf Coast aquifer, which includes the Chicot, Evangeline, and Jasper formations. As a result of regulations restricting expansion of Gulf Coast Aquifer use, there are already approximately fifteen new active Catahoula Aquifer wells operating in Montgomery County. Unfortunately, the Catahoula Aquifer experiences highly variable amounts of salinity depending on geographical location, with salinity typically lowest in the



*Above: Existing Catahoula Aquifer wells in Montgomery County (excerpt from DRAFT Master Plan Appendix*

northwest areas of the county with levels generally considered potable and increasing greatly from 2 – 10 times potable levels as one moves into the south and southeast areas of the county.

As a result, most existing Catahoula wells are blended with less-saline water from existing Gulf Coast Aquifer wells in order to achieve an acceptable quality. Catahoula water also presents other water quality challenges, including high corrosion potential due to low calcium hardness, high total dissolved solid concentrations for specific metals which can cause taste and odor problems, as well as high temperature (up to approximately 110 degrees Fahrenheit in some areas), all of which can require use of cooling towers and other treatment measures at the well head. Despite these challenges, Catahoula Aquifer water is considered a viable potential future source of water for both the SJRA and other water supply entities in Montgomery County with a maximum additional supply from this source estimated to be 10,500 acre-feet /year at an approximate cost of \$520 per acre foot.

### Return Flows

Another viable long-range water supply strategy in both Montgomery County and the SJRA's Highlands service area is that of capturing "return flows" from permitted wastewater treatment facilities. Development activities throughout the state, including in the San Jacinto River Basin, will generate significant volumes of excellent quality water discharged into receiving streams from advanced wastewater treatment systems, which can be

permitted as a future water supply. The process for obtaining these return flows for use as a water supply will consist primarily of permitting and/or contracting activity, and in some cases will require additional infrastructure to convey the supply to SJRA's desired storage location. This strategy is anticipated to eventually provide in the year 2070 up to 23,600 acre-feet/year of water to SJRA's Montgomery County service area, and up to approximately 135,000 acre-feet/year to SJRA's Highlands service area. Since most of the proposed Montgomery County supply is located downstream of Lake Conroe, the RWSMP and is proposes to capture the flows near the Lake Creek confluence with the West Fork San Jacinto and pump the water via pipeline back to Lake Conroe for storage. The estimated cost of supplies from the return flow strategy for Montgomery County is approximately \$313 per acre foot for Montgomery County and a likely lower cost for the Highlands service area.



*Above: The Woodlands Wastewater Treatment Plant 1*



## Water Conservation

Municipal water conservation is a key strategy in the RWSMP due to its relative ease in implementation and low cost. A substantial amount of conservation is anticipated to occur in the future with no action required by SJRA due to national and state regulations mandating future use of more water-efficient plumbing fixtures, appliances, etc. This “baseline” conservation reduces water supply demands beyond the historical household usage levels at no cost to SJRA. In addition to this baseline conservation, SJRA has an option to actively promote additional water conservation activities in order to achieve further demand reduction. These additional water conservation activities include reduction of water loss by repairing and/or replacing leaking pipes due to aged infrastructure, development and distribution of public education and school curriculum related to water conservation, encouraging utilities to adopt outdoor landscape watering programs, and other similar active measures to achieve further reductions in water demand.



*Above: Discussion regarding conservation around Lake Conroe during a School Tour*

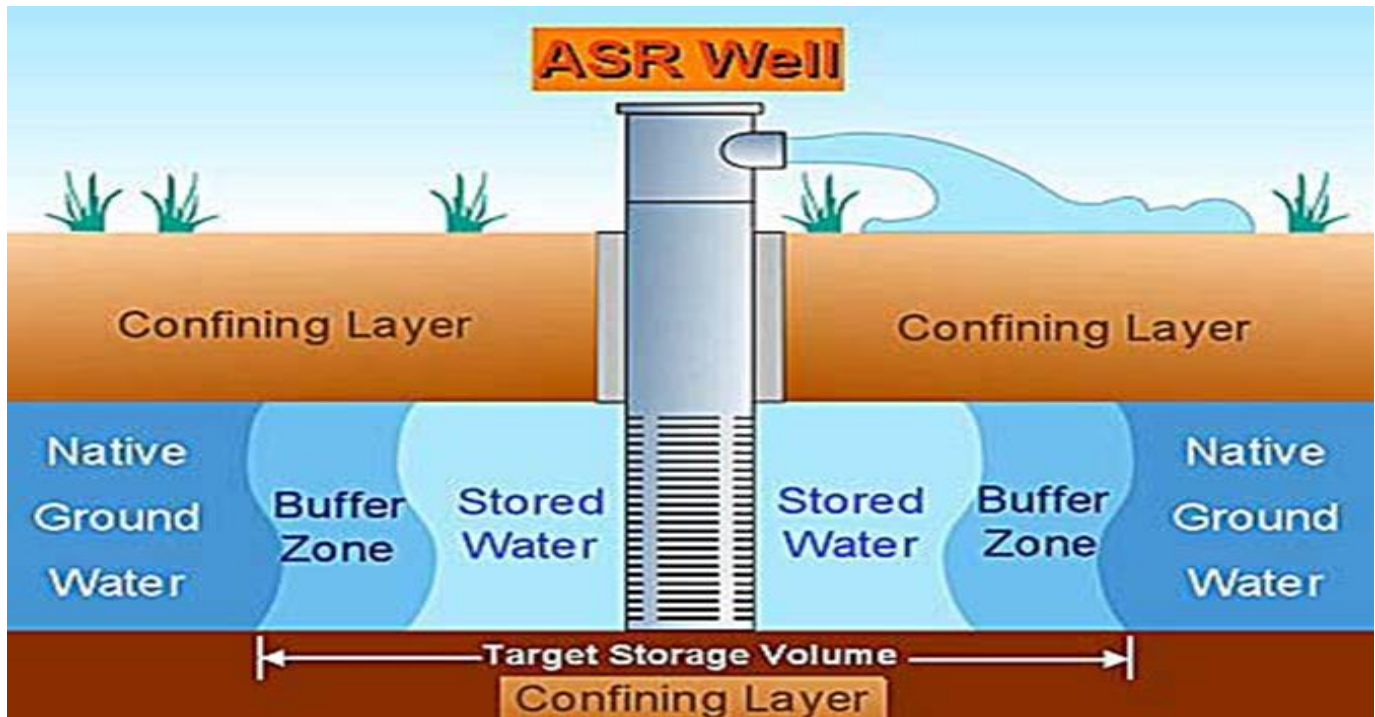
Overall, by reducing demands, it is anticipated that water conservation as a whole could provide approximately 8,600 acre-feet/year of additional water supply by the year 2020, and approximately 43,600 acre-feet/year by 2070 at a maximum cost of approximately \$200 per acre foot.

## Aquifer Storage and Recovery

The final water supply strategy recommended in the RWSMP is aquifer storage and recovery (ASR). ASR, a relatively new strategy in Texas, consists of pumping treated water into the Gulf Coast Aquifer in times when excess water is available (such as during cold or rainy months when water demands are low, or during high rain periods), and subsequently recovering it for use (i.e. pumping it back into the water system) when demands are greater (i.e. during hot/dry months or during periods of drought). Challenges associated with ASR include the requirement that the water be treated to drinking standards prior to injection, potential loss recoverability of injected water with time (the longer the water is stored, the less efficiently it can be recovered), and the difficulties associated with capturing excess water supply and injecting it into wells. For example, regarding the latter challenge, while storm water runoff could be an excellent source of water for injection in an ASR well, in addition to treatment requirements, costly and extensive infrastructure could be required to capture, transfer, and inject that supply in a cost efficient fashion. ASR can provide benefits if utilized efficiently, including but not limited to long-term low-cost storage of water, small facility

footprints, reduced evaporation losses, potential to locate the supply where it is most needed. Multiple entities in Texas are currently using ASR successfully, including the City of El Paso, City of Kerrville, and the San Antonio Water System. However, this strategy is untested in

the Gulf Coast Aquifer at this time. Additional research will be needed to better evaluate how it will perform in this Montgomery County region. The cost and amount of supply that this strategy could provide for Montgomery County is unknown at this time.



*Above: Illustration of how an ASR well works (credit: [www.asrforum.com](http://www.asrforum.com))*

## Lake Conroe Campus Facilities Update

SJRA Raw Water Enterprise has recently begun several improvement projects at the Lake Conroe campus. These projects include the repair and rehabilitation of the west diversion channel; and improvements to the dam maintenance facilities and the campus access road.

### West Diversion Channel

The west diversion channel is a critical component of the underdrain and relief well system for the western dam embankment. Constructed in 1968, its primary function is to collect water from seepage relief wells located on the downstream side of the western portion of the dam as well as from the small offsite drainage areas located north and south along Highway 105.

Over time, the channel banks have deteriorated due to slope sloughing and erosion along this channel.

These issues are a result of the type of soils found in the area as well as the increase in storm water runoff from development within the drainage watershed. This project will address the channel banks most affected by erosion and prevent damages from extending beyond SJRA easement boundaries as we reduce future erosion potential. The project will make appropriate channel modifications, including installation of drainage infrastructure to reduce storm water impacts to the channel, flattening the channel embankment slopes to reduce water velocities, and installing stone riprap in selected areas. The SJRA staff is now working to complete the design and the project is expected to begin construction in the second half of 2018.



*Above: Location of Diversion Channel Repair*

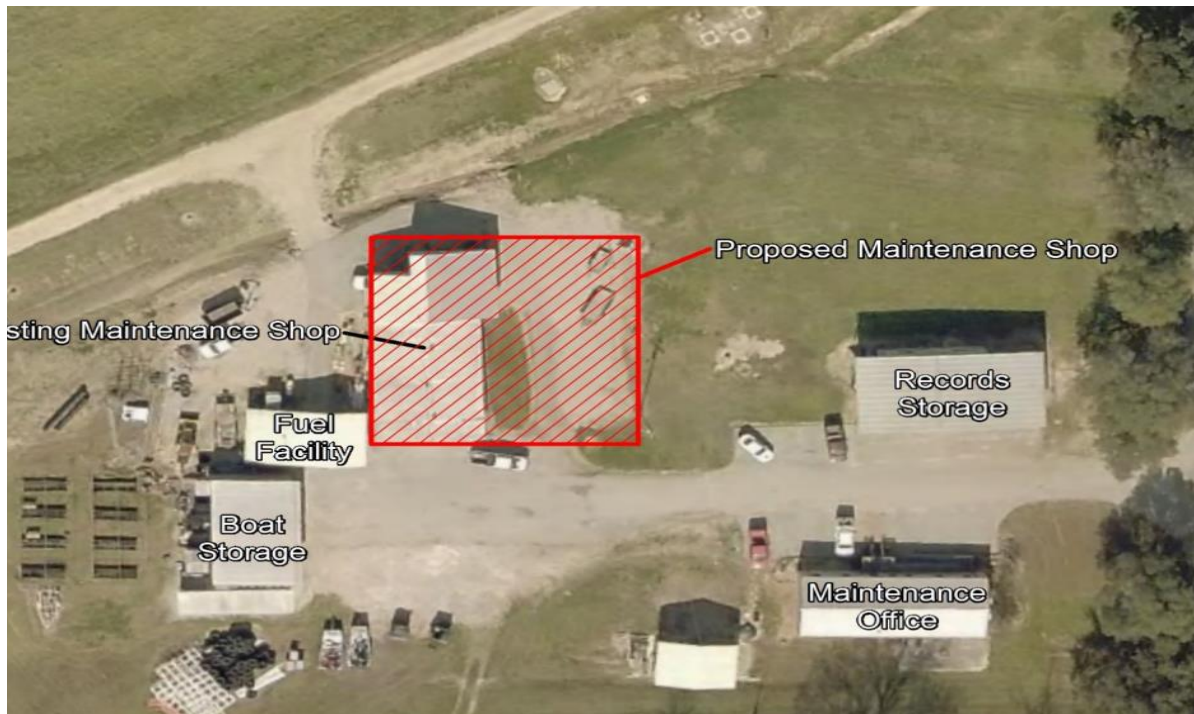


### Maintenance Building and Facilities

A new maintenance building is scheduled for construction in FY 2019 to be located near the existing Lake Conroe Division maintenance facilities, most of which were built during construction of the dam over 40 years ago. Improvements are needed to provide modernized maintenance, storage, and office space, as well as increased efficiency, safety, and capabilities. Some of the new facilities will house and maintain critical SCADA components related to the operation of the Lake Conroe Dam. Options for repurposing existing facilities are being investigated along with design of new facilities in order to determine the most efficient method of providing the needed improvements. Construction of all the improvements are currently scheduled to be completed by August of 2020.

### Campus Access Road

Concurrently, repairs to the campus access road are also under design. This project will include the milling of a large portion of the existing asphalt road and the overlay of a new asphalt surface, as well as spot repairs in areas where the road width needs to be increased. SJRA staff are working to finalize the design with construction anticipated to begin in the last quarter of 2018.



*Above: Location of Diversion Channel Repair*

## Raw Water Enterprise - Next Quarter Calendar

### June 2018

5 <sup>th</sup>	Bacteria Implementation Group (BIG) Meeting at HGAC in Houston
6 <sup>th</sup>	Region H Meeting at SJRA in Conroe
12 <sup>th</sup>	District Board of Directors Meeting at LSGCD in Conroe
13 <sup>th</sup>	Dam Safety Conference at Lonestar Convention Center in Conroe
13 <sup>th</sup> – 15 <sup>th</sup>	Texas Water Conservation Association Mid-Year Conference at La Torretta
28 <sup>th</sup>	Board of Directors Monthly Meeting at SJRA in Conroe

### July 2018

10 <sup>th</sup>	District Board of Directors Meeting at LSGCD in Conroe
11 <sup>th</sup>	Second Public Meeting on TWDB Phase 1 Flood Protection Planning Grant at Montgomery County Commissioners Court in Conroe
18 <sup>th</sup>	Regional Flood Management Council Meeting at HGAC in Houston
18 <sup>th</sup>	Galveston Bay Council Meeting at HGCSD in Friendswood
26 <sup>th</sup>	Board of Directors Monthly Meeting at SJRA in Conroe

### August 2018

2 <sup>nd</sup>	HGAC Natural Resource Advisory Committee Meeting at HGAC in Houston
14 <sup>th</sup>	District Board of Directors Meeting at LSGCD in Conroe
23 <sup>rd</sup>	Board of Directors Monthly Meeting at SJRA in Conroe

## Employee Service and Awards Recognition

### Five Years of Service

*David Parkhill – Raw Water Enterprise*

*Joseph Williard – Lake Conroe Division*

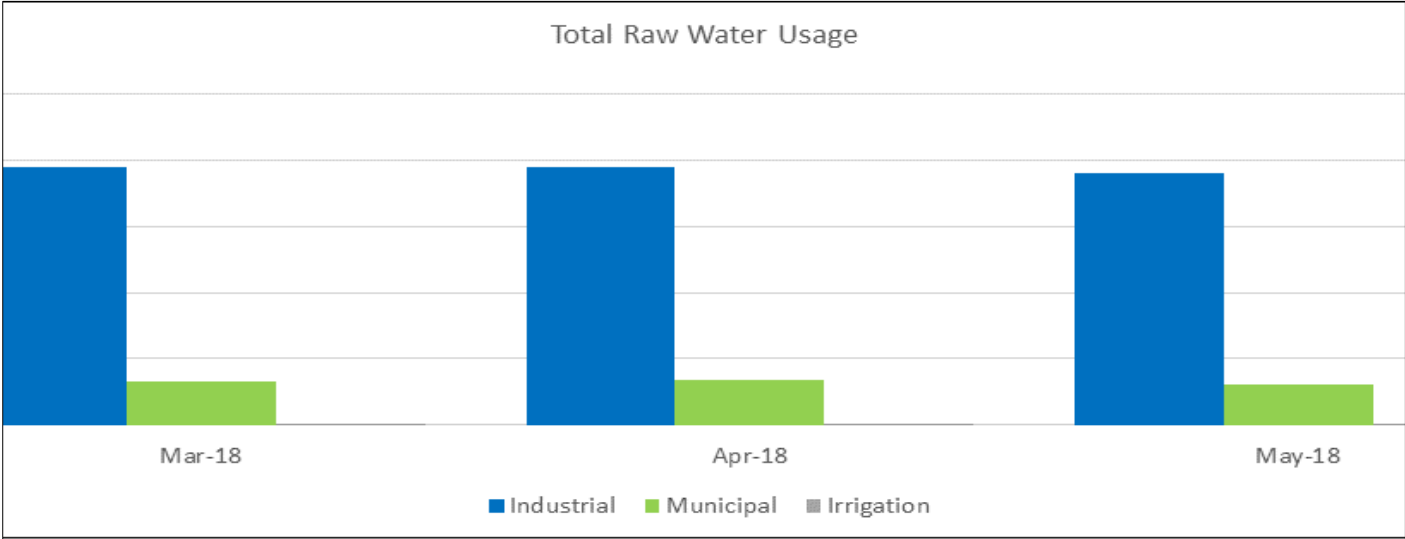
### Leadership SJRA Graduates

*Brian Foster – Lake Conroe Division*

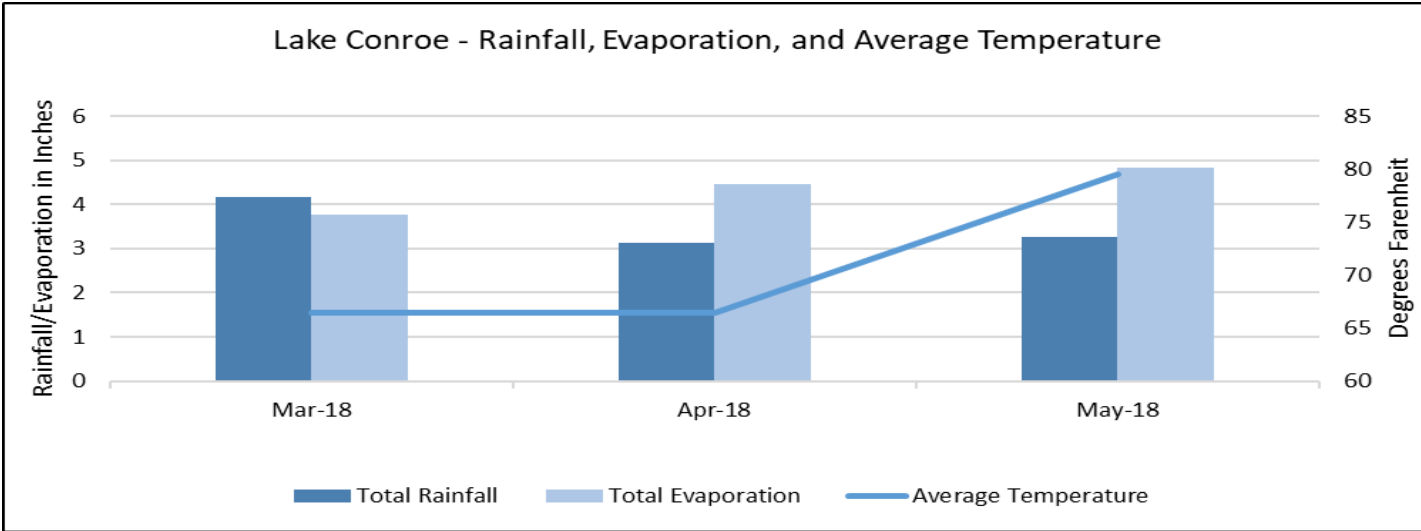
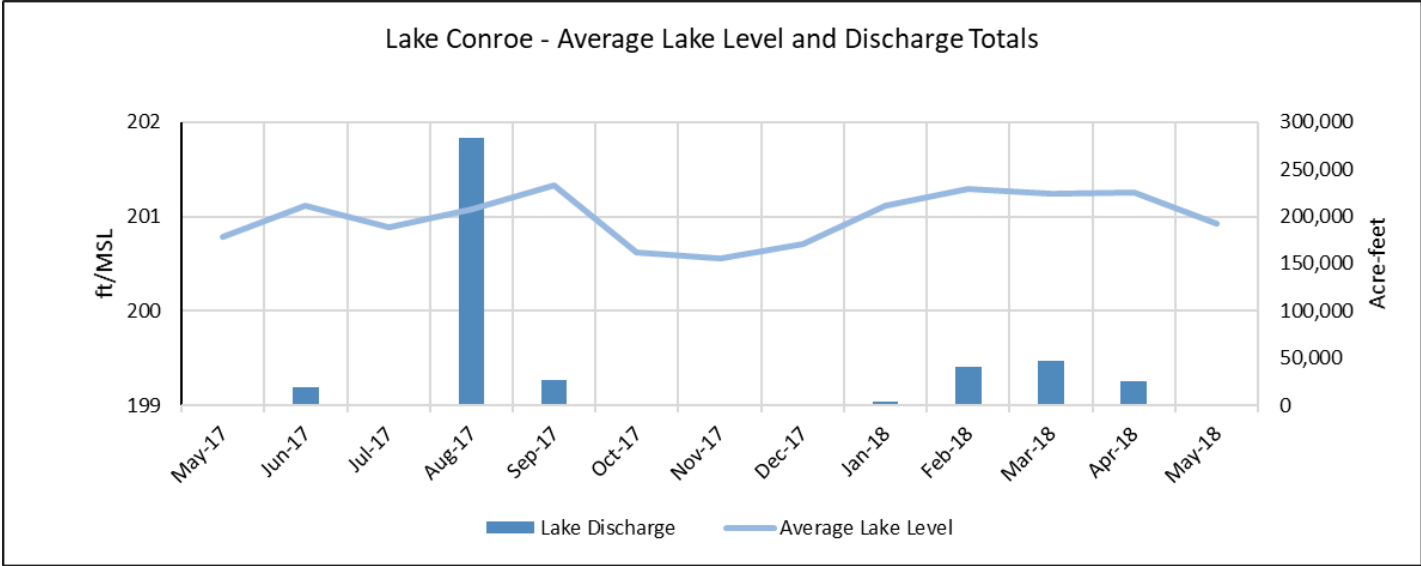
*Walter Mosley – Highlands Division*

*Shane Simpson – Lake Conroe Division*

# Raw Water Usage Data



# Lake Conroe - Reservoir Level Data



\*\*Lake Level Data: USGS Gauge at Dam, Rainfall & Temperature: SJRA Gauge at Dam, Evaporation & Discharge: Internal Calculation



## Lake Conroe and Highlands Division Safety Tailgates

### Highland Division Tailgates

- Hard Hat Safety – *Lynzey Jett*
- Good House Keeping – *Charlie McNair*
- Hurricane Preparedness – *Kim Wright*
- “It Wasn’t Me” – *Kenneth Forest*

### Lake Conroe Division Tailgates

- Preventative Maintenance – *Brian Foster*
- Fall Protection Training – *Brian Foster*

### HR/Safety Coordinated Training Activities

- Driving Safety
- Heat Exhaustion



*Above: Lake Conroe Staff conduct Fall Protection Training on the South Side of the Main Spillway*

## Raw Water Enterprise Third Quarter Financials

### San Jacinto River Authority Unaudited Statement of Revenues and Expenses - Raw Water For the Quarter Ending May 31, 2018

	Mar		Apr		May		Fiscal Year To Date				Fiscal Budget	
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Variance	% Variance	Total Year Budget	Actual YTD % of Total Year Budget
<b>OPERATING REVENUES</b>												
Industrial/Municipal	\$ 1,340,736	\$ 1,395,206	\$ 1,221,012	\$ 1,445,721	\$ 1,317,973	\$ 1,497,902	\$ 11,705,122	\$ 12,244,847	\$ (539,725)	(4%)	\$ 17,007,399	66%
Irrigation	76,280	57,173	130,495	32,450	119,843	18,799	378,566	149,275	229,291	154%	243,926	155%
Reservation fees	52,536	36,013	48,042	20,601	35,833	12,161	378,806	253,386	125,420	49%	273,088	136%
<b>TOTAL OPERATING REVENUES</b>	<b>\$ 1,469,562</b>	<b>\$ 1,488,392</b>	<b>\$ 1,399,548</b>	<b>\$ 1,498,772</b>	<b>\$ 1,473,649</b>	<b>\$ 1,528,862</b>	<b>\$ 12,462,494</b>	<b>\$ 12,647,508</b>	<b>\$ (185,014)</b>	<b>(1%)</b>	<b>\$ 17,524,413</b>	<b>71%</b>
<b>OPERATING EXPENSES</b>												
Payroll & employee benefit expenses	\$ 20,376	\$ 36,699	\$ 16,887	\$ 36,699	\$ 17,163	\$ 36,699	\$ 170,149	\$ 343,496	\$ 173,347	(50%)	\$ 466,794	(36%)
Professional fees	60,363	81,500	1,715	80,500	36,663	80,500	259,495	726,250	466,755	(64%)	967,750	(27%)
Purchased & contracted services	6,700	213	-	213	-	213	6,700	17,913	11,213	(63%)	18,550	(36%)
Supplies, materials & utilities	-	100	79	100	-	100	243	900	657	(73%)	1,200	(20%)
General & administration	4,700	6,549	3,726	6,640	3,652	8,071	31,778	63,640	31,862	(50%)	90,750	(35%)
<b>TOTAL OPERATING EXPENSES</b>	<b>\$ 92,140</b>	<b>\$ 125,061</b>	<b>\$ 22,407</b>	<b>\$ 124,152</b>	<b>\$ 57,478</b>	<b>\$ 125,583</b>	<b>\$ 468,364</b>	<b>\$ 1,152,198</b>	<b>\$ 683,834</b>	<b>(59%)</b>	<b>\$ 1,545,044</b>	<b>(30%)</b>
<b>NON-OPERATING REVENUES &amp; EXPENSES</b>												
Interest expense	\$ (35,469)	\$ (31,685)	\$ (31,685)	\$ (31,685)	\$ (31,685)	\$ (31,685)	\$ (288,952)	\$ (288,952)	\$ -	0%	\$ (384,008)	75%
<b>TOTAL NON-OPERATING (EXCLUDING ITEMS NOT BUDGETED)</b>	<b>\$ (35,469)</b>	<b>\$ (31,685)</b>	<b>\$ (31,685)</b>	<b>\$ (31,685)</b>	<b>\$ (31,685)</b>	<b>\$ (31,685)</b>	<b>\$ (288,952)</b>	<b>\$ (288,952)</b>	<b>\$ -</b>	<b>0%</b>	<b>\$ (384,008)</b>	<b>75%</b>
<b>NET INCOME (LOSS) (EXCLUDING ITEMS NOT BUDGETED)</b>	<b>\$ 1,341,953</b>	<b>\$ 1,331,646</b>	<b>\$ 1,345,456</b>	<b>\$ 1,342,934</b>	<b>\$ 1,384,485</b>	<b>\$ 1,371,593</b>	<b>\$ 11,705,177</b>	<b>\$ 11,206,358</b>	<b>\$ 498,820</b>	<b>4%</b>	<b>\$ 15,595,360</b>	<b>75%</b>
<b>NON-OPERATING REVENUES &amp; EXPENSES (NOT BUDGETED)</b>												
Amortized debt issuance expense	\$ 2,719	\$ -	\$ 2,719	\$ -	\$ 2,719	\$ -	\$ 24,468	\$ -	\$ 24,468	0%	\$ -	0%
<b>TOTAL NON-OPERATING (NOT BUDGETED)</b>	<b>\$ 2,719</b>	<b>\$ -</b>	<b>\$ 2,719</b>	<b>\$ -</b>	<b>\$ 2,719</b>	<b>\$ -</b>	<b>\$ 24,468</b>	<b>\$ -</b>	<b>\$ 24,468</b>	<b>0%</b>	<b>\$ -</b>	<b>0%</b>
<b>NET INCOME (LOSS) (BUDGETED AND NOT BUDGETED)</b>	<b>\$ 1,344,672</b>	<b>\$ 1,331,646</b>	<b>\$ 1,348,175</b>	<b>\$ 1,342,934</b>	<b>\$ 1,387,204</b>	<b>\$ 1,371,593</b>	<b>\$ 11,729,645</b>	<b>\$ 11,206,358</b>	<b>\$ 523,288</b>	<b>5%</b>	<b>\$ 15,595,360</b>	<b>75%</b>

## Highlands Division Third Quarter Financials

San Jacinto River Authority  
Unaudited Statement of Revenues and Expenses - Highlands  
For the Quarter Ending May 31, 2018

	Mar		Apr		May		Fiscal Year To Date				Fiscal Budget	
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Variance	% Variance	Total Year Budget	Actual YTD % of Total Year Budget
<b>OPERATING REVENUES</b>												
Rental revenue	\$ -	\$ -	\$ 5,775	\$ -	\$ -	\$ -	\$ 5,775	\$ -	\$ 5,775	0%	\$ -	0%
<b>TOTAL OPERATING REVENUES</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 5,775</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 5,775</b>	<b>\$ -</b>	<b>\$ 5,775</b>	<b>0%</b>	<b>\$ -</b>	<b>0%</b>
<b>OPERATING EXPENSES</b>												
Payroll & employee benefit expenses	\$ 195,548	\$ 238,941	\$ 195,649	\$ 238,941	\$ 190,239	\$ 238,941	\$ 1,878,737	\$ 2,234,994	\$ 356,258	(16%)	\$ 3,071,345	(61%)
Professional fees	7,237	11,167	5,217	14,647	1,524	10,667	54,019	103,885	49,847	(48%)	136,615	(40%)
Purchased & contracted services	28,984	32,031	8,695	32,031	21,325	32,031	139,886	288,286	148,600	(52%)	384,380	(38%)
Supplies, materials & utilities	24,498	37,746	24,507	37,746	32,603	37,746	210,122	339,720	129,598	(38%)	487,347	(45%)
Maintenance repairs, parts & rentals	43,235	120,559	140,891	120,559	32,943	120,559	475,459	1,085,028	609,569	(56%)	1,446,704	(33%)
General & administration	30,482	41,818	28,252	42,401	26,624	51,537	241,727	408,361	166,634	(41%)	579,485	(42%)
<b>TOTAL OPERATING EXPENSES</b>	<b>\$ 329,985</b>	<b>\$ 482,261</b>	<b>\$ 403,211</b>	<b>\$ 486,324</b>	<b>\$ 305,258</b>	<b>\$ 491,480</b>	<b>\$ 2,999,749</b>	<b>\$ 4,458,254</b>	<b>\$ 1,458,505</b>	<b>(33%)</b>	<b>\$ 6,085,856</b>	<b>(49%)</b>
<b>NON-OPERATING REVENUES &amp; EXPENSES</b>												
Interest on investments	\$ 21,906	\$ 1,333	\$ 12,977	\$ 1,333	\$ 35,468	\$ 1,333	\$ 135,064	\$ 12,000	\$ 123,064	1026%	\$ 16,000	844%
Interest expense	(190,645)	(186,458)	(186,458)	(186,458)	(186,458)	(186,458)	(1,682,310)	(1,682,310)	(0)	0%	(2,241,684)	75%
Capital contributions	-	-	-	-	-	-	1,258,150	-	1,258,150	0%	1,571,279	80%
<b>TOTAL NON-OPERATING (EXCLUDING ITEMS NOT BUDGETED)</b>	<b>\$ (168,740)</b>	<b>\$ (185,125)</b>	<b>\$ (173,481)</b>	<b>\$ (185,125)</b>	<b>\$ (150,990)</b>	<b>\$ (185,125)</b>	<b>\$ (289,095)</b>	<b>\$ (1,670,310)</b>	<b>\$ 1,381,214</b>	<b>(83%)</b>	<b>\$ (654,405)</b>	<b>44%</b>
<b>NET INCOME (LOSS) (EXCLUDING ITEMS NOT BUDGETED)</b>	<b>\$ (498,725)</b>	<b>\$ (667,386)</b>	<b>\$ (570,918)</b>	<b>\$ (671,449)</b>	<b>\$ (456,248)</b>	<b>\$ (676,605)</b>	<b>\$ (3,283,069)</b>	<b>\$ (6,128,564)</b>	<b>\$ 2,845,494</b>	<b>(46%)</b>	<b>\$ (6,740,261)</b>	<b>49%</b>
<b>NON-OPERATING REVENUES &amp; EXPENSES (NOT BUDGETED)</b>												
Depreciation	\$ (164,665)	\$ -	\$ (164,626)	\$ -	\$ (164,674)	\$ -	\$ (1,517,507)	\$ -	\$ (1,517,507)	0%	\$ -	0%
Amortized debt issuance expense	1,261	-	1,261	-	1,261	-	11,350	-	11,350	0%	-	0%
<b>TOTAL NON-OPERATING (NOT BUDGETED)</b>	<b>\$ (163,404)</b>	<b>\$ -</b>	<b>\$ (163,365)</b>	<b>\$ -</b>	<b>\$ (163,413)</b>	<b>\$ -</b>	<b>\$ (1,506,158)</b>	<b>\$ -</b>	<b>\$ (1,506,158)</b>	<b>0%</b>	<b>\$ -</b>	<b>0%</b>
<b>NET INCOME (LOSS) (BUDGETED AND NOT BUDGETED)</b>	<b>\$ (662,128)</b>	<b>\$ (667,386)</b>	<b>\$ (734,283)</b>	<b>\$ (671,449)</b>	<b>\$ (619,661)</b>	<b>\$ (676,605)</b>	<b>\$ (4,789,227)</b>	<b>\$ (6,128,564)</b>	<b>\$ 1,339,337</b>	<b>(22%)</b>	<b>\$ (6,740,261)</b>	<b>71%</b>



## Lake Conroe Division Third Quarter Financials

San Jacinto River Authority  
Unaudited Statement of Revenues and Expenses - Lake Conroe  
For the Quarter Ending May 31, 2018

	Mar		Apr		May		Fiscal Year To Date				Fiscal Budget	
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Variance	% Variance	Total Year Budget	Actual YTD % of Total Year Budget
<b>OPERATING REVENUES</b>												
Permits, licenses & fees	\$ 112,189	\$ 92,441	\$ 85,992	\$ 77,431	\$ 115,906	\$ 117,040	\$ 793,964	\$ 730,511	\$ 63,453	9%	\$ 1,045,000	76%
Cost sharing revenue	194,394	260,620	162,807	278,008	261,226	251,599	1,760,839	2,509,562	(748,723)	(30%)	3,344,068	53%
Grant revenue	-	53,000	72,678	53,000	-	53,000	72,678	477,000	(404,322)	(85%)	636,000	11%
<b>TOTAL OPERATING REVENUES</b>	<b>\$ 306,563</b>	<b>\$ 406,061</b>	<b>\$ 321,476</b>	<b>\$ 408,439</b>	<b>\$ 377,132</b>	<b>\$ 421,638</b>	<b>\$ 2,627,480</b>	<b>\$ 3,717,074</b>	<b>\$ (1,089,593)</b>	<b>(29%)</b>	<b>\$ 5,025,068</b>	<b>52%</b>
<b>OPERATING EXPENSES</b>												
Payroll & employee benefit expenses	\$ 194,190	\$ 218,054	\$ 182,936	\$ 218,054	\$ 186,496	\$ 218,054	\$ 1,746,673	\$ 2,038,776	\$ 292,102	(14%)	\$ 2,834,220	(62%)
Professional fees	69,896	101,637	72,477	101,637	182,162	101,637	551,457	834,740	283,283	(34%)	1,164,650	(47%)
Purchased & contracted services	31,231	31,913	28,073	31,913	15,359	31,913	228,444	287,226	58,782	(20%)	382,966	(60%)
Supplies, materials & utilities	37,350	29,538	22,198	29,538	19,262	29,534	187,211	265,853	78,641	(30%)	354,455	(53%)
Maintenance repairs, parts & rentals	24,650	104,448	46,004	114,077	40,329	114,077	354,101	993,555	639,454	(64%)	1,310,785	(27%)
General & administration	53,339	74,178	52,657	75,622	66,343	75,621	460,615	666,449	225,834	(33%)	924,130	(50%)
<b>TOTAL OPERATING EXPENSES</b>	<b>\$ 410,657</b>	<b>\$ 559,768</b>	<b>\$ 404,345</b>	<b>\$ 570,841</b>	<b>\$ 509,951</b>	<b>\$ 570,835</b>	<b>\$ 3,528,502</b>	<b>\$ 5,106,599</b>	<b>\$ 1,578,097</b>	<b>(31%)</b>	<b>\$ 6,971,205</b>	<b>(51%)</b>
<b>NON-OPERATING REVENUES &amp; EXPENSES</b>												
Interest on investments	\$ 11	\$ -	\$ 11	\$ -	\$ 13	\$ -	\$ 136	\$ -	\$ 136	0%	\$ -	0%
Other revenues	250	-	250	-	-	-	2,334	-	2,334	0%	-	0%
<b>TOTAL NON-OPERATING (EXCLUDING ITEMS NOT BUDGETED)</b>	<b>\$ 261</b>	<b>\$ -</b>	<b>\$ 261</b>	<b>\$ -</b>	<b>\$ 13</b>	<b>\$ -</b>	<b>\$ 2,470</b>	<b>\$ -</b>	<b>\$ 2,470</b>	<b>0%</b>	<b>\$ -</b>	<b>0%</b>
<b>NET INCOME (LOSS) (EXCLUDING ITEMS NOT BUDGETED)</b>	<b>\$ (103,833)</b>	<b>\$ (153,707)</b>	<b>\$ (82,608)</b>	<b>\$ (162,402)</b>	<b>\$ (132,806)</b>	<b>\$ (149,197)</b>	<b>\$ (898,552)</b>	<b>\$ (1,389,525)</b>	<b>\$ 490,974</b>	<b>(35%)</b>	<b>\$ (1,946,137)</b>	<b>46%</b>
<b>NON-OPERATING REVENUES &amp; EXPENSES (NOT BUDGETED)</b>												
Depreciation	\$ (14,601)	\$ -	\$ (14,594)	\$ -	\$ (18,680)	\$ -	\$ (137,680)	\$ -	\$ (137,680)	0%	\$ -	0%
<b>TOTAL NON-OPERATING (NOT BUDGETED)</b>	<b>\$ (14,601)</b>	<b>\$ -</b>	<b>\$ (14,594)</b>	<b>\$ -</b>	<b>\$ (18,680)</b>	<b>\$ -</b>	<b>\$ (137,680)</b>	<b>\$ -</b>	<b>\$ (137,680)</b>	<b>0%</b>	<b>\$ -</b>	<b>0%</b>
<b>NET INCOME (LOSS) (BUDGETED AND NOT BUDGETED)</b>	<b>\$ (118,435)</b>	<b>\$ (153,707)</b>	<b>\$ (97,202)</b>	<b>\$ (162,402)</b>	<b>\$ (151,486)</b>	<b>\$ (149,197)</b>	<b>\$ (1,036,232)</b>	<b>\$ (1,389,525)</b>	<b>\$ 353,294</b>	<b>(25%)</b>	<b>\$ (1,946,137)</b>	<b>53%</b>