



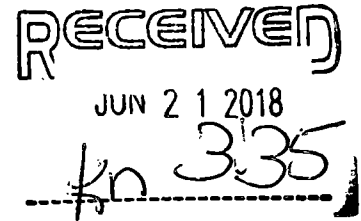
CITY OF HOT SPRINGS

Utilities Department

780 Adams Street
Hot Springs, Arkansas 71901

June 19, 2018

Richard C. Healey
Enforcement Branch Manager
Office of Water Quality
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317



RE: City of Hot Springs – CAO Release Request – LIS-08-099

Mr. Healey,

Below is the City of Hot Springs Utilities response to your email of May 17.

Comment During our review of the SSOs reported from 2015-2018 for NPDES Permits AR0033880 and AR0050148, we have identified approximately 137 SSO reports that may be duplicate reports, please review our list and the list of SSOs reports for the period 2015-2018. Please review the attached lists and spreadsheets to confirm the duplicate reports. Upon your confirmation, we will delete any duplicate record.

Response We concur

Of the SSOs reported for the period 2015-2018, please identify which are capacity or non-capacity SSOs.

Comment

Response See Exhibit A - attached

Comment Capacity Related SSOs. For each year, please identify how many and the date(s) of the rain events measured above the design storm threshold and how many SSOs occurred during those events. Also, how many SSOs occurred below the design storm threshold?

Response See Exhibit A – attached

Comment Please provide a map with the location of the reported capacity SSOs for the period 2015-2018.

Response See Exhibit B – attached Maps

Comment Non-Capacity Related SSOs. For each year, please identify how many SSOs how many were related to construction & vandalism or operation & maintenance (of those, please breakdown the cause (debris, equipment failure, grease, line failure or roots).

Response See Exhibit A – attached

Comment The 2012 SEACAP Improvement Plan identified two categories of capacity improvements, Priority 1 and Priority 2 projects. The Priority 1 projects list was further defined by the relation to eliminate the reported SSOs as reference in CAO LIS 08-099.

Response See Exhibit C - attached

Comment Please provide a list of the Priority 1 projects that have not been completed.

Response See Exhibit C - attached

Comment For the period 2015-2018, please identify the number of capacity SSOs per year, that are related to these incomplete Priority Projects.

Response See Exhibit B

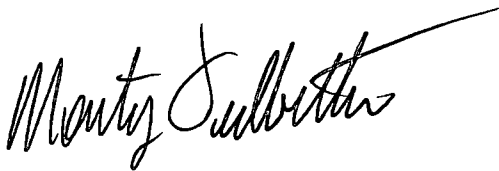
Comment Please provide a map with the location of the capacity SSOs for the period 2015-2018.

Response See Exhibit B

Comment Please provide a plan and milestone schedule to address any of the Priority 1 Projects that have not been completed.

Response See Exhibit C

Regards,



Monty Ledbetter
Utilities Director

EXHIBIT A

Summary Capacity Related SSO Events CITY OF HOT SPRINGS UTILITIES

NPID **AR0033880**

Year	Design Storm Event	Non-Design Storm Event	Non Capacity Related SSOs				Totals
			Equipment Failure	Line Blockage	Line Failure	Other	
2018	55	7	5	2	2	1	72
2017	21	25	18	4	7	1	76
2016	38	48	8	2	5	1	102
2015	105	59	13	3	3	2	185
Totals	219	139	44	11	17	5	435

NPID **AR0050148**

Year	Design Storm Event	Non-Design Storm Event	Non Capacity Related SSOs				Totals
			Equipment Failure	Line Blockage	Line Failure	Other	
2018	10	0	5	0	0	2*	15
2017	2	0	12		3		17
2016	7	2	6			2*	17
2015	18	5	5	0	2	1	31
Totals	37	7	28	0	5	1	80

**Energy Issues*

2018 Capacity Related SSO Events CITY OF HOT SPRINGS UTILITIES

NPID	AR0033880	Design Storm Event		Rain Event	Other		
Facility / Manhole	Location	SSO Date	Volume	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
5259	857 Carpenter Dam Rd	4/14/2018	4500	Gulpha Ck		R	2.67 Inches of rain on the 14th
4117	1539 Spring St	4/14/2018	2000	Unknown Ck		R	2.67 Inches of rain on the 14th
10578	*611 East Grand Ave	4/14/2018	1000	Stokes Ck		RO/R	2.67 Inches of rain on the 14th <i>*Staff discovered root obstruction after SSO occurred. In process of resolving issue</i>
1747	3047 Malvern Ave	4/14/2018	5000	Gulpha Ck		R	2.67 Inches of rain on the 14th
4118	1539 Spring St	4/14/2018	3000	Gulpha Ck		R	2.67 Inches of rain on the 14th
5260	816 Carpenter Dam Rd	4/14/2018	1500	Unknown Ck		R	2.67 Inches of rain on the 14th
11274	768 McLeod St	4/14/2018	Undetermined	Stokes Ck		R/E	2.67 Inches of rain on the 14th <i>*Pumping configuration revised following SSO event to increase pump capacity. This will resolve issue.</i>
5259	857 Carpenter Dam Rd	4/6/2018	10000	Unknown Ck		R	4.1 inches of rain 6th and 7th
17447	3047 Malvern Ave	4/6/2018	13000	Gulpha Ck		R	4.1 inches of rain 6th and 7th
1964	104 Forest View Ct	4/6/2018	4000	Hot Springs Ck		R	4.1 inches of rain 6th and 7th
1866	362 Fontana Rd.	4/6/2018	4500	Hot Springs Ck		R	4.1 inches of rain 6th and 7th
12242	106 Forest View Ct.	4/6/2018	3500	Hot Springs Ck		R	4.1 inches of rain 6th and 7th
10578	611 East Grand Ave	4/6/2018	500	Storm Drain		R	4.1 inches of rain 6th and 7th
4117	1539 Spring St	4/6/2018	3500	Gulpha Ck		R	4.1 inches of rain 6th and 7th
4118	1539 Spring St	4/6/2018	4000	Gulpha Ck		R	4.1 inches of rain 6th and 7th
1865	352 Fontana Rd	4/6/2018	4500	Hot Springs Ck		R	4.1 inches of rain 6th and 7th
8173	210 Aberina St	4/2/2018	500	Unknown Ck		D	<i>Manhole stopped up</i>
Lakeside P.S.	421 Lake Park Dr	4/2/2018	1500	Ditch		E	<i>Mechanical failure (bubbler air loss)</i>
Unknown	212 Bull Bayou Rd	3/30/2018	500	Ditch		E	<i>Duplex grinder pump failure</i>
1747	3047 Malvern Ave	3/30/2018	5000	Gulpha Ck		LF	<i>Force main break (station shut down for repair)</i>
Milk Ln. P.S.	100 Jerry Lane Milk Lane	3/15/2018	200		Ground	D	<i>Pumps stopped up</i>
Line Failure	233 Elmwood Dr	3/12/2018	1500	Lake Catherine		LF	<i>force main break</i>
Fairwood P.S.	127 Macon Terrace	3/8/2018	300	Lake Hamilton		CO	<i>Contractor improperly installed new transducer for wetwell level</i>
HS 1 P.S.	152 Aberina Dr.	3/6/2018	1000	Ditch		E	<i>Mechanical failure</i>
Elmwood P.S.	233 Elmwood Dr.	2/26/2018	1000	Lake Catherine		R	15.89 inches of rain from 2-21 thur 3-1
1747	3047 Malvern Ave	2/28/2018	80000	Gulpha Ck		R	15.89 inches of rain from 2-21 thur 3-1

NPID **AR0033880**

Facility / Manhole	Location	SSO Date	Volume	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
5259	857 Carpenter Dam Rd	2/28/2018	50000	Unknown Ck		R	15.89 inches of rain from 2-21 thur 3-1
4118	1539 Spring St	2/28/2018	15000	Gulpha Ck		R	15.89 inches of rain from 2-21 thur 3-1
1964	104 Forest View Ct	2/28/2018	14000	Hot Springs Ck		R	15.89 inches of rain from 2-21 thur 3-1
10578	611 East Grand Ave	2/28/2018	1500	Storm Drain		R	15.89 inches of rain from 2-21 thur 3-1
4117	1539 Spring St	2/28/2018	12000	Gulpha Ck		R	15.89 inches of rain from 2-21 thur 3-1
5260	816 Carpenter Dam Rd	2/28/2018	15000	Unknown Ck		R	15.89 inches of rain from 2-21 thur 3-1
12242	106 Forest View Ct	2/28/2018	15000	Hot Springs Ck		R	15.89 inches of rain from 2-21 thur 3-1
1866	362 Fontana Rd	2/28/2018	17000	Hot Springs Ck		R	15.89 inches of rain from 2-21 thur 3-1
1865	352 Fontana Rd	2/28/2018	15000	Hot Springs Ck		R	15.89 inches of rain from 2-21 thur 3-1
3327	229 Gorge Rd	3/1/2018	4500	Gulpha Ck		R	15.89 inches of rain from 2-21 thur 3-1
11481	104 Forest View Ct	2/28/2018	3000		Ground	R	15.89 inches of rain from 2-21 thur 3-1
3346	331 Gorge Rd	3/1/2018	3000	Gulpha Ck		R	15.89 inches of rain from 2-21 thur 3-1
1798	1213 7th St	3/1/2018	2500	Ditch		R	15.89 inches of rain from 2-21 thur 3-1
2180	1213 7th St	3/1/2018	1500	Ditch		R	15.89 inches of rain from 2-21 thur 3-1
11274	771 McLeod St	3/1/2018	2500	Stokes Ck		R	15.89 inches of rain from 2-21 thur 3-1
Regional Plant	320 Davidson DR Bypass partial secondary treatment	2/20/2018	120 MG	Treatment Plant	WWTP	R	15.89 inches of rain from 2-21 thur 3-1
11242	106 Forest View Cir	2/21/2018	50000	Hot Springs Ck		R	15.89 inches of rain from 2-21 thur 3-1
5259	857 Carpenter Dam Rd	2/21/2018	45000	Unknown Ck		R	15.89 inches of rain from 2-21 thur 3-1
3298	112 Gorge Rd	2/21/2018	40000	Gulpha Ck		R	15.89 inches of rain from 2-21 thur 3-1
1747	3047 Malvern Ave	2/21/2018	80000	Gulpha Ck		R	15.89 inches of rain from 2-21 thur 3-1
1864	104 Forest View Ct	2/21/2018	35000	Hot Springs Ck		R	15.89 inches of rain from 2-21 thur 3-1
5260	816 Carpenter Dam Rd	2/21/2018	30000	Unknown Ck		R	15.89 inches of rain from 2-21 thur 3-1
1866	362 Fontana Rd	2/21/2018	40000	Hot Springs Ck		R	15.89 inches of rain from 2-21 thur 3-1
3327	229 Gorge Rd	2/22/2018	4500	Gulpha Ck		R	15.89 inches of rain from 2-21 thur 3-1
	151 Rocky Reef Circle	2/22/2018	2500	Ditch	Ground	R	15.89 inches of rain from 2-21 thur 3-1
1798	1213 7th St	2/22/2018	8500	Ditch		R	15.89 inches of rain from 2-21 thur 3-1
4117	1539 Spring St	2/22/2018	5000	Gulpha Ck		R	15.89 inches of rain from 2-21 thur 3-1
11274	771 McLeod St	2/22/2018	25000	Stokes Ck		R	15.89 inches of rain from 2-21 thur 3-1
10578	611 East Grand Ave	2/22/2018	2500	Storm Drain		R	15.89 inches of rain from 2-21 thur 3-1
11481	104 Forest View Ct	2/22/2018	3000	Ground		R	15.89 inches of rain from 2-21 thur 3-1
4118	1539 Spring St	2/22/2018	6000	Gulpha Ck		R	15.89 inches of rain from 2-21 thur 3-1
2180	1213 7th St	2/22/2018	8000	Ditch		R	15.89 inches of rain from 2-21 thur 3-1

NPID **AR0033880**

Facility / Manhole	Location	SSO Date	Volume	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
Regional Plant	Continuation of bypass from 2-10 thru 20th -2018. Restarting 2-21st 2018 undetermined yet.	2/21/2018	Undetermined	SSO Occurred at Treatment Plant		R	<i>Pump unable to keep up with treated side of the plant . EQ Pond Full , we had an extra large diesel pump shipped and hooked up late last night. At approximately 4:30 am 2-21-2018 EQ pond started trickling over one end of levee ,we added chlorine tablets</i>
Regional Plant	WWTP 320 Davidson DR , Bypass Partial Treatment I&I Overloaded treatment system this is a bypass not an SSO.	2/20/2018	48.4MG	SSO Occurred at Treatment Plant		R	<i>Partial at WWTP , notified ADEQ ADH and downstream users of the bypass. The first 10 days we were opening and closing intermittently as needed to have the least possible bypass impact on the plant and discharged effluent . we are still under the AROO</i>
11481	104 Forest View Ct	2/21/2018	2000		Ground	R	15.89 inches of rain from 2-21 thur 3-1
1798	1213 7th St	2/21/2018	2500	Ditch		R	15.89 inches of rain from 2-21 thur 3-1
10578	611 East Grand Ave	2/21/2018	3500	Storm Drain		R	15.89 inches of rain from 2-21 thur 3-1
2180	1213 7th St	2/21/2018	2000	Ditch		R	15.89 inches of rain from 2-21 thur 3-1
4117	1539 Spring St	2/21/2018	4750	Gulpha Ck		R	15.89 inches of rain from 2-21 thur 3-1
4118	1539 Spring St	2/21/2018	5000	Gulpha Ck		R	15.89 inches of rain from 2-21 thur 3-1
11274	771 McLeod St	2/21/2018	25000	Stokes Ck		R	15.89 inches of rain from 2-21 thur 3-1
8384	151 Rocky Reef Circle	2/21/2018	3500	Ditch	Ground	R	15.89 inches of rain from 2-21 thur 3-1
33278	229 Gorge Rd	2/21/2018	2500	Gulpha Ck		R	15.89 inches of rain from 2-21 thur 3-1
10578	611 East Grand Ave	2/21/2018	3500	Storm Drain		R	15.89 inches of rain from 2-21 thur 3-1
HS 1 P.S.	152 Aberina St	2/19/2018	5000	Unknown Ck		E	Pump Failure
111	209 Highland St	1/30/2018	1000	Ditch		RO	Roots

NPID **AR0050148**

Facility / Manhole	Location	SSO Date	Volume	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
Winkler PS	194 Winkler Rd	4/23/2018	5000		Ground	E	Equipment Failure
Mazarn PS	1724 Marion Anderson Rd	4/15/2018	10,000	Lake Hamilton		E	Equipment Failure
9250	114 Ridge Pt	4/6/2018	2000	Lake Hamilton		R	4.1 Inches of Rain
13484	2460 Marion Anderson Dr	4/6/2018	3000	Lake Hamilton		R	4.1 Inches of Rain
14384	2460 Marion Anderson Rd	4/6/2018	Continued Overflow	Lake Hamilton		R	4.1 Inches of Rain
9250	114 Ridge Pt	4/6/2018	Continued Overflow	Lake Hamilton		R	4.1 Inches of Rain
Winkler PS	200 Winkler Rd	3/20/2018	1500		Ground	EF	Entergy Issues
13484	2460 Marion Anderson Rd	2/28/2018	10000	Lake Hamilton		R	15.89 Inches of Rain 2/21/18 thorough 3/1/18
13483	2460 Marion Anderson Rd	2/28/2018	8000	Lake Hamilton		R	15.89 Inches of Rain 2/21/18 thorough 3/1/18
9250	114 Ridge Pt	2/28/2018	12000	Lake Hamilton		R	15.89 Inches of Rain 2/21/18 thorough 3/1/18
13484	2460 Marion Anderson Rd	2/28/2018	Continued Overflow	Lake Hamilton		R	15.89 Inches of Rain 2/21/18 thorough 3/1/18
13483	2460 Marion Anderson Rd	2/28/2018	Continued Overflow	Lake Hamilton		R	15.89 Inches of Rain 2/21/18 thorough 3/1/18
9250	114 Ridge Pt	2/28/2018	Continued Overflow	Lake Hamilton		R	15.89 Inches of Rain 2/21/18 thorough 3/1/18
13483	2460 Marion Anderson Rd	2/22/2018	8000	Lake Hamilton		R	15.89 Inches of Rain 2/21/18 thorough 3/1/18
13484	2460 Marion Anderson Rd	2/22/2018	10000	Lake Hamilton		R	15.89 Inches of Rain 2/21/18 thorough 3/1/18
9250	114 Ridge Pt	2/21/2018	30000	Lake Hamilton		R	15.89 Inches of Rain 2/21/18 thorough 3/1/18
13484	2460 Marion Anderson Rd	2/22/2018	Continued Overflow	Lake Hamilton		R	15.89 Inches of Rain 2/21/18 thorough 3/1/18
13483	2460 Marion Anderson Rd	2/22/2018	Continued Overflow	Lake Hamilton		R	15.89 Inches of Rain 2/21/18 thorough 3/1/18
13484	114 Ridge Pt	2/21/2018	5000	Lake Hamilton		R	15.89 Inches of Rain 2/21/18 thorough 3/1/19
13483	2460 Marion Anderson Rd	2/21/2018	4000	Lake Hamilton		R	15.89 Inches of Rain 2/21/18 thorough 3/1/20

NPID **AR0050148**

Facility / Manhole	Location	SSO Date	Volume	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
13484	2460 Marion Anderson Rd	2/21/2018	Still Overflowing at	Lake Hamilton		R	15.89 Inches of Rain 2/21/18 thorough 3/1/18
13483	2460 Marion Anderson Rd	2/21/2018	Still Overflowing at	Lake Hamilton		R	15.89 Inches of Rain 2/21/18 thorough 3/1/18
9250	114 Ridge Pt	2/21/2018	Still Overflowing at	Lake Hamilton		R	15.89 Inches of Rain 2/21/18 thorough 3/1/18
Winkler PS	194 Winkler Rd	1/30/2018	5000		Ground	EF	Entergy is having trouble with power surges due cold weather usage
Winkler PS	194 Winkler Rd	1/18/2018	500		Ground	EF	Entergy is having trouble with power surges due cold weather usage
Winkler PS	194 Winkler Rd	1/17/2018	750		Ground	EF	Entergy is having trouble with power surges due cold weather usage.
Winkler PS	194 Winkler Rd	1/2/2018	5000		Ground	E	Winkler Pump Station overflowed onto ground surface due to equipment failure.

2017 Capacity Related SSO Events CITY OF HOT SPRINGS UTILITIES

NPID	AR0033880		Design Storm Event		Rain Event	Other	
Facility / Manhole	Location						
991	403 McLeod St	12/22/2017	3500	Stokes Ck		R	3.78 inches of rain
993	481 McLeod St	12/22/2017	4000	Stokes Ck		R	3.78 inches of rain
1864	104 Forestview Ct	12/22/2017	4000	Hot Springs Ck		R	3.78 inches of rain
5259	857 Carpenter Dam Rd	12/22/2017	6500	Unknown Ck		R	3.78 inches of rain
4118	1539 Spring St	12/22/2017	5500	Gulpha Ck		R	3.78 inches of rain
998	615 McLeod St	12/22/2017	5500	Stokes Ck		R	3.78 inches of rain
12242	106 Forestview Ct	12/22/2017	4000	Hot Springs Ck		R	3.78 inches of rain
4117	1539 Spring St	12/22/2017	4000	Gulpha Ck		R	3.78 inches of rain
1865	352 Fontana Rd	12/22/2017	5000	Hot Springs Ck		R	3.78 inches of rain
Halteria P.S.	401 Halteria Lane	12/20/2017	250		Ground	LF	Line Failure - Force Main Break
Regional Plant	318 Davidson Drive at the filter backwash return tank	12/12/2017	1000	Treatment Plant	Backwash return tank	Other	Operator washing tertiary filter failed to close valve in time. We will be using this incident as a warning and training for all operators and staff.
HS Creek P.S.	360 Fontana Rd	11/29/2017	2500	Hot Springs Ck		E	Equipment Failure
Line Failure	5322 Central Ave	10/30/2017	500		Ground	CO	Contractor hit force main
Lakeside P.S.	857 Carpenter Dam Rd	10/17/2017	1000	Unknown Ck		D	Blocked gravity main
Line Failure	322 Farris Landing Rd	9/6/2017	400			LF	Line Failure - Force Main Break
Files Rd P.S.	521 Files Rd	8/20/2017	1000			EF	Electrical Failure
Island 5 P.S.	111 Green Circle Island # 5 Pump Station overflowed into ditch due to Equipment Failure	8/10/2017	150		Ground	E	Equipment Failure
Line Failure	5416 Central Ave	8/8/2017	10,000		Ground	CO	Contractor hit force main
1866	360 Fontana Rd	8/2/2017	1000	Hot Springs Ck		E	Equipment Failure
1866	362 Fontana Rd	7/19/2017	10,000	Hot Springs Ck		E	Equipment Failure
Catherine Hts. P.S.	108 Catherine Heights Rd	7/19/2017	1000		Ground	E	Equipment Failure
10578	611 East Grand Ave	7/14/2017	150	Storm Drain		RO	Roots in graity main
520	808 Quapaw Ave	7/14/2017	100	Storm Drain		D	Blocked gravity main
HS 2 P.S.	579 Lake Hamilton Dr	7/3/2017	300		Ground	E	Equipment Failure
7746	2353 Lakeshore Dr	6/26/2017	500	Lake Hamilton		E	Equipment Failure
Lakeside P.S.	423 Lakepark Dr	6/23/2017	500	Unknown Ck		EF	Power Loss

NPID

AR0033880

Facility / Manhole	Location	SSO Date	Volume	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
9588	111 Big Duke Trail	6/18/2017	50		Ground	G	Grease
Line Failure	5917 Central Ave	6/16/2017	1000		Ground	CO	Contractor hit force main
105	213 Highland	6/7/2017	600		Ground	D	Blocked gravity main
Hackberry P.S.	122 Hackberry Dr	5/28/2017	1000	Lake Hamilton		EF	Power Loss
7746	2327 Lakeshore Dr	5/3/2017	Undetermined	Lake Hamilton		R	2.88 inches of rain
HS 3 P.S.	4023 Higdon Ferry Rd	5/7/2017	7500	Lake Hamilton		R	Equipment Failure
1747	3047 Malvern Ave	5/3/2017	15500	Gulpha Ck		R	2.88 inches of rain
12242	106 Forestview Ct	5/3/2017	15000	Hot Springs Ck		R	2.88 inches of rain
4117	1539 Spring St	5/3/2017	4500	Gulpha Ck		R	2.88 inches of rain
5260	816 Carpenter Dam Rd	5/3/2017	5000	Unknown Ck		R	2.88 inches of rain
1864	104 Forestview Ct	5/3/2017	8000	Hot Springs Ck		R	2.88 inches of rain
991	403 McLeod St	5/3/2017	8500	Stokes Ck		R	2.88 inches of rain
1865	352 Fontana Rd	5/3/2017	3000	Hot Springs Ck		R	2.88 inches of rain
Sundance 1 P.S.	213 Lorado Loop	5/3/2017	3500		Ground	E	Equipment Failure
5259	857 Carpenter Dam Rd	5/3/2017	12000	Unknown Ck		R	2.88 inches of rain
2506	111 Jefferson S	5/3/2017	1000	Hot Springs Ck		R	2.88 inches of rain
4118	1539 Spring St	5/3/2017	9000	Gulpha Ck		R	2.88 inches of rain
991	403 McLeod St	4/30/2017	3000	Stokes Ck		R	2.52 inches of rain
5260	816 Carpenter Dam Rd	4/30/2017	2500	Unknown Ck		R	2.52 inches of rain
1865	352 Fontana Rd	4/30/2017	4000	Hot Springs Ck		R	2.52 inches of rain
998	615 McLeod St	4/30/2017	3500	Stokes Ck		R	2.52 inches of rain
12242	106 Forestview Ct	4/30/2017	6500	Hot Springs Ck		R	2.52 inches of rain
1747	3047 Malvern Ave	4/30/2017	7500	Gulpha Ck		R	2.52 inches of rain
993	481 McLeod St	4/30/2017	3000	Stokes Ck		R	2.52 inches of rain
4117	1539 Spring St	4/30/2017	3000	Gulpha Ck		R	2.52 inches of rain
5259	857 Carpenter Dam Rd	4/30/2017	7000	Unknown Ck		R	2.52 inches of rain
4118	1539 Spring St	4/30/2017	3500	Gulpha Ck		R	2.52 inches of rain
10578	611 East Grand Ave	4/30/2017	300		Ground	R	2.52 inches of rain
8295	2343 Higdon Ferry Rd	4/27/2017	2500	Lake Hamilton		E	Equipment Failure
11274	771 McLeod St	4/26/2017	2500	Ditch		R	1.94 inches of rain
12242	106 Forestview Ct	4/26/2017	5000	Hot Springs Ck		R	1.94 inches of rain
4118	1539 Spring St	4/26/2017	4000	Gulpha Ck		R	1.94 inches of rain

NPID

AR0033880

Facility / Manhole	Location	SSO Date	Volume	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
2182	907 West Saint Louis Ave	4/26/2017	500	Unknown Ck		R	1.94 inches of rain
998	615 McLeod St	4/26/2017	6500	Stokes Ck		R	1.94 inches of rain
1864	104 Forestview Ct	4/26/2017	5000	Hot Springs Ck		R	1.94 inches of rain
5260	816 Carpenter Dam Rd	4/26/2017	4000	Unknown Ck		R	1.94 inches of rain
5259	857 Carpenter Dam Rd	4/26/2017	5000	Unknown Ck		R	1.94 inches of rain
10578	611 East Grand Ave	4/26/2017	1000		Ground	RO	Roots in gravity main
991	403 McLeod St	4/26/2017	5000	Stokes Ck		R	1.94 inches of rain
1865	352 Fontana Rd	4/26/2017	5500	Hot Springs Ck		R	1.94 inches of rain
998	615 McLeod St	4/2/2017	2500	Stokes Ck		R	.8 inches of rain
5259	857 Carpenter Dam Rd	4/2/2017	4000	Unknown Ck		E	Equipment Failure
4118	1539 Spring St	3/25/2017	100	Ditch		R	2.2 inches of rain
4117	1539 Spring St	3/25/2017	100		Ground	R	2.2 inches of rain
Fairwood F.M.	2912 Albert Pike Rd	3/20/2017	1500		Ground	LF	Force Main Break (20")
302 D	144 Sanford St	3/6/2017	300	Unknown Ck		D	stopped up gravity main
9587	111 Big Duke Trail	2/25/2017	1000		Ground	E	Equipment Failure
Hackberry P.S.	118 Hackberry St.	1/20/2017	1000	Ditch		E	Equipment Failure
Fairwood F.M.	2804 Albert Pike Rd	1/12/2017	7500	Lake Hamilton		LF	Force Main Break
Chad St. P.S.	375 Chadwood St	1/4/2017	500	Unknown Ck		E	Equipment Failure

NPID

AR0050148

Facility / Manhole	Location	SSO Date	Volume	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
Winkler PS	194 Winkler Rd	11/6/2017	800		Ground	E	Electrical
70 W. PS 9	2280 Airport Rd	10/28/2017	100		Ground	Other	<i>Loss of utility power</i>
Winkler PS	194 Winkler Rd	10/23/2017	1000		Ground	E	Equipment Failure
70 W. PS 11	2222 Airport Rd	10/3/2017	1000	Ditch		E	Equipment Failure
70 W. PS 13	2122 Airport Rd	9/25/2017	750		Ground	E	Equipment Failure
70 W. PS 13	2122 Airport Rd	9/11/2017	500		Ground	E	Equipment Failure
Duplex Grinder	201 South Rodgers Rd Forest Hills Apts	9/6/2017	200		Ground	E	Equipment Failure
Mazarn 2	1729 Marion Anderson Rd	9/3/2017	1000		Ground	Other	<i>Loss of utility power</i>
Relief Valve	399 South Rodgers Rd	8/28/2017	1000	Ditch		E	Equipment Failure
Winkler PS	194 Winkler Rd	7/14/2017	5500		Ground	E	Equipment Failure
70 W. PS 14	2006 Airport Road	5/31/2017	1000		Ground	E	Equipment Failure
70 W. PS 14	2006 Airport Road	5/30/2017	1,000		Ground	E	Equipment Failure
70 W. PS 2	123 Southmoore Rd	5/8/2017	500	Ditch	Ground	E	Equipment Failure
MH 13484	2460 Marion Anderson Rd	5/3/2017	Continued Overflow	Lake Hamilton		R	2.88 Inches of Rain
13483	2460 Marion Anderson Rd	5/3/2017	7500	Lake Hamilton		R	2.88 Inches of Rain
13483	2460 Marion Anderson Rd	5/3/2017	Continued Overflow	Lake Hamilton		R	2.88 Inches of Rain
MH 13484	2460 Marion Anderson Rd	5/3/2017	7500	Lake Hamilton		R	2.88 Inches of Rain
Force Main	2362 Marion Anderson Rd	4/3/2017	1500	Lake Hamilton		LF	Line Failure
Mazarn 3	2475 Marion Anderson Rd	4/3/2017	3000	Lake Hamilton		LF	Line Failure - Shut down the Pump Station to make repair to the broken 6" Pressure main @ 2362 Marion Anderson Rd.

2016 Capacity Related SSO Events CITY OF HOT SPRINGS UTILITIES

NPID	AR0033880	Design Storm		Rain Event		Other	
		Event	Volume in Gallons	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
Facility / Manhole	Location	SSO Date	Volume in Gallons	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
Fairwood P.S.	107 Macon Terrace	12/7/2016	4,000	Unknown Ck	Ground	LF	Force main break station shut down during repair
Sundacne 2 P.S.	380 Elkhorn Loop	12/1/2016	1000	Ditch		E	Equipment Failure
Island 5 P.S.	109 Green Circle	11/9/2016	200	Ditch		E	Equipment Failure
Line Failure	182 Arkota Shores Dr	10/28/2016	400		Ground	LF	Force main break
P.S.	213 Larado Lp	10/21/2016	200	Ditch		E	Equipment Failure
Stokes P.S. Area	Lakeshore Dr. & McLeod St	10/12/2016	7500		Ground	CO	Contractor broke force main
Line Failure	Unknown Address	9/14/2016	10,000	Lake Hamilton		LF	Force main break
Lakeside P.S.	421 Lakepark Dr	8/29/2016	300	Ditch		E	Equipment Failure
Emerson P.S.	169 Emerson Pt	8/21/2016	500		Ground	E	Equipment Failure
1747	3047 Malvern Ave	8/20/2016	30000	Gulpha Ck		R	1.9 inches of rain
5259	857 Carpenter Dam Rd	8/20/2016	25000	Unknown Ck		R	1.9 inches of rain
998	615 McLeod St	8/20/2016	8500	Stokes Ck		R	1.9 inches of rain
12242	106 Forest View Ct	8/20/2016	7500	Hot Springs Ck		R	1.9 inches of rain
5260	816 Carpenter Dam Rd	8/20/2016	6000	Unknown Ck		R	1.9 inches of rain
995	519 McLeod St	8/20/2016	3000		Ground	R	1.9 inches of rain
1864	104 Forest View Ctngs Creek.	8/20/2016	8500		Ground	R	1.9 inches of rain
4118	1539 Spring St	8/20/2016	5500	Gulpha Ck		R	1.9 inches of rain
991	403 McLeod St	8/20/2016	8000	Stokes Ck		R	1.9 inches of rain
1866	352 Fontana Rd	8/20/2016	15000	Hot Springs Ck		R	1.9 inches of rain
1865	362 Fontana Rd	8/20/2016	15000	Hot Springs Ck		R	1.9 inches of rain
3112	633 East Grand Ave	8/20/2016	500	Storm Drain		R	1.9 inches of rain
4117	1539 Spring St	8/20/2016	5000	Gulpha Ck		R	1.9 inches of rain
1747	3047 Malvern Ave	8/15/2016	30000	Gulpha Ck		R	3.97 inches of rain
1866	362 Fontana Rd	8/15/2016	9000	Hot Springs Ck		R	3.97 inches of rain
998	615 McLeod St	8/15/2016	7000	Stokes Ck		R	3.97 inches of rain
12242	106 Forest View Ct	8/15/2016	8000	Hot Springs Ck		R	3.97 inches of rain
5260	816 Carpenter Dam Rd	8/15/2016	10000	Unknown Ck		R	3.97 inches of rain

NPID

AR0033880

Facility / Manhole	Location	SSO Date	Volume in Gallons	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
991	403 McLeod St	8/15/2016	15000	Stokes Ck		R	3.97 inches of rain
5259	857 Carpenter Dam Rd	8/15/2016	15000	Unknown Ck		R	3.97 inches of rain
1864	104 Forest View Ct	8/15/2016	10000	Hot Springs Ck		R	3.97 inches of rain
4117	1539 Spring St	8/15/2016	6500	Gulpha Ck		R	3.97 inches of rain
1865	352 Fontana Rd	8/15/2016	9000	Hot Springs Ck		R	3.97 inches of rain
4118	1539 Spring St	8/15/2016	7500	Gulpha Ck		R	3.97 inches of rain
11653	311 Oak Shore Circle	7/27/2016	2500		Ground	D	Blocked gravity main
Catherine Landing P.S.	1700 Shady Grove Rd	7/24/2016	1000	Lake Catherine		E	Equipment Failure
8574	458 Essex Park Trail	7/15/2016	2000	Lake Catherine		E	Entergy lost power line (car crash)
Emerson St. P.S.	220 Emerson Dr	6/27/2016	1000	Lake Hamilton		E	Equipment Failure
3372	227 Bayshore Cv	6/26/2016	300	Lake Hamilton		D	Blocked gravity main
Line Failure	135 Emerson Pt	6/13/2016	1500	Lake Hamilton		LF	Force main break
995	519 McLeod St	4/29/2016	5000	Stokes Ck		R	4.19 inches of rain
5259	857 Carpenter Dam Rd	4/29/2016	10,000	Unknown Ck		R	4.19 inches of rain
1747	3047 Malvern Ave	4/29/2016	15000	Gulpha Ck		R	4.19 inches of rain
4117	1539 Spring St	4/29/2016	7500	Gulpha Ck		R	4.19 inches of rain
5260	816 Carpenter Dam Rd	4/29/2016	7000	Unknown Ck		R	4.19 inches of rain
1864	104 Forest View Ct	4/29/2016	9500	Hot Springs Ck		R	4.19 inches of rain
4118	1539 Spring St	4/29/2016	8500	Gulpha Ck		R	4.19 inches of rain
991	403 McLeod St	4/29/2016	5000	Stokes Ck		R	4.19 inches of rain
1865	362 Fontana Rd	4/29/2016	7000	Hot Springs Ck		R	4.19 inches of rain
1866	352 Fontana Rd	4/29/2016	6500	Hot Springs Ck		R	4.19 inches of rain
998	615 McLeod St	4/29/2016	9500	Stokes Ck		R	4.19 inches of rain
9587	111 Big Duke Trl	4/30/2016	5000	Lake Hamilton		R	4.19 inches of rain
Lakeside P.S.	Lake Park Dr	4/30/2016	7500		Ground	R	4.19 inches of rain
Wilson Mill P.S.	Scroggins Dr	4/30/2016	8000	Lake Catherine		R	4.19 inches of rain
4117	1539 Spring St	4/11/2016	900	Gulpha Ck		R	2.57 inches of rain
1864	104 Forest View Ct	4/11/2016	1100	Hot Springs Ck		R	2.57 inches of rain
5259	857 Carpenter Dam Rd	4/11/2016	1500	Unknown Ck		R	2.57 inches of rain
4118	1539 Spring St	4/11/2016	1300	Gulpha Ck		R	2.57 inches of rain
1747	3047 Malvern Ave	4/11/2016	1600	Gulpha Ck		R	2.57 inches of rain

NPID

AR0033880

Facility / Manhole	Location	SSO Date	Volume in Gallons	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
1866	352 Fontana Rd	4/11/2016	1500	Hot Springs Ck		R	2.57 inches of rain
5260	816 Carpenter Dam Rd	4/11/2016	900	Unknown Ck		R	2.57 inches of rain
998	615 McLeod St	4/11/2016	1500	Stokes Ck		R	2.57 inches of rain
1747	3047 Malvern Ave	3/31/2016	9500	Gulpha Ck		R	2.5 inches of rain
5259	857 Carpenter Dam Rd.	3/31/2016	8500	Unknown Ck		R	2.5 inches of rain
998	615 McLeod St	3/31/2016	5000	Stokes Ck		R	2.5 inches of rain
4118	1539 Spring St	3/31/2016	1000	Unknown Ck		R	2.5 inches of rain
995	519 McLeod St	3/31/2016	3000	Stokes Ck		R	2.5 inches of rain
1864	104 Forest View Ct	3/31/2016	5000	Hot Springs Ck		R	2.5 inches of rain
Regional Plant	329 Davidson Dr	3/11/2016	13.5 MG	Regional WWTP		R	EQ Pond full - Partial bypass of excess flow from Rain Event
1747	3047 Malvern Ave	3/9/2016	18000	Gulpha Ck		R	3.46 inches of rain
5259	857 Carpenter Dam Rd	3/9/2016	12000	Unknown Ck		R	3.46 inches of rain
4117	1539 Spring St	3/9/2016	3000	Gulpha Ck		R	3.46 inches of rain
12242	106 Forest View Ct	3/9/2016	3500	Hot Springs Ck		R	3.46 inches of rain
1865	352 Fontana Rd	3/9/2016	4000	Hot Springs Ck		R	3.46 inches of rain
4118	1539 Spring St	3/9/2016	3500	Gulpha Ck		R	3.46 inches of rain
1864	104 Forest View Ct	3/9/2016	4000	Hot Springs Ck		R	3.46 inches of rain
1866	362 Fontana Rd	3/9/2016	4500	Hot Springs Ck		R	3.46 inches of rain
5260	816 Carpenter Dam Rd	3/9/2016	2500	Unknown Ck		R	3.46 inches of rain
991	403 McLeod St	3/9/2016	4500	Stokes Ck		R	3.46 inches of rain
998	615 McLeod St	3/9/2016	5000	Stokes Ck		R	3.46 inches of rain
995	519 McLeod St	3/9/2016	5000	Stokes Ck		R	3.46 inches of rain
1865	362 Fontana Rd	2/23/2016	2500	Hot Springs Ck		R	1.55 inches of rain
1747	3047 Malvern Ave	2/23/2016	10000	Gulpha Ck		R	1.55 inches of rain
4118	1539 Spring St	2/23/2016	1800	Gulpha Ck		R	1.55 inches of rain
5259	857 Carpenter Dam	2/23/2016	2500	Unknown Ck		R	1.55 inches of rain
12242	106 Forest View Ct	2/23/2016	3500	Hot Springs Ck		R	1.55 inches of rain
1866	352 Fontana Rd	2/23/2016	2500	Hot Springs Ck		R	1.55 inches of rain
995	519 McLeod St	2/23/2016	2000	Stokes Ck		R	1.55 inches of rain
998	615 McLeod St	2/23/2016	3000	Stokes Ck		R	1.55 inches of rain
5260	816 Carpenter Dam	2/23/2016	1000	Unknown Ck		R	1.55 inches of rain
1747	3047 Malvern Ave	1/9/2016	12000	Gulpha Ck		R	1.4 inches of rain

NPID AR0033880

Facility / Manhole	Location	SSO Date	Volume in Gallons	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
4117	1539 Spring St	1/9/2016	7000	Gulpha Ck		R	1.4 inches of rain
1866	352 Fontana Rd	1/9/2016	14000	Hot Springs Ck		R	1.4 inches of rain
5259	857 Carpenter Dam Rd	1/9/2016	10000	Unknown Ck		R	1.4 inches of rain
998	615 McLeod St	1/9/2016	10000	Stokes Ck		R	1.4 inches of rain
4118	1539 Spring St	1/9/2016	7000	Gulpha Ck		R	1.4 inches of rain
12242	106 Forest View Ct	1/9/2016	15000	Hot Springs Ck		R	1.4 inches of rain
995	519 McLeod St	1/9/2016	9000	Stokes Ck		R	1.4 inches of rain
1865	362 Fontana Rd	1/9/2016	8500	Hot Springs Ck		R	1.4 inches of rain
5260	816 Carpenter Dam Rd	1/9/2016	5000	Unknown Ck		R	1.4 inches of rain
991	403 McLeod St	1/9/2016	7500	Stokes Ck		R	1.4 inches of rain
1864	104 Forest View Ct	1/9/2016	5000	Hot Springs Ck		R	1.4 inches of rain
HS 4 P.S.	127 Foxwood St	1/5/2016	3000		Ground	E	Equipment Failure

NPID AR0050148

Facility / Manhole	Location	SSO Date	Volume in Gallons	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
Mazarn 3 P.S.	2475 Marion Anderson Rd	12/27/2016	3500	Lake Hamilton	Ground	E	
Mazarn 4 P.S.	Marion Anderson at Kathy Ln	12/10/2016	500	Lake Hamilton		E	
70 W.13 P.S.	2122 Airport Rd	11/4/2016	200		Ground	E	
Winkler P.S.	194 Winkler Rd.	10/31/2016	300		Ground	E	
13483	2460 Marion Anderson Rd	8/20/2016	4000	Lake Hamilton		R	1.9 Inches of Rain
13484	2460 Marion Anderson Rd	8/20/2016	4000	Lake Hamilton		R	1.9 Inches of Rain
13484	2460 Marion Anderson Rd	8/15/2016	3000	Lake Hamilton		R	3.97 Inches of Rain
13483	2460 Marion Anderson Rd	8/15/2016	3000	Lake Hamilton		R	3.97 Inches of Rain
Mazarn 4 P.S.	3033 Marion Anderson Rd	7/23/2016	500	Lake Hamilton		E	
Winkler P.S.	194 Winkler Rd	6/27/2016	2000	Unknown Ck		E	
13483	2460 Marion Anderson Rd	4/29/2016	4000	Lake Hamilton		R	4.19 Inches of Rain
13484	2460 Marion Anderson Rd	4/29/2016	4000	Lake Hamilton		R	4.19 Inches of Rain
70 W 2 P.S.	105 South Moore Rd	4/30/2016	500		Ground	R	4.19 Inches of Rain
70 W14 P.S.	Airport Rd Hwy 70 West	4/3/2016	1000		Ground	E	3.46 Inches of Rain
13484	2460 Marion Anderson Rd	3/10/2016	5000	Lake Hamilton		R	3.46 Inches of Rain
13483	2460 Marion Anderson Rd	3/10/2016	5000	Lake Hamilton		R	3.46 Inches of Rain
Winkler P.S.	200 Winkler Rd	2/21/2016	1000		Ground	E	

2015 Capacity Related SSO Events

CITY OF HOT SPRINGS UTILITIES

NPID	AR0033880	Design Storm		Rain Event		Other	
		Event	Volume	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
Facility / Manhole	Location	SSO Date	Volume	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
1866	352 Fontana Rd	12/29/2015	45000	Hot Springs Ck		R	3.2 inches of rain
1865	362 Fontana Rd	12/29/2015	50000	Hot Springs Ck		R	3.2 inches of rain
12242	106 Forest View Ct	12/29/2015	70000	Hot Springs Ck		R	3.2 inches of rain
995	519 McLeod St	12/29/2015	50000	Stokes Ck		R	3.2 inches of rain
5259	857 Carpenter Dam Rd	12/29/2015	60000	Unknown Ck		R	3.2 inches of rain
1747	3047 Malvern Ave	12/29/2015	75000	Gulpha Ck		R	3.2 inches of rain
991	403 McLeod St	12/29/2015	50000	Stokes Ck		R	3.2 inches of rain
1864	104 Forest View Ct	12/29/2015	70000	Hot Springs Ck		R	3.2 inches of rain
4118	1539 Spring St	12/29/2015	20000	Gulpha Ck		R	3.2 inches of rain
4117	1539 Spring St	12/29/2015	20000	Gulpha Ck		R	3.2 inches of rain
998	615 McLeod St	12/29/2015	60000	Stokes Ck		R	3.2 inches of rain
5260	816 Carpenter Dam Rd	12/29/2015	50000	Unknown Ck		R	3.2 inches of rain
3116	400 East Grand Ave	12/28/2015	300	Storm Drain		RO	Roots in main
HS 4 PS	126 Foxwood St	12/18/2015	10,000	Ditch		EF	Equipment Failure
1864	104 Forest View Ct	12/16/2015	50000	Hot Springs Ck		R	1.38 inches of rain
5259	857 Carpenter Dam Rd	12/14/2015	20000	Unknown Ck		R	1.38 inches of rain
998	615 McLeod St.	12/14/2015	5000	Stokes Ck		R	1.38 inches of rain
991	403 McLeod St	12/14/2015	5000	Stokes Ck		R	1.38 inches of rain
995	519 McLeod St	12/14/2015	5000	Stokes Ck		R	1.38 inches of rain
1866	360 Fontana Rd	12/14/2015	10000	Hot Springs Ck		R	1.38 inches of rain
1747	3047 Malvern	12/14/2015	35000	Gulpha Ck		R	1.38 inches of rain
4117	1539 Spring St	12/1/2015	90,000	Gulpha Ck		R	5.85 inches of rain
995	519 McLeod St	12/1/2015	255,000	Stokes Ck		R	5.85 inches of rain
998	615 McLeod St	12/1/2015	255,000	Stokes Ck		R	5.85 inches of rain
4118	1539 Spring St	12/1/2015	90,000	Gulpha Ck		R	5.85 inches of rain
HS 1 PS	152 Aberina St	11/30/2015	2500	Unknown Ck		R	5.85 inches of rain
10297	5506 Central	11/30/2015	2000		Ground	R	5.85 inches of rain
991	405 McLeod St .	11/30/2015	205,000	Stokes Ck		R	5.85 inches of rain
5260	816 Carpenter Dam Rd.	11/30/2015	95,000	Unknown Ck		R	5.85 inches of rain

NPID

AR0033880

Facility / Manhole	Location	SSO Date	Volume	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
Wilson Mill PS	244 Scroggins Terrace	11/28/2015	1,000 gallons		Ground	R	5.85 inches of rain
Malvern Hwy PS	415 Essex Park Terrace	11/28/2015	1,500 gallons		Ground	R	5.85 inches of rain
4118	1539 Spring St	11/28/2015	90000	Gulpha Ck		R	5.85 inches of rain
5259	857 Carpenter Dam Rd	11/28/2015	95000	Unknown Ck		R	5.85 inches of rain
1864	104 Forestview Ct	11/28/2015	125000	Hot Springs Ck		R	5.85 inches of rain
1747	3047 Malvern Ave	11/28/2015	255,000	Gulpha Ck		R	5.85 inches of rain
1866	362 Fontana Rd	11/28/2015	245000	Hot Springs Ck		R	5.85 inches of rain
12242	106 Forestview Ct	11/28/2015	125000	Hot Springs Ck		R	5.85 inches of rain
5260	816 Carpenter Dam Rd	11/28/2015	95000	Unknown Ck		R	5.85 inches of rain
1747	3047 Malvern Ave	11/19/2015	75000	Gulpha Ck		R	3.11 inches of rain
12242	106 Forestview Ct	11/19/2015	65000	Hot Springs Ck		R	3.11 inches of rain
Island 5 PS	109 Green Circle	11/19/2015	2500	Lake Hamilton		R	3.11 inches of rain/ power loss
Island 6 PS	116 Long Island Bay	11/19/2015	2500	Lake Hamilton		R	3.11 inches of rain/ power loss
HS 2 PS	579 Lake Hamilton Dr	11/18/2015	21,000	Lake Hamilton		R	3.11 inches of rain/ power loss
995	519 McLeod St	11/18/2015	12000	Stokes Ck		R	3.11 inches of rain
5260	816 Carpenter Dam Rd	11/18/2015	15,000	Unknown Ck		R	3.11 inches of rain
HS 1 PS	152 Aberina St	11/18/2015	20,000	Lake Hamilton		R	3.11 inches of rain/ power loss
HS 3 PS	2332 Higdon Ferry Rd	11/18/2015	40000	Lake Hamilton		R	3.11 inches of rain/ power loss
998	615 McLeod St	11/18/2015	13000	Stokes Ck		R	3.11 inches of rain
5260	816 Carpenter Dam Rd	11/18/2015	15,000	Unknown Ck		R	3.11 inches of rain
4117	1539 Spring St	11/18/2015	7000	Gulpha Ck		R	3.11 inches of rain
991	403 McLeod St	11/18/2015	10000	Stokes Ck		R	3.11 inches of rain
1865	362 Fontana Rd	11/18/2015	40,000	Hot Springs Ck		R	3.11 inches of rain
4118	1539 Spring St	11/18/2015	7500	Gulpha Ck		R	3.11 inches of rain
1866	352 Fontana Rd	11/18/2015	40,000	Hot Springs Ck		R	3.11 inches of rain
5259	857 Carpenter Dam Rd	11/18/2015	25,000	Unknown Ck		R	3.11 inches of rain
1866	360 Fontana Rd	11/6/2015	2000	Hot Springs Ck		EF	Equipment failure
4480	441 Leawood St	10/12/2015	50	Ditch			Blocked main
	100 Meacon Terrace	10/5/2015	150	Storm Drain			Force main break
HS 2 PS	Lakeland Dr at Lake Hamilton Dr	9/27/2015	1000	Lake Hamilton		EF	Equipment failure
Carpenter Dam PS	421 Lakepark Dr	9/21/2015	300		Ground	EF	Equipment failure

NPID

AR0033880

Facility / Manhole	Location	SSO Date	Volume	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
	2816 Albert Pike Rd	9/1/2015	26,845	Lake Hamilton			<i>Revision of Volume (Gallons) for the SSO at . on August 20, 2015 a 20 inch Pressure Sewer Main blew apart while trying to make a repair to bell.</i>
Chadwood PS	Chdwood Dr	8/29/2015	2500	Unknown Ck		EF	Equipment failure
Emerson PS	176 Emerson Pt	8/26/2015	100		Ground	EF	Equipment failure
	2816 Albert Pike Rd	8/20/2015	26,845	Lake Hamilton			<i>Revision to estimated gallons (previously noted as undetermined) was made on 9/1/2015. Sewer Pressure main blew apart while trying to make a repair to bell.</i>
HS 2 PS	579 Lake Hamilton Dr	7/29/2015	2000		Ground	EF	Equipment Failure
11465	112 Marquette Place	7/20/2015	2500	Ditch			Damage caused by contractor
Regional WWTP	320 Davidson Dr	7/6/2015	Est 3.125 MG		Bar Screen inside ww plant		5.16 inches of rain At <i>the head of plant - high flows bar screen jammed up , excessive debris.</i>
4118	1539 Spring St	7/4/2015	3000	Gulpha Ck			5.16 inches of rain
5259	857 Carpenter Dam Rd	7/4/2015	25000	Unknown Ck			5.16 inches of rain
995	519 McLeod St	7/4/2015	10,000	Stokes Ck			5.16 inches of rain
998	615 McLeod St	7/4/2015	18,000	Stokes Ck			5.16 inches of rain
1747	3047 Malvern Ave - Manhole # 1747 - overflowed into Gulpha Creek	7/4/2015	40,000	Gulpha Ck			5.16 inches of rain
HS 4 PS	Foxwood St at Burchwood Bay	6/21/2015	2000		Ground	EF	Equipment Failure
Regional WWTP	320 Davidson DR	6/2/2015	14.million				<i>Heavy Rains , I&I Issues. EQ Pond at maximum capacity. Bypass Partial flows over 18. MGD</i>
5259	857 Carpenter Dam Rd	5/30/2015	50,000	Unknown Ck			.88 inches of rain
4117	1539 Spring St	5/26/2015	2500	Gulpha Ck			2.26 inches of rain
Regional WWTP	320 Davidson Dr	5/26/2015	Undetermined				<i>Heavy rains I&i Issues . 12 MGD Design EQ Pond at Maximum Capacity . influent < 45MGD</i>
12242	106 Forest View Ct	5/26/2015	25,000	Hot Springs Ck			2.26 inches of rain
1747	3047 Malvern Ave	5/26/2015	80,000	Gulpha Ck			2.26 inches of rain
4118	1539 Spring St	5/26/2015	5000	Gulpha Ck			2.26 inches of rain
995	519 McLeod St	5/26/2015	28,000	Stokes Ck			2.26 inches of rain

NPID

AR0033880

Facility / Manhole	Location	SSO Date	Volume	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
5259	857 Carpenter Dam Rd	5/26/2015	90000	Unknown Ck			2.26 inches of rain
5260	816 Carpenter Dam Rd	5/26/2015	15,000	Unknown Ck			2.26 inches of rain
Brown PS	112 Channelview St	5/26/2015	10000	Lake Hamilton			Equipment failure
998	615 McLeod St	5/26/2015	85000	Stokes Ck			2.26 inches of rain
1747	3047 Malvern Ave	5/21/2015	225000	Gulpha Ck			1.91 inches of rain
998	615 McLeod	5/21/2015	250000	Stokes Ck			1.91 inches of rain
5259	857 Carpenter Dam Rd	5/21/2015	200000	Unknown Ck			1.91 inches of rain
5260	816 Carpenter Dam Rd	5/20/2015	20000	Unknown Ck			1.91 inches of rain
4117	1539 Spring St	5/20/2015	20000	Gulpha Ck			1.91 inches of rain
4118	1539 Spring St	5/20/2015	25000	Gulpha Ck			1.91 inches of rain
991	403 McLeod St	5/20/2015	60000	Stokes Ck			1.91 inches of rain
1750*	117 Catherine Heights Rd	5/20/2015	Did not overflow.	NA	NA		<i>Manhole# 1750 did not overflow.</i>
161	408 Hollywood Ave	5/20/2015	1500	Hot Springs Ck			1.91 inches of rain
Regional WWTP	320 Davidson	5/20/2015	Undetermined				<i>Heavy Rains I&I , overflow EQ Pond full. bypass secondary treatment . disinfect before discharging. continuous monitoring</i>
1864	104 Forest View Ct	5/20/2015	45000	Hot Springs Ck			1.91 inches of rain
995	519 McLeod St	5/20/2015	90000	Stokes Ck			1.91 inches of rain
12242	106 Forest View Ct	5/20/2015	55000	Hot Springs Ck			1.91 inches of rain
5259	857 Carpenter Dam Rd	5/17/2015	3000	Unknown Ck			1.12 inches of rain
998	- Manhole # 998 - overflowed into Stokes Creek	5/17/2015	5500	Stokes Ck			1.12 inches of rain
8755	519 McLeod St	5/17/2015	3500	Stokes Ck			1.12 inches of rain
8755	- Manhole #8755 - overflowed onto Private Property	5/13/2015	7000		Ground		5.99 inches of rain
995	519 McLeod St	5/12/2015	250000	Stokes Ck			5.99 inches of rain
1747	3047 Malvern Ave	5/12/2015	400000	Gulpha Ck			5.99 inches of rain
1864	104 Forest View Ct	5/12/2015	90000	Hot Springs Ck			5.99 inches of rain
5259	857 Carpenter Dam Rd	5/12/2015	200000	Unknown Ck			5.99 inches of rain
991	403 McLeod St	5/12/2015	90000	Stokes Ck			5.99 inches of rain
998	615 McLeod St	5/12/2015	250000	Stokes Ck			5.99 inches of rain
12242	106 Forest View Ct	5/12/2015	100000	Hot Springs Ck			5.99 inches of rain
162	264 Shady Grove Rd	5/11/2015	7500	Hot Springs Ck			5.99 inches of rain

NPID

AR0033880

Facility / Manhole	Location	SSO Date	Volume	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
4150	204 Shady Grove Rd	5/11/2015	15,000	Hot Springs Ck			5.99 inches of rain
1899	798 Adams St	5/11/2015	15,000	Hot Springs Ck			5.99 inches of rain
138	504 Hollywood Ave	5/11/2015	4,000	Ditch			5.99 inches of rain
9760	140 Shore Acres	5/11/2015	6000	Lake Hamilton			5.99 inches of rain
5260	816 Carpenter Dam Rd	5/11/2015	75000	Unknown Ck			5.99 inches of rain
3327	229 Gorge Rd	5/11/2015	35000	Gulpha Ck			5.99 inches of rain
972	612 Woodlawn Ave	5/11/2015	100000	Stokes Ck			5.99 inches of rain
4117	1539 Spring St	5/11/2015	60000	Gulpha Ck			5.99 inches of rain
9968	287 Gorge Rd	5/11/2015	20,000	Gulpha Ck			5.99 inches of rain
161	290 Shady Grove Rd	5/11/2015	25000	Hot Springs Ck			5.99 inches of rain
9759	146 Shore Acres	5/11/2015	6500	Lake Hamilton			5.99 inches of rain
4206	799 Adams St	5/11/2015	120000	Hot Springs Ck			5.99 inches of rain
974	703 Woodlawn Ave	5/11/2015	110000	Stokes Ck			5.99 inches of rain
4118	1539 Spring St	5/11/2015	65000	Gulpha Ck			5.99 inches of rain
11274	McLeod St at & Lakeshore Dr	5/10/2015	50000	Stokes Ck			5.99 inches of rain
1747	End of Emerson Place	5/10/2015	5000	Lake Hamilton			5.99 inches of rain
5259	Carpenter Dam Rd	5/9/2015	20000	Unknown Ck			5.99 inches of rain
1747	3047 Malvern Ave	4/26/2015	120000	Gulpha Ck			2.46 inches of rain
Unknown MH	1539 Spring St	4/25/2015	4000	Gulpha Ck			2.46 inches of rain
991	403 McLeod St	4/25/2015	3000	Stokes Ck			2.46 inches of rain
998	615 McLeod St	4/25/2015	40000	Stokes Ck			2.46 inches of rain
Unknown MH	106 Forest View Ct	4/25/2015	15000	Hot Springs Ck			2.46 inches of rain
5259	857 Carpenter Dam Rd	4/25/2015	45000	Unknown Ck			2.46 inches of rain
4118	1539 Spring St	4/25/2015	25000	Gulpha Ck			2.46 inches of rain
995	519 McLeod St	4/25/2015	30000	Stokes Ck			2.46 inches of rain
4677	202 Mohawk St	4/23/2015	5000	Unknown Ck			Blocked main
Airport Grounds	525 Airport Road (Airborne Air Ambulance)	4/21/2015	100		Used Motor Oil		<i>A non permitted used oil storage vessel of 300 gallons total volume. Tank failure due to rust. Oil is contained on site with no entry to run off drains. No water contact. Clean up began at 12:00 PM by pumping oil to storage vessel. Soil remediation w</i>
1747	3047 Malvern Ave	4/15/2015	1000	Gulpha Ck			3.02 inches of rain
5259	Carpenter Dam Rd	4/15/2015	175000	Unknown Ck			3.02 inches of rain

NPID

AR0033880

Facility / Manhole	Location	SSO Date	Volume	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
991	McLeod St	4/14/2015	35000	Stokes Ck			3.02 inches of rain
1864	Forestview Ct	4/14/2015	70000	Hot Springs Ck			3.02 inches of rain
5260	816 Carpenter Dam Rd	4/14/2015	25,000	Unknown Ck			3.02 inches of rain
4118	Spring St	4/14/2015	40,000	Gulpha Ck			3.02 inches of rain
Unknown MH	Malvern Ave north of Gulpha Creek Bridge	4/14/2015	150000	Gulpha Ck			3.02 inches of rain
998	McLeod St	4/14/2015	100000	Stokes Ck			3.02 inches of rain
995	McLeod St	4/14/2015	50000	Stokes Ck			3.02 inches of rain
998	McLeod St	4/14/2015	100000	Stokes Ck			3.02 inches of rain
11275	772 McLeod St	4/2/2015	90000	Stokes Ck			1.56 inches of rain
998	615 McLeod St	4/2/2015	150,000	Stokes Ck			1.56 inches of rain
Private Clean Out	314 West St	3/27/2015	15,000	Storm Drain		EF	Blocked main
5259	Carpenter Dam Rd	3/23/2015	450,000	Unknown Ck		EF	Equipment failure
Regional WWTP	320 Davidson Drive	3/23/2015	Undetermined			R	<i>Overflow to EQ Pond Full . heavy rains past month , we are having to go back on partial bypass of secondary treatment, going directly to disinfection before discharge , with continuous monitoring.</i>
1747	Malvern Ave north of Gulpha Creek Bridge	3/15/2015	Undetermined	Gulpha Ck		R	3.08 inches of rain
5259	Carpenter Dam Rd	3/15/2015	Undetermined	Unknown Ck		R	3.08 inches of rain
998	McLeod St	3/15/2015	Undetermined	Stokes Ck		R	3.08 inches of rain
993	McLeod St	3/15/2015	Undetermined	Stokes Ck		R	3.08 inches of rain
5260	816 Carpenter Dam Rd	3/14/2015	200000	Unknown Ck		R	3.08 inches of rain
4117	Spring St	3/14/2015	45000	Gulpha Ck		R	3.08 inches of rain
9760	128 Shore Acres Rd	3/14/2015	4500	Lake Hamilton		R	3.08 inches of rain
991	McLeod St	3/14/2015	175000	Stokes Ck		R	3.08 inches of rain
12242	Forest View Ct	3/14/2015	400000	Hot Springs Ck		R	3.08 inches of rain
4118	Spring St	3/14/2015	60000	Gulpha Ck		R	3.08 inches of rain
138	Hollywood Ave	3/13/2015	4500	Ditch		R	3.08 inches of rain
1899	793 Adams St	3/13/2015	2500		Ground	R	3.08 inches of rain
4206	797 Adams St	3/13/2015	3500	Hot Springs Ck		R	3.08 inches of rain
166	202 Shady Grove Rd	3/13/2015	10000	Hot Springs Ck		R	3.08 inches of rain
10578	611 East Grand Ave	3/13/2015	4000	Ditch		R	3.08 inches of rain

NPID

AR0033880

Facility / Manhole	Location	SSO Date	Volume	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
998	McLeod St	3/11/2015	115000	Stokes Ck		R	1.18 inches of rain
5259	Carpenter Dam Rd	3/11/2015	150,000	Unknown Ck		R	1.18 inches of rain
993	McLeod St	3/11/2015	75,000	Stokes Ck		R	1.18 inches of rain
1747	Malvern Ave just north of Gulpha Creek bridge	3/11/2015	350000	Gulpha Ck		R	1.18 inches of rain
4118	Spring St	3/10/2015	5000	Gulpha Ck		R	1.18 inches of rain
Regional WWTP	20 Davidson Dr.	3/9/2015	5 to 10 percent of flow			R	Due to rains in February, heavy snow and ice, and continuing rains in March EQ pond reached maximum fill level. We have had to open the secondary bypass valve.
11274	McLeod St	2/23/2015	1000	Storm Drain		R	
1747	Malvern Ave between Gulpha Creek Bridge and Bypass	2/22/2015	Undetermined	Gulpha Ck		R	1.01 inches of rain
998	McLeod St	2/21/2015	50000	Stokes Ck		R	1.01 inches of rain
993	McLeod St	2/21/2015	7000	Stokes Ck		R	1.01 inches of rain
Lakeside PS	857 Carpenter Dam Road	1/30/2015	4,500 gallons	Ditch		EF	Equipment failure
5259	Carpenter Dam Rd	1/21/2015	500	Unknown Ck		EF	Equipment failure
5259	Carpenter Dam Rd	1/9/2015	7,000	Unknown Ck		EF	Equipment failure
5259	Carpenter Dam Rd	1/5/2015	35000	Unknown Ck		R	1.77 inches of rain
991	McLeod St	1/5/2015	15,000	Stokes Ck		R	1.77 inches of rain
991	McLeod St	1/5/2015	30,000	Stokes Ck		R	1.77 inches of rain
998	McLeod St	1/5/2015	30,000	Stokes Ck		R	1.77 inches of rain
1750	Catherine Heights Rd	1/5/2015	90000	Gulpha Ck		R	1.77 inches of rain

NPID

AR0050148

Facility / Manhole	Location	SSO Date	Volume	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
13484	2460 Marion Anderson Rd	12/27/2015	23000	Lake Hamilton		R	3.2 Inches of Rain
13483	2460 Marion Anderson Rd	12/27/2015	25000	Lake Hamilton		R	3.2 Inches of Rain
13483	2460 Marion Anderson Rd	11/27/2015	85,000	Unknown Ck		R	5.85 Inches of Rain
Warpath P.S.	162 Warpath Lift station overflowed into unknown stream.	11/27/2015	20,000	Unknown Ck		R	5.85 Inches of Rain
Airport Rd P.S.	2006 Airport Road Lift station overflowed out of lift tank into unknown stream.	11/27/2015	3500	Lake Hamilton		R	5.85 Inches of Rain
Mazarn 2 P.S.	1724 Marion Anderson Mazarn 2 P.S. Overflowed at lift station into yard, then ditch, into Lake Hamilton.	11/27/2015	2500	Lake Hamilton		R	5.85 Inches of Rain
Mazarn 1 P.S.	114 Ridge Point Mazarn 1 P.S. Overflowed into yard and then into Lake Hamilton.	11/27/2015	1500	Lake Hamilton		R	5.85 Inches of Rain
13484	2460 Marion Anderson Rd	11/17/2015	1000	Unknown Ck		R	3.11 Inches of Rain
S. Rogers P.S.	297 South Rodgers South Rodgers Pump Station overflowed into Unknown Creek	11/17/2015	25,000	Lake Hamilton		R	3.11 Inches of Rain
13483	2460 Marion Anderson Rd	11/17/2015	1000	Lake Hamilton		R	3.11 Inches of Rain
13484	2460 Marion Anderson Rd	9/18/2015	1500		Ground	E	
70 W. P.S.	2006 Airport Rd. 70	8/26/2015	2000	Ditch		E	
70 W. 11 P.S.	2222 Airport Rd	8/24/2015	7500	Ditch		E	
10	1000 Block of Marion Anderson Rd	7/21/2015	5000	Unknown Ck		LF	Line Failure
S. Rogers P.S.	299 South Rodgers Rd	5/25/2015	500	Lake Hamilton		R	2.26 Inches of Rain
13483	2460 Marion Anderson Rd	5/20/2015	25000	Lake Hamilton		R	1.91 Inches of rain
13484	2460 Marion Anderson Rd	5/20/2015	25000	Lake Hamilton		R	1.91 Inches of rain
13483	2460 Marion Anderson Rd	5/11/2015	30000	Lake Hamilton		R	5.99 Inches of Rain
13484	2460 Marion Anderson Rd	5/11/2015	30000	Lake Hamilton		R	5.99 Inches of Rain
13483	2460 Marion Anderson Rd	4/13/2015	30,000	Ditch		R	3.02 Inches of Rain
70 West - 11 P.S.	2222 Airport Rd. 70 West - 11 Pump Station - overflowed into Ditch	4/13/2015	1000	Lake Hamilton		E	
13484	2460 Marion Anderson Rd	3/13/2015	10000	Lake Hamilton		R	

NPID

AR0050148

Facility / Manhole	Location	SSO Date	Volume	Receiving Water	Affected Private Property	Cause of Failure	Rainfall / Comments
13483	2460 Marion Anderson Rd	3/13/2015	10000	Lake Hamilton		R	3.08 Inches of Rain
13483	2460 Marion Anderson Rd	3/12/2015	5000	Lake Hamilton		R	3.08 Inches of Rain
13484	2460 Marion Anderson Rd	3/12/2015	5000	Lake Hamilton		R	3.08 Inches of Rain
9289	1750 Marion Anderson Road	3/4/2015	50000		Ground	E	
Winkler P.S.	365 Winkler Road	2/13/2015	1800	Ditch		O	Water was from treated decant basin . Open valve allowed excess water from discharge basin to bypass filter and leak to the return sump pump. Pump tripped out. reset and pumped tank down . got a crew out there fixed faulty val
Force Main	2362 Marion Anderson Rd	1/31/2015	750	Ditch		LF	Line Failure. Cleaned up with pumper truck

EXHIBIT B



City of Hot Springs 2018 Non Design Storm Event (7 Each)



Legend

- 2018 Non Storm Event
- Street Centerline
- ▭ CHS City Limits
- ▭ County Hydro



THE DATA CONTAINED HEREIN WAS COMPILED FROM VARIOUS SOURCES FOR THE SOLE USE AND BENEFIT OF THE CITY OF HOT SPRINGS, AR AND THE PUBLIC AGENTS IT SERVES, AND USE OF THE DATA BY ANYONE OTHER THAN THE CITY OF HOT SPRINGS IS AT THE SOLE RISK OF THE USER AND WITH ACCEPTANCE OF THIS DATA, THE USER ACKNOWLEDGES AND AGREES TO WAIVE ANY CLAIMS, COSTS OR DAMAGES OF ANY NATURE AGAINST THE CITY OF HOT SPRINGS, INCLUDING COSTS OF DEFENSE, ARISING FROM EMPLOYER USE OF THIS DATA, OR USE BY ANOTHER PARTY, ACCEPTANCE OR USE OF THIS DATA, IN WHOLE OR IN PART, WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES.



City of Hot Springs 2018 Design Storm Event (55 Each)



- Legend**
- 2018 Design Storm Event
 - Street Centerline
 - ▭ CHS City Limits
 - ▭ County Hydro



THE DATA CONTAINED HEREIN WAS COMPILED FROM VARIOUS SOURCES FOR THE SOLE USE AND BENEFIT OF THE CITY OF HOT SPRINGS, AR. AND THE PUBLIC AGENCIES IT SERVES. ANY USE OF THE DATA BY ANYONE OTHER THAN THE CITY OF HOT SPRINGS IS AT THE USER'S RISK OF THE USER AND WITH ACCEPTANCE OF THE DATA, THE USER DOES HEREBY HOLD THE CITY OF HOT SPRINGS HARMLESS AND WITHOUT LIABILITY FROM ANY CLAIMS, COSTS OR DAMAGES OF ANY NATURE ARISING FROM IMPROPER USE OF THE DATA, OR USE BY ANOTHER PARTY. ACCEPTANCE OR USE OF THE DATA IS DONE WITHOUT ANY EXPRESSED OR IMPLIED WARRANTIES.

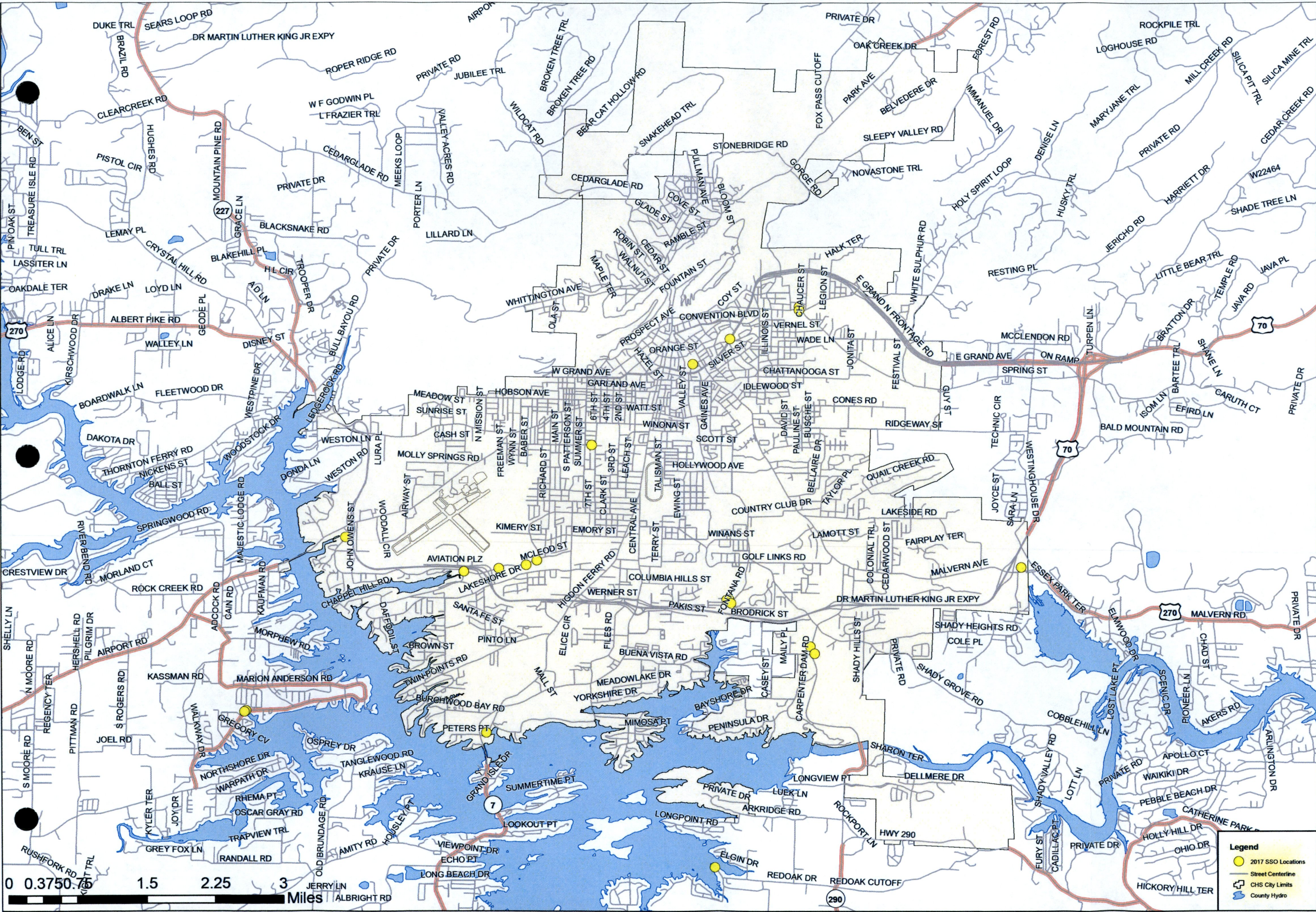
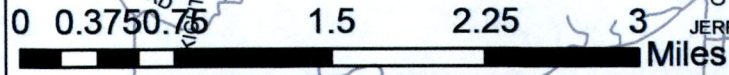


City of Hot Springs 2017 SSO Capacity Related Event Locations (46 Each)



THE DATA CONTAINED HEREIN WAS COMPILED FROM VARIOUS SOURCES FOR THE USE AND BENEFIT OF THE CITY OF HOT SPRINGS OR ANY OTHER USER. THE CITY OF HOT SPRINGS IS NOT RESPONSIBLE FOR ANY USE OF THIS DATA BY ANY OTHER USER. THE CITY OF HOT SPRINGS IS NOT RESPONSIBLE FOR ANY LIABILITY FROM ANY CLAIMS, COSTS OR DAMAGES OF ANY NATURE ARISING FROM IMPROPER USE OF THIS DATA, OR USE BY ANOTHER PARTY. ACCEPTANCE OR USE OF THIS DATA IS DONE WITHOUT ANY WARRANTY OR IMPLIED WARRANTY.

- Legend**
- 2017 SSO Locations
 - Street Centerline
 - CHS City Limits
 - County Hydro

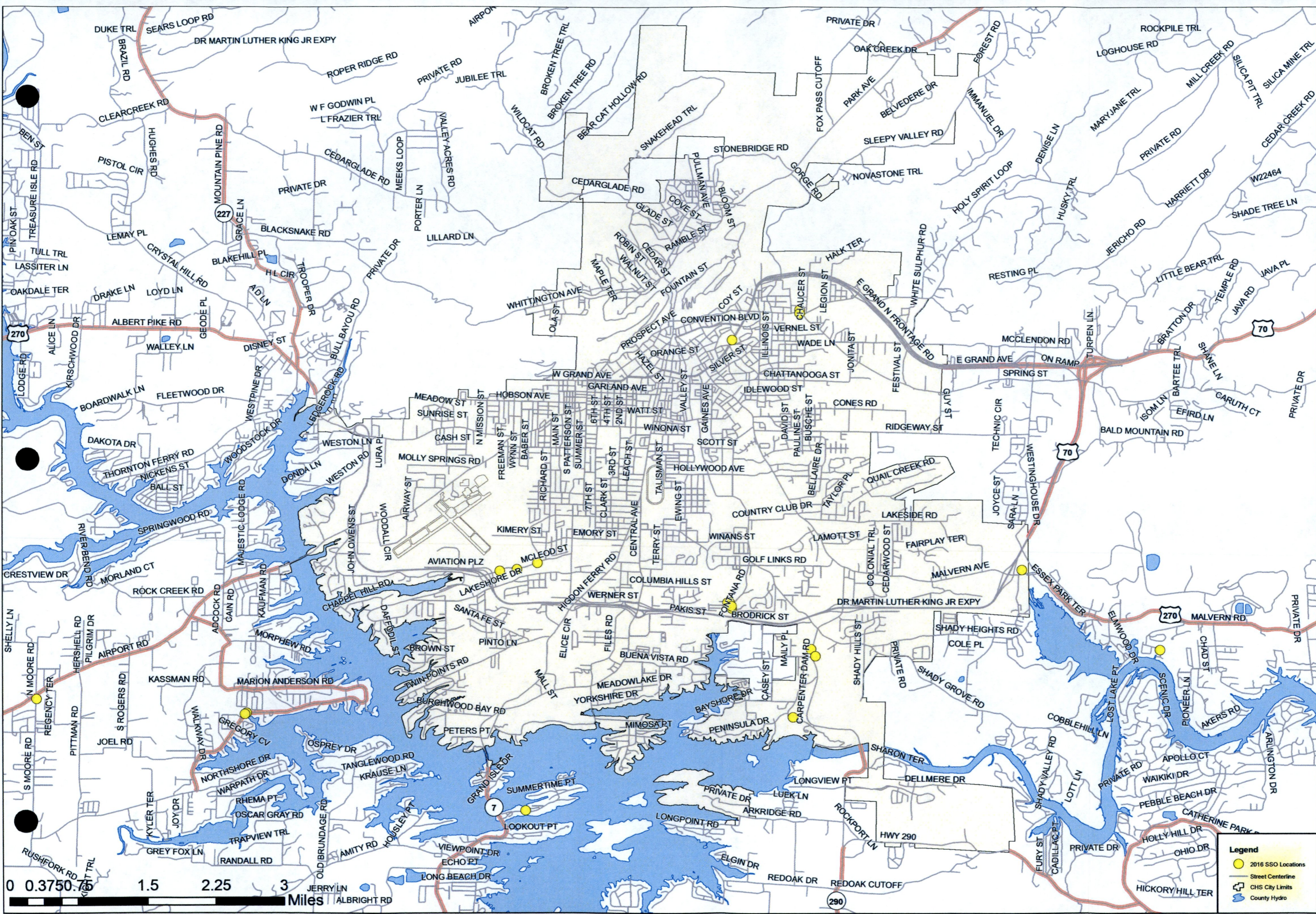




City of Hot Springs 2016 SSO Capacity Related Event Locations (86 Each)



THE DATA CONTAINED HEREIN WAS COMPILED FROM VARIOUS SOURCES FOR THE USE OF THE CITY OF HOT SPRINGS AND IS PROVIDED AS IS. THE CITY OF HOT SPRINGS DOES NOT WARRANT THE ACCURACY OF THE DATA. ANY USE OF THE DATA BY ANY OTHER USER IS AT THE USER'S SOLE RISK. THE CITY OF HOT SPRINGS SHALL NOT BE LIABLE FOR ANY CLAIMS, COSTS OR DAMAGES OF ANY NATURE ARISING FROM IMPROPER USE OF THE DATA, OR USE BY ANOTHER PARTY. ACCEPTANCE OF USE OF THE DATA IS DONE WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES.

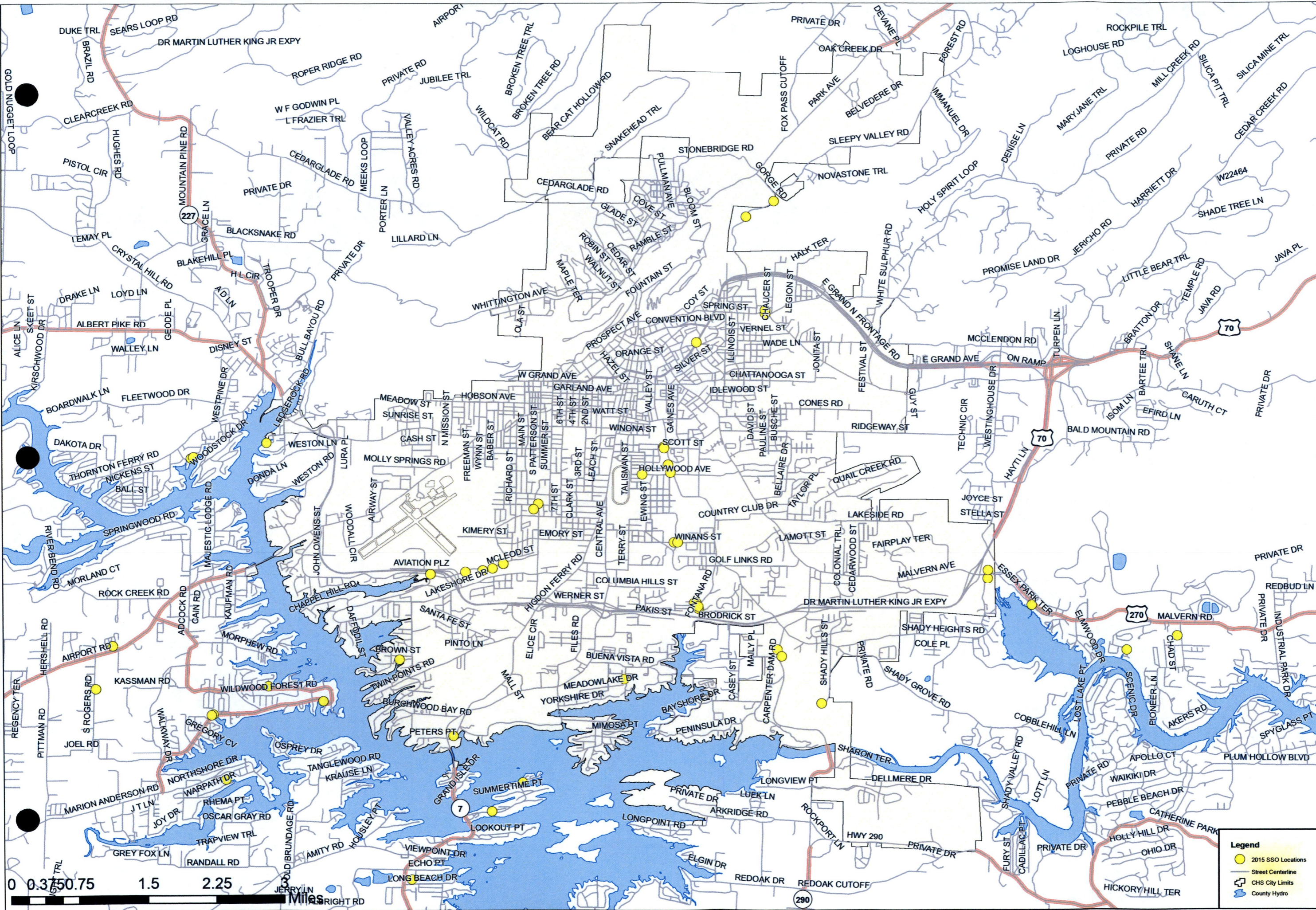


- Legend**
- 2016 SSO Locations
 - Street Centerline
 - - - CHS City Limits
 - County Hydro

0 0.3750 1.5 2.25 3 Miles



City of Hot Springs 2015 SSO Capacity Related Event Locations (164 Each)



- Legend**
- 2015 SSO Locations
 - Street Centerline
 - CHS City Limits
 - ☪ County Hydro

THE DATA CONTAINED HEREIN WAS COMPILED FROM VARIOUS SOURCES FOR THE SOLE USE AND BENEFIT OF THE CITY OF HOT SPRINGS, AR AND THE PUBLIC AGENCIES IT SERVES. ANY USE OF THE DATA BY ANYONE OTHER THAN THE CITY OF HOT SPRINGS, AR OR ANY AGENCY OF THE CITY OR ANY AGENCY OF THE STATE OF ARIZONA IS PROHIBITED. THE USER DOES HEREBY WAIVE THE CITY OF HOT SPRINGS, AR AND THE STATE OF ARIZONA FROM ANY CLAIM, COSTS OR DAMAGES OF ANY NATURE ARISING FROM IMPROPER USE OF THE DATA, OR USE BY ANY OTHER PARTY, ACCEPTANCE OR USE OF THE DATA IS SOLELY THE USER'S RESPONSIBILITY. NO IMPLIED WARRANTIES.

EXHIBIT C

SECAP Project List

(Reference 2012 Report)

Gulpha Basin Priority 1 Projects

- **Gravity Mains**
 - E. Grand Ave. -*
 - Upper Gulpha Interceptor -*
- **Force Main**
 - Gulpha Pump Station Force Main - *
- **Pump Station**
 - Gulpha Pump Station – Rehabilitated in 2014, new generator for backup power, new SCADA, pump rebuilds as needed and the wet well was cleaned out. This station contused to perform well.

Hot Springs Creek /Davidson Dr Tributary Priority 1 Projects

- **Gravity Mains**
 - 4th St. & Greenwood Ave.
 - Hot Springs Creek interceptor
- **Force Mains**
 - Albert Pike Rd Force Main – Fairwood Force Main, complete
 - 24 Inch Parallel to Fairwood Force Main – Fairwood Force Main, complete
 - Carpenter Dam Rd Force Main – Fairwood Force Main, complete
- **Pump Stations**
 - Hwy 270 P.S. – Pump Station is performing well, reduced flows due to the new Fairwood Main.
 - Hot Springs Creek P.S. – Reconfigured to reduce flows utilizing new mains
 - Molly Creek P.S. – Rehabilitated in 2009
 - PS 20 -
 - Lakeside P.S. – Design is in progress

Stokes P.S. Tributary Priority 1 Projects

- **Gravity Main**
 - Stokes Interceptor – Complete, placed in service late 2016 into 2017.
- **Force Main**
 - Stokes Force Main – Complete, placed in service late 2017.
- **Mazarn/Southwest WWTP Tributary Priority 1 Projects**
 - **Force Main**
 - Mazarn Force Main – It was determined this was not needed following the 2015 flow monitoring results
 - **Pump Stations**
 - Mazarn #1 P.S. – Pump Station equipment has been updated and is performing well
 - Mazarn #4 P.S. - Pump Station equipment has been updated and is performing well
 - **Manhole Rehabilitation**
 - All completed – Significant reduction in I&I, involved (4ea) phases of rehabilitation as well as use of the Uretek application to address defects.

- **Sewer Line Rehabilitation**
 - Point Repairs – City Utilities staff, as well as project development, have been utilized to address known areas of deficiency that are in need of repair.
 - Complete Rehabilitation – Developed in our Wastewater System Improvements projects.
- **Inflow Removal**
 - Public Sector – We have completed several related projects
- **Capacity Improvements**
- Our annual Wastewater Collection Systems Improvement Projects continue to address system deficiencies and improve our overall system health.

Summary

*The city of Hot Springs developed the SECAP Priority One Project list in 2011. This list of projects was determined from information we had at that time. As we began to collect data and analyze our overall system we began to realize our initial thought process may not have been the best approach.

Our wastewater hydraulic model then became the tool we would use to determine our best path forward in addressing the mandates of the CAO. We used the model to analyze the data and ultimately develop our process to mitigate overflows. After conducting post rehab flow monitoring in 2015 we were able to validate the success of the I&I projects and the reduction in conveyance flows in several areas. This I&I reduction enabled Hot Springs to review the project priority plan with insight we had not previously been able to.

We now had data to guide us in addressing those areas most in need. That data was then input into the hydraulic model, from that we were able to reprioritize several areas. Subsequent projects were developed for rehab or replacement of line segments, manholes, pump stations, eliminating cross connections and addressing emergent items. Hot Springs completed rehabilitation of several pump stations, most of which were not identified in the initial plan. We purposely chose not to focus only on the overflows, we focused on working to improve the overall health of the wastewater system. Please refer to our annual report project list (ATT. C) for a complete list of all projects associated with the CAO effort.

Today we continue to develop additional capacity and system improvement projects, funding are budgeted for this annually. Currently we are working on a design for the Gulpha Basin areas, those areas where overflows are occurring in significant rain events or where the potential for overflows is greatest. To ensure we are addressing the appropriate locations we once again installed flow meters in Feb., 2018. This data will be used to confirm the flows as compared to 2015 and provide us the information to effectively address any issues. We are currently finalizing that flow monitoring analysis and will be developing a scope of work from that data, all to better prioritize areas requiring attention in the Gulpha Basin.

From 2004 to 2008 SSO's occurred at an average rate of 16 overflows per 100 miles of gravity sewer for two-year storm events. Data analyzed from storm events in 2017, not including the 20-Year event which occurred in late February, revealed Hot Springs has reduced that number to roughly 1 SSO per 100 miles of pipe. As noted earlier, while Hot Springs focused on eliminating SSO related events, we

also continued to assess the overall system. This resulted in our identifying much needed improvements at our treatment facilities.

Projects implemented at the plants include the new UV Disinfection System and Headworks Project at our Regional Davidson Dr. Plant and an additional Tertiary Filter at our Southwest Wastewater Treatment Plant. We are currently in the design phase of a project to install a Tertiary Filter at our Regional Plant. This will enable our treatment facility to increase the throughput during high flow events while maintaining compliance with our NPDES permit.

As we develop long term plans to mitigate overflows we continue to add backup pumping systems to critical pump stations that ensure continued operation of the facilities during utility power loss. It also allows the site station to be taken off line for maintenance without interrupting conveyance of our flows.

Hot Springs fully recognizes, and embraces, the fact our work is, not finished. Honestly, there will always be work to do here as we endeavor to prevent system degradation and ensure we protect our community, the environment, and the natural beauty we enjoy here. Our commitment to continually assess, rehabilitate and improve the wastewater system will be accomplished by utilizing the CMOM principles and industry best practices methods.

Our maintenance program continues to evolve utilizing new technology and equipment. We are committed to continued training of our staff and equipping them with the required tooling to ensure our success. While much has been accomplished, we acknowledge there remains work to be done.

APPENDIX "A" - WASTEWATER PROJECT STATUS REPORT

FIRM/CONTRACTOR	PROJECT	COST	SPENT TO DATE	STATUS	FUNDING SOURCE			
					CHS BUDGET	2009 BOND	2013 BOND PROJECTS	2013 BOND PROJECTS
						SPENT TO DATE	Estimated Cost(s)	SPENT TO DATE
CAO PROJECTS								
2009-2014								
Brown Engineers		\$ 48,543.00	\$ 48,543.00	COMPLETE	\$ 48,543.00			
Brown Engineers	SCADA Master Plan	\$ 149,400.00	\$ 149,400.00	COMPLETE	\$ 149,400.00			
Brown Engineers	SCADA RTU Programming	\$ 196,700.00	\$ 196,700.00	COMPLETE	\$ 196,700.00			
Brown Engineers	West Mtn. SCADA Repeater	\$ 134,540.00	\$ 134,540.00	COMPLETE	\$ 25,599.00	\$ 108,941.00		
Brown Engineers	Grinder Station Alarm Design	\$ 170,967.58	\$ 169,257.90	COMPLETE		\$ 169,257.90		
All Service Electric	Grinder Station Monitoring	\$ 899,171.50	\$ 868,782.65	COMPLETE		\$ 868,782.65		
Brown Engineers	Grinder Lift Sta. Integration	\$ 335,000.00	\$ 335,000.00	COMPLETE		\$ 335,000.00		
Dell	Computer Equipment	\$ 14,867.41	\$ 14,867.41	COMPLETE		\$ 14,867.41		
Brown Engineers	Regional HMI Upgrades	\$ 178,102.00	\$ 181,617.48	COMPLETE		\$ 181,617.48		
CHS Procurement		\$ 16,254.81	\$ 16,254.81	COMPLETE	\$ 16,254.81			
Brown Engineers	SCADA / RTU	\$ 138,375.58	\$ 138,375.60	COMPLETE		\$ 138,375.60		
Koontz Electric	SCADA / RTU	\$ 932,777.00	\$ 857,248.74	COMPLETE		\$ 857,248.74		
Brown Engineers	Ignition Software/ SCADA Integration	\$ 616,025.00	\$ 609,864.75	COMPLETE		\$ 609,864.75		
Brown Engineers	Ignition/ HMI Interface Software	\$ 84,117.00	\$ 84,117.00	COMPLETE		\$ 84,117.00		
Brown Engineers	Generator Monitoring	\$ 144,750.00	\$ 144,026.00	COMPLETE		\$ 144,026.00		
Brown Engineers	Finance Generator	\$ 25,904.00	\$ 25,904.00	COMPLETE				
Brown Engineers	SCADA Support(ASC)	\$ 45,000.00	\$ 34,734.57	COMPLETE	\$ 34,734.57			
Brown Engineers	SCADA Support(ASC)	\$ 45,000.00	\$ 36,803.40	COMPLETE	\$ 36,803.40			
Brown Engineers	Regional Generator Design	\$ 9,910.00	\$ 12,408.30	COMPLETE	\$ 12,408.30			
Garver, LLC	Pump Station Study	\$ 1,202,754.00	\$ 1,202,668.13	COMPLETE		\$ 1,202,668.13		
H&H Electric	Pump Sta. Project 10A	\$ 1,024,104.40	\$ 1,024,104.40	COMPLETE		\$ 1,024,104.40		
On-Line Const.	Pump Sta. Project 10B	\$ 322,594.76	\$ 320,118.78	COMPLETE		\$ 320,118.78		
VEI General Cont.	Hogan/Lakeside Pump Station	\$ 612,013.00	\$ 615,183.08	COMPLETE		\$ 615,183.08		
Entergy	Hogan/Lakeside Pump Station	\$ 8,276.48	\$ 8,276.48	COMPLETE		\$ 8,276.48		
H&H Electric	Gulpha Pump Station	\$ 1,153,412.00	\$ 1,153,412.00	COMPLETE		\$ 1,153,412.00		
Garver, LLC	Pump Station Study	\$ 1,090,000.00	\$ 1,056,885.70	COMPLETE		\$ 527,421.00		\$229,795.70
City Crews		\$ 243,000.00	\$ 243,000.00	COMPLETE	\$ 243,000.00			
Heller Co./City	Molly Creek Pump Station	\$ 363,000.00	\$ 363,000.00	COMPLETE	\$ 363,000.00			
Heller Co./City	Tom Ellsworth Main Replacement	\$ 226,765.00	\$ 226,765.00	COMPLETE	\$ 226,765.00			
Cobar Construction		\$ 222,342.26	\$ 222,342.26	COMPLETE	\$ 222,342.26			
RJN Group	Wastewater Coll. Sysytem Survey Phase 1	\$ 412,305.00	\$ 412,302.35	COMPLETE	\$ 412,302.35			
RJN Group	Wastewater Coll. Sysytem Survey Phase II	\$ 350,000.00	\$ 350,000.00	COMPLETE	\$ 349,449.45	\$ 349,449.45		
RJN Group	SSES	\$ 3,369,913.00	\$ 3,364,206.74	99% Complete		\$ 3,364,206.74		
RJN Group	Wastewater Coll. System Survey Phase IV, V & VI	\$ 629,505.00	\$ 613,160.00	COMPLETE		\$ 613,160.00		
RJN Group	Post Rehab Flow Monitoring	\$ 73,480.00	\$ 71,924.87	COMPLETE		\$ 71,924.87		
RJN Group	Stokes Creek Force Main Design	\$ 996,880.00	\$ 982,155.39	COMPLETE		\$ 982,155.39		
Uretex/City	Manhole Rehab	\$ 149,000.00	\$ 149,000.00	COMPLETE		\$ 149,000.00		
City Crews		\$ 33,000.00	\$ 33,000.00	COMPLETE	\$ 33,000.00			
Uretex/City	Manhole Rehab	\$ 650,000.00	\$ 607,526.30	COMPLETE		\$ 607,526.30		
Ark Midland RR	Fairwood Easement(s)	\$ 152,000.00	\$ 152,000.00	COMPLETE		\$ 195,861.07		
Coakley Co.	Fairwood Force Main Phase 1	\$ 1,877,257.98	\$ 1,784,906.76	COMPLETE		\$ 1,784,906.76		
Engineers, Inc.	Fairwood Design	\$ 21,800.00	\$ 21,800.00	COMPLETE		\$ 21,800.00		
Kim Construction	Manhole Rehab Phase 1 & II	\$ 3,410,523.00	\$ 3,410,523.00	COMPLETE		\$ 3,410,523.00		
Heller Co.	Pipeline Rehab Phase 1	\$ 1,439,184.10	\$ 1,726,414.14	COMPLETE		\$ 1,726,414.14		
Heller, Co.	Troup St. Main Repalcement	\$ 15,000.00	\$ 15,000.00	COMPLETE	\$ 15,000.00			
Garver, LLC	Construction Inspection	\$ 276,900.00	\$ 201,557.11	COMPLETE		\$ 201,557.11		
Engineers, Inc.	Pond St Main Replacement	\$ 52,000.00	\$ 56,700.00	COMPLETE		\$ 56,700.00		
Kraus Const. Co.	Fairwood Pump Station	\$ 2,775,600.00	\$ 2,836,695.00	COMPLETE		\$ 2,836,695.00		

APPENDIX "A" - WASTEWATER PROJECT STATUS REPORT

On- Line	Fairwood Pond St. Main Replacement	\$ 1,214,652.05	\$ 1,231,000.21	COMPLETE		\$ 1,231,000.21		
On- Line	Pond St Gravity Main Repairs	\$ 27,582.35	\$ 27,582.35	COMPLETE		\$ 27,582.35		
On- Line	Fairwood Pump Sta. Force Main	\$ 730,387.00	\$ 816,531.00	COMPLETE	\$ 775,000.00			
Kimzey Water Dist.	SWWWTP Water Supply	\$ 58,620.00	\$ 58,620.00	COMPLETE		\$ 58,620.00		
Fournier	SWWWTP Sludge Equipment	\$ 375,236.00	\$ 366,605.57	COMPLETE		\$ 366,605.57		
CDM	SWWWTP Sludge Project	\$ 164,810.00	\$ 150,119.00	90% Design Review	\$ 150,119.00			
Plastic Fusion Inc	EQ Pond Liner Repair	\$ 54,930.00	\$ 54,930.00	COMPLETE	\$ 54,930.00			
2013 Bond Projects								
CLB Engineers	SWWWTP Tertiary Filter	\$ 49,500.00	\$ 48,400.00	COMPLETE		\$ 49,500.00	\$ 48,400.00	
Engineers ,Inc	Hogan Force Main	\$ 69,000.00	\$ 69,000.00	COMPLETE		\$ 69,000.00	\$ 69,000.00	
Boyles Construction	Hogan Force Main	\$ 564,418.00	\$ 564,418.00	COMPLETE		\$ 564,418.00	\$ 564,418.00	
EPS	SWWWTP Tertiary Filter	\$ 583,211.00	\$ 584,710.99	COMPLETE		\$ 700,000.00	\$ 584,710.99	
T.G. Excavating	Manhole Rehab Phase III & IV	\$ 2,181,111.00	\$ 2,024,580.50	COMPLETE		\$ 2,200,000.00	\$ 2,024,580.50	
S&J Construction	Stokes Collection System	\$ 6,145,897.45	\$ 5,854,897.55	COMPLETE		\$ 3,500,000.00	\$ 5,854,897.55	
Engineers ,Inc	Fairwood Force Main Phase III	\$ 24,000.00	\$ 24,000.00	COMPLETE		\$ 24,000.00	\$ 24,000.00	
Coakley Co.	Fairwood Force Main Phase III	\$ 2,139,000.00	\$ 1,986,945.65	COMPLETE		\$ 2,200,000.00	\$ 1,986,945.65	
J.S. Haren	Stokes Pump Station	\$ 2,374,106.35	\$ 2,017,922.45	COMPLETE		\$ 2,533,000.00	\$ 1,575,713.13	
RJN	Regional Plant Grit Chamber Design	\$ 28,960.00	\$ 20,000.00	Reassigned to Garver			\$ 20,000.00	
RJN	Grit Chamber & UV Disinfection	\$ 8,900,000.00	\$ 1,102,638.07	In Progress		\$ 8,900,000.00		
RJN	Post Rehab Flow Monitoring	\$ 365,230.00	\$ 298,900.00	COMPLETE		\$ 365,000.00	\$ 365,000.00	
Engineers Inc	Fairwood Force Main Phase IV	\$ 40,000.00	\$ 38,500.00	COMPLETE		\$ 40,000.00	\$ 31,000.00	
Diamond Const.	Fairwood Force Main Phase IV	\$ 5,200,000.00	\$ 5,327,079.54	COMPLETE		\$ 5,200,000.00	\$ 4,302,690.61	
Coakley Co.	Stokes Force Main	\$ 3,900,000.00	\$ 3,613,031.22	COMPLETE		\$ 3,900,000.00	\$ 2,316,384.00	
RJN	Construction Inspection	\$ 510,297.95	\$ 371,846.27	COMPLETE		\$ 510,297.95	\$ 371,846.27	
Brown Engineers	Regional HMI Phase I	\$ 264,392.00	\$ 272,945.77	COMPLETE		\$ 264,392.00	\$ 272,945.77	
IPR South Central ,LLC	Rehab Fairwood Main	\$ 666,800.00	\$ 491,550.20	COMPLETE		\$ 666,800.00	\$ 491,550.20	
EcoVerde ,LLC	Odor Control System	\$ 53,542.00	\$ 53,542.00	COMPLETE		\$ 53,542.00	\$ 53,542.00	
EcoVerde ,LLC	Odor Control System	\$ 106,600.00	\$ 106,600.00	COMPLETE		\$ 106,600.00	\$ 96,600.00	
RJN	UV Disinfection System for Regional	\$ 273,608.00	\$ 236,297.36	COMPLETE				
CTS Services	Grit Chamber Cleaning	\$ 60,000.00	\$ 60,000.00	COMPLETE		\$ 60,000.00	\$ 60,000.00	
Jack Tyler Engineering	Godwin Pumps (HS #1 thru #4)	\$ 236,000.00	\$ 256,945.00	COMPLETE		\$ 236,000.00		
Seven Valleys Contracting	Godwin Pumps (HS #1 thru #4)	\$ 392,000.00		COMPLETE				
Jack Tyler Engineering	Stokes Godwin Pump	\$ 481,690.50	481,690.50	COMPLETE		\$ 481,690.50	\$481,690.50	
Hanson	Stokes Godwin Pump	\$ 42,000.00	31,500.00	COMPLETE				
Coakley Co.	2017 Collection Systems Improvement	\$ 661,980.00		COMPLETE				
T.G. Excavating	Pipeline Rehab Phase II	\$ 1,464,444.00		COMPLETE				
RJN Group	Construction Inspection	\$ 341,000.00	375,087.37	COMPLETE				
RJN Group	Pipeline Rehab Phase II	\$ 29,094.00	26,579.74	COMPLETE				
Jenkins/Cranford/United	TV Hill Paving	\$ 164,443.37		COMPLETE				
Coakley Co./HD Supply/Miller Pipeline	Fairwood FM Repairs	\$ 76,110.54	76,110.54	COMPLETE				
Cranford Const	Mcleod Paving	\$ 17,739.20	17,739.20	COMPLETE				
Entergy/Ctr. Pt.	Stokes PS Utilities	\$ 17,534.80	17,534.80	COMPLETE				
Garver	Const. Mgmt. Stokes P.S.	\$ 210,000.00	\$ 272,000.00	COMPLETE				
RJN Group	Construction Inspection	\$ 229,492.00	43,702.68	COMPLETE				
TOTALS		\$ 68,827,434.42	\$ 56,404,179.95		\$ 3,365,351.14	\$ 26,418,970.36	\$ 32,624,240.45	\$ 21,825,710.87