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BEFORE THE ARIZONA CORPORATION COMMISSION

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GARY PIERCE, Chairman
SANDRA D. KENNEDY
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BOB STUMP
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AZ CORP COMMISSION
DOCKET CONTROL

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IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE ITS ANTHEM WATER DISTRICT AND ITS SUN CITY WATER DISTRICT, AND POSSIBLE RATE CONSOLIDATION FOR ALL OF ARIZONA AMERICAN WATER COMPANY'S DISTRICTS.

DOCKET NO. W-01303A-09-0343

Arizona Corporation Commission
DOCKETED

SEP 13 2011

DOCKETED BY *MM*

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS ANTHEM / AGUA FRIA WASTEWATER DISTRICT, SUN CITY WASTEWATER DISTRICT, AND SUN CITY WEST WASTEWATER DISTRICT.

DOCKET NO. SW-01303A-09-0343

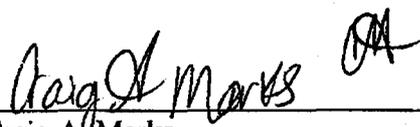
NOTICE OF FILING REBUTTAL TESTIMONY

1 Arizona-American Water Company hereby files the Rebuttal Testimony of Sandra L.
2 Murrey.

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Respectfully submitted on September 13, 2011, by:



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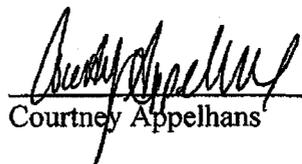
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BEFORE THE ARIZONA CORPORATION COMMISSION

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GARY PIERCE, Chairman
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IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE ITS ANTHEM WATER DISTRICT AND ITS SUN CITY WATER DISTRICT, AND POSSIBLE RATE CONSOLIDATION FOR ALL OF ARIZONA AMERICAN WATER COMPANY' S DISTRICTS.

DOCKET NO. W-01303A-09-0343

IN THE MATTER OF THE APPLICATION OF ARIZONA-AMERICAN WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES BASED THEREON FOR UTILITY SERVICE BY ITS ANTHEM / AGUA FRIA WASTEWATER DISTRICT, SUN CITY WASTEWATER DISTRICT, AND SUN CITY WEST WASTEWATER DISTRICT.

DOCKET NO. SW-01303A-09-0343

**REBUTTAL TESTIMONY
OF
SANDRA L. MURREY
REGARDING
CONSIDERATION OF STAND-ALONE REVENUE REQUIREMENTS AND RATE
DESIGNS FOR THE ANTHEM/AGUA FRIA WASTEWATER DISTRICT
ON BEHALF OF
ARIZONA AMERICAN WATER COMPANY
SEPTEMBER 13, 2011**

1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Sandra L. Murrey. My business address is 2355 West Pinnacle Peak, Suite
4 300, Phoenix, Arizona 85027.

5 **Q. ARE YOU THE SAME SANDRA L. MURREY WHO PREVIOUSLY**
6 **SUBMITTED DIRECT TESTIMONY IN THIS DOCKET ON APRIL 1, 2011?**

7 A. Yes.

8 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

9 A. The purpose of my rebuttal testimony is to address and clarify various issues that were
10 raised by other parties in their direct testimony.

11 **II. CITY OF PHOENIX**

12 **Q. IN YOUR DIRECT TESTIMONY, ARIZONA-AMERICAN PROPOSED**
13 **ADJUSTING THE TEST YEAR USAGE FOR CITY OF PHOENIX TO**
14 **REFLECT FLUME WASTEWATER READS, WHICH WERE ESTIMATED AT**
15 **APPROXIMATELY 30% OF THE EXISTING WATER METER READS. IS 30%**
16 **STILL A GOOD ESTIMATE?**

17 A. At this time, we cannot corroborate that percentage. The 30% estimate was based on
18 common industry standards. In other words, it stands to reason that wastewater flow is
19 much less than water flow because much of the later is consumed outside the home or
20 business and is not received back as wastewater. However, Arizona-American began
21 compiling actual flume reads back to January 2009. Please see Exhibit SLM-1 for these
22 monthly reads through July 2011. I was not aware of the flume based meter reads until
23 just recently.

1 **Q. PLEASE SUMMARIZE THE RESULTS OF THE ACTUAL FLUME**
2 **WASTEWATER READS AS COMPARED TO THE 2008 TEST YEAR WATER**
3 **USAGE BILLED TO THE CITY OF PHOENIX.**

4 A. The actual flume wastewater readings are much higher than the original estimate and are
5 close to the test-year water usage as shown in the table below.

6 **Table 1 – City of Phoenix Wastewater Flume vs. Water Flow**

<u>(in kgals)</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
Test Year Water Usage	231,722		
Wastewater Flume Reads		189,997	225,813

7 Based on these reads, it would seem to make little difference whether the volumes billed
8 to the City of Phoenix for wastewater are based on flume readings or on the existing
9 proxy of water-meter reads. It is my understanding the City of Phoenix and the Company
10 have had discussions concerning the accuracy of the Company's wastewater flume
11 readings and that the Company has taken some remedial actions in that regard, but that
12 higher than expected readings have continued.

13 **Q. DOES THE CITY OF PHOENIX HAVE ITS OWN FLUME METER READINGS?**

14 A. Yes. It is my understanding the City of Phoenix also has its own meter placed a distance
15 ahead of the Company's flume meter. I received several days of flume reads based on
16 the City of Phoenix meter just moments prior to filing my testimony. This data appears
17 to more closely support the industry norm. Please see Exhibit SLM-2 for the City's
18 flume reads for the period May 1, 2011 to May 4, 2011.

1 **Q. MR. ANDY TERREY AND MS. TAMMY RYAN, BOTH CLAIM THAT THEY**
2 **DID NOT RECEIVE A WRITTEN NOTICE OF THE RATE INCREASE IN**
3 **DOCKET NO. 09-0343. HOW DO YOU RESPOND?**

4 A. The City of Phoenix was timely noticed. The current address for the "OWU" account in
5 question is:

6 Al Eneboe, Water Service Budget & Fiscal
7 FL 9
8 City of Phoenix
9 200 W. Washington
10 Phoenix, AZ 85003

11 Arizona-American provided notice to the City through Mr. Eneboe. I do not know what
12 happened to the notice after it was received by the City.

13 **Q. SINCE RECEIVING MS. RYAN'S TESTIMONY, HAS ARIZONA-AMERICAN**
14 **DONE ANYTHING TO BETTER UNDERSTAND THE CITY'S ALLEGATION**
15 **OF LACK OF NOTICE?**

16 A. Yes, especially since Ms. Ryan states (Page 2-5, Line 9) that she questioned the Budget
17 & Fiscal Section staff. I have attempted unsuccessfully several times to contact Ms.
18 Ryan to discuss the situation. Recently, I left her a detailed phone message indicating
19 that Mr. Eneboe is the City's designated point of contact. I note that it is the City's
20 responsibility to provide Arizona-American with any necessary updates of customer
21 contact information.

22 **Q. IN MR. TERREY'S TESTIMONY (PAGE 1-7, Lines 15-17), HE ASKS THAT A**
23 **STUDY BE COMPLETED TO DETERMINE THE COST OF PROVIDING**
24 **WHOLESALE WASTEWATER SERVICE TO WEST ANTHEM. WHAT IS**
25 **ARIZONA-AMERICAN'S POSTION?**

1 A. A study is not necessary at this time. Such a study would be outside the scope of this
2 case. In Decision No. 72047, the Commission ordered (page 122):

3 IT IS FURTHER ORDERED that the docket in this proceeding shall
4 remain open for the sole purpose of considering the design and
5 implementation of stand-alone revenue requirements and rate designs as
6 agreed to in the settlement reached during the Open Meeting for the
7 Anthem Wastewater district and Agua Fria Wastewater district.

8 IT IS FURTHER ORDERED that Arizona-American Water Company
9 shall file, no later than April 1, 2011, an application supporting
10 consideration of stand-alone revenue requirements and rate designs as set
11 forth in the Agreement reached during the Open Meeting for the Anthem
12 Wastewater district and Agua Fria Wastewater district.

13 Arizona-American has fully complied with the Commission's Decision. There is nothing
14 in the Decision that requires a new cost-of-service study. The Commission rarely, if
15 ever, approves rates for an individual customer or class of customers that exactly reflects
16 its cost of providing service to that customer or class. There are many additional factors
17 the Commission considers in approving rates beyond the exact cost of service. It is not
18 unusual for a rate case not to even include a new cost of service study, but rather rely on a
19 study from a prior case.

20 **Q. THE CITY IS ALSO REQUESTING A CORRECTION OF THE WHOLESALE**
21 **OWU RATE AND THE INCLUSION OF A WATER WHEELING RATE THAT**
22 **WERE ESTABLISHED IN DECISION NO. 72047. SHOULD THIS REQUEST**
23 **BE ADDRESSED IN THIS COMPLIANCE FILING?**

24 A. No. The City's request concerns water rates which are also outside the scope of this case,
25 but, the Company disagrees with the City that the water wheeling rate is incorrect in the
26 filed tariff.

27

28

1 **III. ANTHEM CITY COUNCIL**

2 **Q. MR. DAN NEIDLINGER, ON BEHALF OF THE ANTHEM COMMUNITY**
3 **COUNCIL, PROPOSES A THREE STEP, THREE YEAR PHASE-IN PLAN TO**
4 **MITIGATE THE RATE IMPACT OF THE DECONSOLIDATION PROPOSAL**
5 **ON THE AGUA FRIA CUSTOMERS. DOES ARIZONA-AMERICAN HAVE**
6 **ANY CONCERNS WITH THE USE OF THE TERM "PHASE-IN"?**

7 A. Yes. Arizona-American prefers that the parties use the term "revenue transition" or
8 something similar. The term "phase-in" has a specific meaning concerning rates and
9 accounting, to the effect that Arizona-American would receive additional revenue
10 gradually over time. However, since the current application is not a rate case, it will have
11 a revenue-neutral impact on Arizona-American. In order to avoid giving the false
12 impression to others that Arizona-American will receive some gain from the present
13 application, Arizona-American asks that the parties refer to the Anthem City Council
14 proposal as a revenue transition, not as a phase-in.

15 **Q. IF AFTER WEIGHING THE EVIDENCE THE COMMISSION DECIDES TO**
16 **APPROVE DECONSOLIDATION FOR THE ANTHEM/AGUA FRIA**
17 **WASTEWATER DISTRICT, WOULD MR. NEIDLINGER'S REVENUE**
18 **TRANSITION PROPOSAL BE HELPFUL?**

19 A. Yes.

20 **IV. OTHER ISSUES**

21 **Q. IN YOUR DIRECT TESTIMONY, YOU STATED THAT ARIZONA-AMERICAN**
22 **WOULD PREFER TO FURTHER POSTPONE WINTER-AVERAGE RATE**
23 **DESIGNS. IS THIS STILL ARIZONA-AMERICAN'S POSITION?**

24 A. Yes. Decision No. 72047 established an implementation date of June 1, 2012, for winter
25 average rate design for residential wastewater customers of the Anthem/Agua Fria

1 district. This upcoming winter— January through March 2012—will be the first winter
2 measurement period and Arizona-American must shortly begin to further inform
3 customers about this upcoming important change. However, for the reasons cited in the
4 earlier phase of this docket, Arizona-American still prefers to postpone this
5 implementation at least until the next rate case.

6 Several other parties in this application, such as Anthem Community Council and
7 Verrado Community Association, also recommend that winter-average rate design be
8 postponed. RUCO has also responded via a data request that it does not oppose Arizona-
9 American's position on winter-average rate design. Arizona-American is concerned that
10 we do not yet have a handle on how much and during what season this rate design will
11 reduce or increase consumption.

12 We are also concerned about causing further customer upset in these districts at a time
13 when a water rate case is also pending. A postponement of even an additional one year
14 would be helpful. Because we do not know when this compliance case will be decided, it
15 would be even further confusing for customers to implement winter-average rates June 1,
16 2012 (thereby presumably providing certainty as to the wastewater billing for the next
17 twelve months), only later to have them deconsolidated and changed during that year.

18 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

19 **A.** Yes. I am not responding to additional issues raised by the other parties either because
20 the issue is outside of the scope of this limited compliance proceeding or because no
21 additional response is needed. Arizona-American is doing its best to fulfill the
22 compliance requirement in Decision No. 72047, which embodied the settlement
23 agreement with the Anthem Community Council.

Attachment

Exhibit SLM-1

City of Phoenix

Flume Reads in kgals from Arizona-American's meter

Data Available only thru July 2011

Exhibit SLM-1

Page 1 of 1

	<u>2009</u>	<u>2010</u>	<u>2011</u>
January	14,313.2	17,919.9	18,890.1
February	12,844.5	14,986.4	17,566.2
March	14,876.4	16,604.3	19,588.1
April	15,319.1	17,404.0	16,944.2
May	14,677.5	15,345.5	17,142.6
June	13,391.8	15,934.3	15,439.5
July	15,106.2	25,932.1	16,551.8
August	15,935.0	24,992.2	
September	16,272.0	19,444.6	
October	17,964.6	19,022.8	
November	18,710.6	19,518.9	
December	20,586.0	18,707.5	
	<u>189,996.9</u>	<u>225,812.5</u>	<u>122,122.5</u> YTD

Attachment

Exhibit SLM-2

Day	Hour	MH-68-19-401		Flume GPM
		mgd	GPM	
1-May	12:00 AM	0.144	100	340
1-May	12:15 AM	0.151	105	326
1-May	12:30 AM	0.168	117	346
1-May	12:45 AM	0.139	97	319
1-May	1:00 AM	0.098	68	263
1-May	1:15 AM	0.079	55	247
1-May	1:30 AM	0.085	59	247
1-May	1:45 AM	0.09	63	247
1-May	2:00 AM	0.086	60	237
1-May	2:15 AM	0.075	52	225
1-May	2:30 AM	0.071	49	225
1-May	2:45 AM	0.06	42	225
1-May	3:00 AM	0.081	56	225
1-May	3:15 AM	0.117	81	268
1-May	3:30 AM	0.11	76	281
1-May	3:45 AM	0.074	51	247
1-May	4:00 AM	0.088	61	247
1-May	4:15 AM	0.091	63	247
1-May	4:30 AM	0.089	62	247
1-May	4:45 AM	0.094	65	247
1-May	5:00 AM	0.089	62	247
1-May	5:15 AM	0.08	56	231
1-May	5:30 AM	0.137	95	286
1-May	5:45 AM	0.108	75	287
1-May	6:00 AM	0.09	63	251
1-May	6:15 AM	0.089	62	248
1-May	6:30 AM	0.076	53	248
1-May	6:45 AM	0.1	69	248
1-May	7:00 AM	0.102	71	257
1-May	7:15 AM	0.127	88	287
1-May	7:30 AM	0.125	87	296
1-May	7:45 AM	0.145	101	338
1-May	8:00 AM	0.215	149	426
1-May	8:15 AM	0.174	121	406
1-May	8:30 AM	0.171	119	406
1-May	8:45 AM	0.227	158	489
1-May	9:00 AM	0.232	161	503
1-May	9:15 AM	0.216	150	505
1-May	9:30 AM	0.29	201	559
1-May	9:45 AM	0.373	259	600
1-May	10:00 AM	0.272	189	534
1-May	10:15 AM	0.288	200	550
1-May	10:30 AM	0.287	199	564
1-May	10:45 AM	0.248	172	548
1-May	11:00 AM	0.328	228	593
1-May	11:15 AM	0.259	180	563
1-May	11:30 AM	0.365	253	632
1-May	11:45 AM	0.286	199	562
1-May	12:00 PM	0.286	199	586
1-May	12:15 PM	0.309	215	580
1-May	12:30 PM	0.248	172	513

Day	Hour	MH-68-19-401		Flume GPM
		mgd	GPM	
1-May	12:45 PM	0.308	214	577
1-May	1:00 PM	0.275	191	552
1-May	1:15 PM	0.258	179	510
1-May	1:30 PM	0.279	194	551
1-May	1:45 PM	0.293	203	557
1-May	2:00 PM	0.225	156	494
1-May	2:15 PM	0.223	155	472
1-May	2:30 PM	0.292	203	544
1-May	2:45 PM	0.236	164	494
1-May	3:00 PM	0.231	160	459
1-May	3:15 PM	0.202	140	448
1-May	3:30 PM	0.274	190	509
1-May	3:45 PM	0.237	165	483
1-May	4:00 PM	0.206	143	445
1-May	4:15 PM	0.198	138	424
1-May	4:30 PM	0.251	174	491
1-May	4:45 PM	0.231	160	485
1-May	5:00 PM	0.217	151	454
1-May	5:15 PM	0.202	140	447
1-May	5:30 PM	0.233	162	484
1-May	5:45 PM	0.231	160	487
1-May	6:00 PM	0.192	133	440
1-May	6:15 PM	0.179	124	413
1-May	6:30 PM	0.257	178	505
1-May	6:45 PM	0.241	167	483
1-May	7:00 PM	0.21	146	451
1-May	7:15 PM	0.244	169	491
1-May	7:30 PM	0.243	169	496
1-May	7:45 PM	0.229	159	475
1-May	8:00 PM	0.292	203	538
1-May	8:15 PM	0.236	164	518
1-May	8:30 PM	0.244	169	501
1-May	8:45 PM	0.242	168	530
1-May	9:00 PM	0.279	194	536
1-May	9:15 PM	0.23	160	462
1-May	9:30 PM	0.18	125	449
1-May	9:45 PM	0.312	217	521
1-May	10:00 PM	0.231	160	464
1-May	10:15 PM	0.202	140	444
1-May	10:30 PM	0.251	174	493
1-May	10:45 PM	0.177	123	412
1-May	11:00 PM	0.184	128	390
1-May	11:15 PM	0.16	111	383
1-May	11:30 PM	0.168	117	393
1-May	11:45 PM	0.169	117	388
2-May	12:00 AM	0.134	93	331
2-May	12:15 AM	0.124	86	319
2-May	12:30 AM	0.111	77	285
2-May	12:45 AM	0.095	66	249
2-May	1:00 AM	0.079	55	234
2-May	1:15 AM	0.082	57	234

Day	Hour	MH-68-19-401		Flume
		mgd	GPM	GPM
2-May	1:30 AM	0.076	53	218
2-May	1:45 AM	0.08	56	215
2-May	2:00 AM	0.133	92	275
2-May	2:15 AM	0.101	70	258
2-May	2:30 AM	0.072	50	216
2-May	2:45 AM	0.083	58	216
2-May	3:00 AM	0.079	55	216
2-May	3:15 AM	0.078	54	216
2-May	3:30 AM	0.081	56	216
2-May	3:45 AM	0.082	57	216
2-May	4:00 AM	0.083	58	216
2-May	4:15 AM	0.083	58	216
2-May	4:30 AM	0.084	58	216
2-May	4:45 AM	0.076	53	216
2-May	5:00 AM	0.097	67	216
2-May	5:15 AM	0.101	70	252
2-May	5:30 AM	0.171	119	323
2-May	5:45 AM	0.107	74	285
2-May	6:00 AM	0.124	86	284
2-May	6:15 AM	0.126	88	297
2-May	6:30 AM	0.163	113	395
2-May	6:45 AM	0.233	162	470
2-May	7:00 AM	0.211	147	472
2-May	7:15 AM	0.318	221	586
2-May	7:30 AM	0.267	185	554
2-May	7:45 AM	0.278	193	571
2-May	8:00 AM	0.249	173	511
2-May	8:15 AM	0.238	165	500
2-May	8:30 AM	0.226	157	509
2-May	8:45 AM	0.216	150	463
2-May	9:00 AM	0.219	152	478
2-May	9:15 AM	0.225	156	472
2-May	9:30 AM	0.179	124	415
2-May	9:45 AM	0.25	174	481
2-May	10:00 AM	0.233	162	460
2-May	10:15 AM	0.171	119	400
2-May	10:30 AM	0.171	119	405
2-May	10:45 AM	0.264	183	479
2-May	11:00 AM	0.198	138	423
2-May	11:15 AM	0.176	122	391
2-May	11:30 AM	0.213	148	436
2-May	11:45 AM	0.199	138	435
2-May	12:00 PM	0.158	110	388
2-May	12:15 PM	0.16	111	369
2-May	12:30 PM	0.195	135	433
2-May	12:45 PM	0.196	136	453
2-May	1:00 PM	0.18	125	391
2-May	1:15 PM	0.159	110	371
2-May	1:30 PM	0.155	108	389
2-May	1:45 PM	0.209	145	445
2-May	2:00 PM	0.157	109	393

Day	Hour	MH-68-19-401		Flume GPM
		mgd	GPM	
2-May	2:15 PM	0.145	101	362
2-May	2:30 PM	0.158	110	351
2-May	2:45 PM	0.169	117	376
2-May	3:00 PM	0.205	142	414
2-May	3:15 PM	0.145	101	362
2-May	3:30 PM	0.138	96	353
2-May	3:45 PM	0.158	110	343
2-May	4:00 PM	0.152	106	331
2-May	4:15 PM	0.149	103	369
2-May	4:30 PM	0.21	146	415
2-May	4:45 PM	0.134	93	365
2-May	5:00 PM	0.144	100	353
2-May	5:15 PM	0.154	107	353
2-May	5:30 PM	0.167	116	379
2-May	5:45 PM	0.209	145	441
2-May	6:00 PM	0.172	119	397
2-May	6:15 PM	0.142	99	378
2-May	6:30 PM	0.158	110	378
2-May	6:45 PM	0.212	147	442
2-May	7:00 PM	0.203	141	460
2-May	7:15 PM	0.172	119	425
2-May	7:30 PM	0.191	133	425
2-May	7:45 PM	0.195	135	448
2-May	8:00 PM	0.231	160	501
2-May	8:15 PM	0.198	138	453
2-May	8:30 PM	0.202	140	463
2-May	8:45 PM	0.259	180	550
2-May	9:00 PM	0.218	151	492
2-May	9:15 PM	0.184	128	455
2-May	9:30 PM	0.221	153	506
2-May	9:45 PM	0.222	154	504
2-May	10:00 PM	0.187	130	438
2-May	10:15 PM	0.168	117	431
2-May	10:30 PM	0.228	158	489
2-May	10:45 PM	0.196	136	449
2-May	11:00 PM	0.169	117	400
2-May	11:15 PM	0.153	106	383
2-May	11:30 PM	0.152	106	384
2-May	11:45 PM	0.163	113	381
3-May	12:00 AM	0.114	79	307
3-May	12:15 AM	0.088	61	277
3-May	12:30 AM	0.086	60	274
3-May	12:45 AM	0.094	65	260
3-May	1:00 AM	0.07	49	241
3-May	1:15 AM	0.067	47	229
3-May	1:30 AM	0.072	50	229
3-May	1:45 AM	0.069	48	229
3-May	2:00 AM	0.061	42	229
3-May	2:15 AM	0.062	43	219
3-May	2:30 AM	0.06	42	207
3-May	2:45 AM	0.071	49	207

Day	Hour	MH-68-19-401		Flume
		mgd	GPM	GPM
3-May	3:00 AM	0.091	63	248
3-May	3:15 AM	0.092	64	266
3-May	3:30 AM	0.074	51	231
3-May	3:45 AM	0.066	46	230
3-May	4:00 AM	0.067	47	230
3-May	4:15 AM	0.064	44	216
3-May	4:30 AM	0.067	47	208
3-May	4:45 AM	0.074	51	214
3-May	5:00 AM	0.086	60	234
3-May	5:15 AM	0.132	92	308
3-May	5:30 AM	0.11	76	295
3-May	5:45 AM	0.108	75	275
3-May	6:00 AM	0.112	78	284
3-May	6:15 AM	0.116	81	302
3-May	6:30 AM	0.152	106	378
3-May	6:45 AM	0.27	188	541
3-May	7:00 AM	0.216	150	516
3-May	7:15 AM	0.251	174	558
3-May	7:30 AM	0.289	201	607
3-May	7:45 AM	0.245	170	531
3-May	8:00 AM	0.315	219	593
3-May	8:15 AM	0.229	159	490
3-May	8:30 AM	0.195	135	475
3-May	8:45 AM	0.259	180	510
3-May	9:00 AM	0.199	138	455
3-May	9:15 AM	0.206	143	477
3-May	9:30 AM	0.258	179	510
3-May	9:45 AM	0.194	135	436
3-May	10:00 AM	0.165	115	407
3-May	10:15 AM	0.216	150	454
3-May	10:30 AM	0.202	140	439
3-May	10:45 AM	0.172	119	391
3-May	11:00 AM	0.166	115	386
3-May	11:15 AM	0.216	150	423
3-May	11:30 AM	0.198	138	431
3-May	11:45 AM	0.19	132	390
3-May	12:00 PM	0.163	113	363
3-May	12:15 PM	0.172	119	357
3-May	12:30 PM	0.191	133	406
3-May	12:45 PM	0.216	150	427
3-May	1:00 PM	0.152	106	355
3-May	1:15 PM	0.163	113	342
3-May	1:30 PM	0.162	113	342
3-May	1:45 PM	0.165	115	370
3-May	2:00 PM	0.19	132	396
3-May	2:15 PM	0.155	108	339
3-May	2:30 PM	0.151	105	320
3-May	2:45 PM	0.146	101	320
3-May	3:00 PM	0.141	98	327
3-May	3:15 PM	0.171	119	383
3-May	3:30 PM	0.161	112	356

Day	Hour	MH-68-19-401		Flume
		mgd	GPM	GPM
3-May	3:45 PM	0.145	101	320
3-May	4:00 PM	0.151	105	320
3-May	4:15 PM	0.125	87	303
3-May	4:30 PM	0.129	90	298
3-May	4:45 PM	0.13	90	314
3-May	5:00 PM	0.197	137	387
3-May	5:15 PM	0.16	111	358
3-May	5:30 PM	0.152	106	345
3-May	5:45 PM	0.155	108	345
3-May	6:00 PM	0.146	101	345
3-May	6:15 PM	0.185	128	421
3-May	6:30 PM	0.172	119	415
3-May	6:45 PM	0.18	125	390
3-May	7:00 PM	0.175	122	378
3-May	7:15 PM	0.168	117	394
3-May	7:30 PM	0.237	165	469
3-May	7:45 PM	0.168	117	418
3-May	8:00 PM	0.19	132	417
3-May	8:15 PM	0.23	160	487
3-May	8:30 PM	0.221	153	475
3-May	8:45 PM	0.205	142	452
3-May	9:00 PM	0.255	177	515
3-May	9:15 PM	0.252	175	514
3-May	9:30 PM	0.187	130	441
3-May	9:45 PM	0.194	135	423
3-May	10:00 PM	0.238	165	497
3-May	10:15 PM	0.191	133	470
3-May	10:30 PM	0.181	126	434
3-May	10:45 PM	0.157	109	424
3-May	11:00 PM	0.203	141	471
3-May	11:15 PM	0.164	114	434
3-May	11:30 PM	0.116	81	373
3-May	11:45 PM	0.121	84	346
4-May	12:00 AM	0.108	75	316
4-May	12:15 AM	0.152	106	351
4-May	12:30 AM	0.097	67	292
4-May	12:45 AM	0.088	61	270
4-May	1:00 AM	0.077	53	257
4-May	1:15 AM	0.077	53	247
4-May	1:30 AM	0.076	53	245
4-May	1:45 AM	0.07	49	225
4-May	2:00 AM	0.068	47	225
4-May	2:15 AM	0.068	47	225
4-May	2:30 AM	0.068	47	225
4-May	2:45 AM	0.072	50	225
4-May	3:00 AM	0.068	47	225
4-May	3:15 AM	0.072	50	225
4-May	3:30 AM	0.076	53	225
4-May	3:45 AM	0.098	68	272
4-May	4:00 AM	0.098	68	293
4-May	4:15 AM	0.087	60	271

Day	Hour	MH-68-19-401		Flume
		mgd	GPM	GPM
4-May	4:30 AM	0.064	44	256
4-May	4:45 AM	0.074	51	211
4-May	5:00 AM	0.079	55	204
4-May	5:15 AM	0.081	56	204
4-May	5:30 AM	0.075	52	204
4-May	5:45 AM	0.1	69	273
4-May	6:00 AM	0.164	114	335
4-May	6:15 AM	0.122	85	299
4-May	6:30 AM	0.135	94	318
4-May	6:45 AM	0.218	151	473
4-May	7:00 AM	0.259	180	497
4-May	7:15 AM	0.256	178	517
4-May	7:30 AM	0.26	181	556
4-May	7:45 AM	0.228	158	519
4-May	8:00 AM	0.329	228	566
4-May	8:15 AM	0.215	149	466
4-May	8:30 AM	0.285	198	520

Sewer Flow Rates

