

APPENDIX E:

LIFT STATION STARTS AND RUNTIMES



Monthly Report

August 2019

Brenner Lift Station

Date	Pump No. 1 Hours	Pump No. 1 Starts	Pump No. 2 Hours	Pump No. 2 Starts
08/01/2019	1.0	8	0.9	9
08/02/2019	1.0	8	0.9	8
08/03/2019	0.9	7	0.8	7
08/04/2019	1.1	8	0.8	7
08/05/2019	0.9	7	0.7	7
08/06/2019	0.7	6	0.7	7
08/07/2019	1.1	9	1.0	9
08/08/2019	1.0	8	0.8	7
08/09/2019	1.0	8	1.0	9
08/10/2019	0.8	6	0.6	6
08/11/2019	1.0	8	0.9	8
08/12/2019	1.1	9	0.9	9
08/13/2019	1.2	9	0.9	8
08/14/2019	1.0	8	0.9	9
08/15/2019	1.0	8	0.7	7
08/16/2019	1.0	8	0.8	8
08/17/2019	1.3	10	1.2	11
08/18/2019	1.4	10	1.0	9
08/19/2019	1.0	8	0.8	8
08/20/2019	1.0	8	0.9	9
08/21/2019	1.3	10	1.1	10
08/22/2019	1.1	9	0.9	9
08/23/2019	0.8	7	0.7	7
08/24/2019	0.9	8	0.7	7
08/25/2019	0.7	6	0.7	7
08/26/2019	1.0	8	0.7	7
08/27/2019	0.8	7	0.8	8
08/28/2019	1.1	9	1.0	9
08/29/2019	0.8	7	0.6	6
08/30/2019	0.9	7	0.7	7
08/31/2019	0.9	7	0.8	8
TOTAL	30.8	246	26.0	247



Monthly Report

August 2019

Center Lift Station

Date	Pump No. 1 Hours	Pump No. 1 Starts	Pump No. 2 Hours	Pump No. 2 Starts
08/01/2019	1.6	27	0.7	27
08/02/2019	1.4	24	0.6	24
08/03/2019	1.3	23	0.6	22
08/04/2019	1.2	23	0.6	23
08/05/2019	1.1	23	0.6	23
08/06/2019	1.0	21	0.6	22
08/07/2019	1.0	20	0.6	20
08/08/2019	0.9	19	0.5	19
08/09/2019	0.9	19	0.6	18
08/10/2019	1.1	22	0.6	23
08/11/2019	1.1	23	0.6	24
08/12/2019	1.0	21	0.6	20
08/13/2019	0.9	19	0.6	20
08/14/2019	1.1	21	0.6	21
08/15/2019	1.1	22	0.5	19
08/16/2019	1.1	23	0.6	23
08/17/2019	1.3	22	0.6	22
08/18/2019	1.5	29	0.8	29
08/19/2019	1.1	24	0.7	24
08/20/2019	1.2	28	0.8	29
08/21/2019	1.1	27	0.8	27
08/22/2019	1.0	26	0.7	26
08/23/2019	1.1	24	0.7	25
08/24/2019	1.6	27	0.7	26
08/25/2019	1.4	24	0.7	25
08/26/2019	1.4	24	0.7	23
08/27/2019	1.5	24	0.7	25
08/28/2019	1.4	23	0.6	22
08/29/2019	1.5	23	0.7	23
08/30/2019	1.5	23	0.6	23
08/31/2019	1.3	21	0.6	22
TOTAL	37.8	719	19.8	719



Monthly Report

August 2019

Cleveland Lift Station

Date	Pump No. 1 Hours	Pump No. 1 Starts	Pump No. 2 Hours	Pump No. 2 Starts
08/01/2019	2.2	53	2.4	53
08/02/2019	2.1	53	2.5	53
08/03/2019	2.1	50	2.5	51
08/04/2019	0.0	1	0.0	0
08/05/2019	0.8	21	1.2	21
08/06/2019	2.2	51	2.7	50
08/07/2019	2.1	48	2.5	49
08/08/2019	1.9	47	2.4	47
08/09/2019	2.1	49	2.7	49
08/10/2019	2.2	50	2.7	49
08/11/2019	1.8	44	2.3	45
08/12/2019	2.2	50	2.4	49
08/13/2019	2.2	49	2.8	50
08/14/2019	2.0	47	2.6	47
08/15/2019	2.0	47	2.3	46
08/16/2019	1.8	45	2.3	46
08/17/2019	1.7	44	2.3	43
08/18/2019	2.0	47	2.6	47
08/19/2019	2.0	47	2.5	47
08/20/2019	2.0	48	2.7	48
08/21/2019	3.4	50	7.5	51
08/22/2019	3.1	53	4.0	53
08/23/2019	2.3	52	2.5	51
08/24/2019	2.0	48	2.2	48
08/25/2019	1.9	47	2.6	48
08/26/2019	2.2	51	2.9	50
08/27/2019	3.0	54	3.4	54
08/28/2019	2.2	49	2.7	49
08/29/2019	2.1	48	2.4	47
08/30/2019	1.9	45	2.6	46
08/31/2019	1.7	42	2.5	42
TOTAL	63.5	1,430	81.7	1,429



Monthly Report

August 2019

Cohansey Lift Station

Date	Pump No. 1 Hours	Pump No. 1 Starts	Pump No. 2 Hours	Pump No. 2 Starts
08/01/2019	1.0	55	1.2	55
08/02/2019	1.1	53	1.1	53
08/03/2019	1.0	52	1.1	53
08/04/2019	1.1	57	1.2	56
08/05/2019	1.2	63	1.4	63
08/06/2019	1.0	56	1.2	56
08/07/2019	1.2	58	1.2	58
08/08/2019	1.0	48	1.1	48
08/09/2019	1.1	49	0.9	48
08/10/2019	1.1	50	1.1	51
08/11/2019	1.1	54	1.1	53
08/12/2019	1.2	55	1.1	55
08/13/2019	1.0	51	1.1	51
08/14/2019	1.1	51	1.1	51
08/15/2019	1.2	46	1.0	46
08/16/2019	1.2	48	1.0	47
08/17/2019	1.0	45	1.0	46
08/18/2019	1.4	58	1.3	58
08/19/2019	1.2	52	1.2	51
08/20/2019	1.2	51	1.2	51
08/21/2019	1.2	51	1.2	50
08/22/2019	1.1	49	1.2	50
08/23/2019	1.2	51	1.2	51
08/24/2019	1.2	51	1.3	52
08/25/2019	1.2	50	1.2	50
08/26/2019	1.2	52	1.2	51
08/27/2019	1.1	48	1.2	49
08/28/2019	1.1	51	1.2	50
08/29/2019	1.1	49	1.1	49
08/30/2019	1.1	48	1.1	49
08/31/2019	1.1	48	1.1	48
TOTAL	35.3	1,600	35.3	1,599



Monthly Report

August 2019

Dale/Owaso Lift Station

Date	Pump No. 1 Hours	Pump No. 1 Starts	Pump No. 2 Hours	Pump No. 2 Starts
08/01/2019	2.0	25	2.3	25
08/02/2019	2.1	26	2.2	25
08/03/2019	2.1	26	2.1	27
08/04/2019	2.2	27	2.2	27
08/05/2019	1.7	28	1.9	27
08/06/2019	1.9	26	1.9	26
08/07/2019	2.1	27	1.9	27
08/08/2019	1.8	25	1.7	25
08/09/2019	1.8	24	2.0	23
08/10/2019	2.0	25	2.3	26
08/11/2019	2.1	27	1.9	27
08/12/2019	2.1	27	1.9	26
08/13/2019	2.0	27	2.1	27
08/14/2019	1.9	26	2.1	25
08/15/2019	1.9	25	2.1	26
08/16/2019	2.0	26	2.2	27
08/17/2019	2.0	26	2.2	26
08/18/2019	2.7	33	3.0	33
08/19/2019	2.4	30	2.7	30
08/20/2019	2.3	29	2.5	28
08/21/2019	2.3	28	2.5	28
08/22/2019	2.2	27	2.5	28
08/23/2019	2.3	28	2.4	27
08/24/2019	2.2	27	2.5	27
08/25/2019	2.3	28	2.7	28
08/26/2019	2.1	24	2.1	24
08/27/2019	2.1	28	2.3	29
08/28/2019	1.9	28	2.6	29
08/29/2019	2.3	29	2.6	28
08/30/2019	2.2	27	2.5	27
08/31/2019	2.2	27	2.5	27
TOTAL	65.3	836	70.4	835



Monthly Report

August 2019

Fernwood Lift Station

Date	Pump No. 1 Hours	Pump No. 1 Starts	Pump No. 2 Hours	Pump No. 2 Starts	Pump No. 3 Hours	Pump No. 3 Starts	Generator Hours
08/01/2019	1.7	22	0.0	0	2.4	39	0.0
08/02/2019	1.4	19	0.0	0	2.5	39	0.0
08/03/2019	1.6	21	0.0	0	2.5	40	0.0
08/04/2019	1.5	20	0.0	0	2.7	42	0.0
08/05/2019	1.4	19	0.0	0	2.3	37	0.0
08/06/2019	1.4	19	0.0	0	2.3	37	0.3
08/07/2019	1.5	19	0.0	0	2.6	39	0.0
08/08/2019	1.3	18	0.0	0	2.5	37	0.0
08/09/2019	1.5	19	0.0	0	2.4	36	0.0
08/10/2019	1.6	19	0.0	0	2.7	39	0.0
08/11/2019	1.6	20	0.0	0	2.8	39	0.0
08/12/2019	1.5	19	0.2	2	2.9	39	0.0
08/13/2019	1.4	19	0.0	0	2.6	38	0.3
08/14/2019	1.5	19	0.0	0	2.5	37	0.0
08/15/2019	1.5	17	0.0	0	2.7	37	0.0
08/16/2019	1.5	20	0.0	0	2.8	41	0.0
08/17/2019	1.5	19	0.0	0	2.8	37	0.0
08/18/2019	1.9	22	0.0	0	3.2	45	0.0
08/19/2019	1.4	19	0.0	0	2.8	37	0.0
08/20/2019	1.4	18	0.0	0	2.7	37	0.3
08/21/2019	1.3	18	0.0	0	2.9	36	0.0
08/22/2019	1.4	19	0.0	0	2.7	38	0.0
08/23/2019	1.5	19	0.0	0	2.6	37	0.0
08/24/2019	1.4	18	0.0	0	2.9	37	0.0
08/25/2019	1.5	19	0.0	0	2.8	37	0.0
08/26/2019	2.9	21	0.3	4	4.2	39	0.0
08/27/2019	1.7	23	0.0	0	3.0	46	0.3
08/28/2019	1.5	21	0.0	0	2.9	43	0.0
08/29/2019	1.3	19	0.0	0	2.4	39	0.0
08/30/2019	1.6	21	0.0	0	2.5	41	0.0
08/31/2019	3.5	43	0.0	0	1.1	19	0.0
TOTAL	49.6	628	0.5	6	82.7	1,184	1.3



Monthly Report

August 2019

Fulham Lift Station

Date	Pump No. 1 Hours	Pump No. 1 Starts	Pump No. 2 Hours	Pump No. 2 Starts
08/01/2019	0.5	12	0.5	13
08/02/2019	0.5	12	0.5	12
08/03/2019	0.5	13	0.4	12
08/04/2019	0.5	13	0.6	14
08/05/2019	0.5	13	0.5	13
08/06/2019	0.5	13	0.4	12
08/07/2019	0.5	12	0.4	12
08/08/2019	0.6	15	0.6	15
08/09/2019	0.5	12	0.4	12
08/10/2019	0.5	11	0.4	12
08/11/2019	0.6	14	0.5	13
08/12/2019	0.7	15	0.6	15
08/13/2019	0.8	18	0.7	18
08/14/2019	0.7	17	0.6	18
08/15/2019	0.6	15	0.6	15
08/16/2019	0.7	16	0.7	15
08/17/2019	0.6	13	0.6	14
08/18/2019	1.1	23	1.0	23
08/19/2019	0.7	15	0.6	14
08/20/2019	0.8	16	0.7	17
08/21/2019	0.6	14	0.6	13
08/22/2019	0.6	15	0.6	14
08/23/2019	0.7	16	0.6	16
08/24/2019	0.6	13	0.5	14
08/25/2019	0.6	14	0.5	13
08/26/2019	0.8	18	0.8	18
08/27/2019	0.6	14	0.6	15
08/28/2019	0.6	14	0.6	14
08/29/2019	0.7	14	0.5	13
08/30/2019	0.6	14	0.5	14
08/31/2019	0.6	14	0.6	14
TOTAL	19.7	448	17.6	447



Monthly Report August 2019

Galtier Lift Station

Date	Pump No. 1 Hours	Pump No. 1 Starts	Pump No. 2 Hours	Pump No. 2 Starts
08/01/2019	1.1	33	1.5	34
08/02/2019	1.2	35	1.5	34
08/03/2019	1.2	35	1.5	36
08/04/2019	1.3	37	1.6	37
08/05/2019	1.1	35	1.4	34
08/06/2019	1.1	34	1.4	34
08/07/2019	1.1	32	1.4	33
08/08/2019	1.1	33	1.4	33
08/09/2019	1.1	32	1.3	32
08/10/2019	1.3	36	1.6	36
08/11/2019	1.2	36	1.6	36
08/12/2019	1.2	35	1.5	35
08/13/2019	1.2	36	1.6	36
08/14/2019	1.2	36	1.6	36
08/15/2019	1.2	36	1.6	36
08/16/2019	1.2	36	1.6	37
08/17/2019	1.2	36	1.5	35
08/18/2019	1.9	53	2.6	53
08/19/2019	1.4	40	1.9	41
08/20/2019	1.4	41	1.9	41
08/21/2019	1.4	39	1.6	38
08/22/2019	1.3	38	1.7	38
08/23/2019	1.2	36	1.6	36
08/24/2019	1.2	35	1.6	36
08/25/2019	1.4	40	1.9	39
08/26/2019	1.5	41	1.9	41
08/27/2019	1.2	36	1.7	37
08/28/2019	1.2	36	1.6	36
08/29/2019	1.3	35	1.5	34
08/30/2019	1.3	35	1.5	35
08/31/2019	1.2	35	1.6	35
TOTAL	39.0	1,133	49.9	1,134



Monthly Report

August 2019

Josephine Lift Station

Date	Pump No. 1 Hours	Pump No. 1 Starts	Pump No. 2 Hours	Pump No. 2 Starts
08/01/2019	1.1	24	1.0	24
08/02/2019	1.1	23	0.9	22
08/03/2019	1.1	24	1.0	24
08/04/2019	1.3	27	1.2	27
08/05/2019	1.1	23	1.0	24
08/06/2019	1.1	24	0.9	23
08/07/2019	1.1	23	0.9	23
08/08/2019	1.0	22	0.9	23
08/09/2019	1.0	23	0.8	23
08/10/2019	1.0	22	0.8	23
08/11/2019	1.2	26	1.0	25
08/12/2019	1.1	25	1.0	25
08/13/2019	1.2	26	1.0	25
08/14/2019	1.1	24	1.0	24
08/15/2019	1.2	25	1.0	24
08/16/2019	1.2	24	1.0	24
08/17/2019	1.1	23	0.9	24
08/18/2019	1.6	31	1.3	31
08/19/2019	1.3	28	1.1	27
08/20/2019	1.4	27	1.0	27
08/21/2019	1.4	28	1.2	28
08/22/2019	1.2	26	1.1	25
08/23/2019	1.2	25	1.1	25
08/24/2019	1.1	24	1.0	24
08/25/2019	1.3	27	1.2	27
08/26/2019	1.3	26	1.1	26
08/27/2019	2.0	27	1.2	27
08/28/2019	1.2	26	0.9	25
08/29/2019	1.1	25	0.8	24
08/30/2019	1.1	23	0.8	23
08/31/2019	1.1	24	0.8	25
TOTAL	37.7	775	31.2	771



Monthly Report August 2019

Long Lake Lift Station

Date	Pump No. 1 Hours	Pump No. 1 Starts	Pump No. 2 Hours	Pump No. 2 Starts
08/01/2019	0.5	47	0.5	45
08/02/2019	0.6	56	0.6	52
08/03/2019	0.5	44	0.5	46
08/04/2019	0.4	29	0.5	30
08/05/2019	0.5	35	0.6	42
08/06/2019	0.4	38	0.5	40
08/07/2019	0.5	39	0.4	38
08/08/2019	0.4	36	0.4	35
08/09/2019	0.5	43	0.5	39
08/10/2019	0.4	36	0.5	38
08/11/2019	0.3	25	0.3	30
08/12/2019	0.4	36	0.5	43
08/13/2019	0.5	46	0.5	45
08/14/2019	0.5	42	0.6	47
08/15/2019	0.5	43	0.6	46
08/16/2019	0.2	20	0.2	20
08/17/2019	0.2	18	0.2	19
08/18/2019	0.4	33	0.4	35
08/19/2019	0.5	42	0.4	40
08/20/2019	0.5	44	0.5	41
08/21/2019	0.5	43	0.5	43
08/22/2019	0.4	37	0.4	38
08/23/2019	0.5	44	0.5	43
08/24/2019	0.4	33	0.4	35
08/25/2019	0.4	30	0.3	30
08/26/2019	0.5	42	0.5	42
08/27/2019	0.5	39	0.5	39
08/28/2019	0.5	39	0.5	41
08/29/2019	0.5	40	0.5	45
08/30/2019	0.5	45	0.5	45
08/31/2019	0.5	43	0.5	45
TOTAL	14.0	1,187	14.4	1,217



City of Roseville, MN

Monthly Report

August 2019

Lounge Lift Station

Date	Pump No. 1 Hours	Pump No. 1 Starts	Pump No. 2 Hours	Pump No. 2 Starts
08/01/2019	0.6	26	0.7	26
08/02/2019	0.6	24	0.6	24
08/03/2019	0.6	23	0.6	23
08/04/2019	0.6	23	0.6	24
08/05/2019	0.6	26	0.6	25
08/06/2019	0.6	24	0.6	25
08/07/2019	0.6	26	0.6	25
08/08/2019	0.6	25	0.6	26
08/09/2019	0.6	24	0.6	23
08/10/2019	0.6	23	0.6	24
08/11/2019	0.6	25	0.7	25
08/12/2019	0.7	26	0.7	25
08/13/2019	0.7	27	0.7	27
08/14/2019	0.7	28	0.7	29
08/15/2019	0.7	29	0.7	28
08/16/2019	0.7	27	0.7	28
08/17/2019	0.8	29	0.8	29
08/18/2019	1.3	46	1.2	47
08/19/2019	1.0	36	0.9	35
08/20/2019	0.9	35	0.9	36
08/21/2019	0.9	35	0.9	34
08/22/2019	0.9	35	0.9	36
08/23/2019	1.0	41	1.0	41
08/24/2019	1.1	42	1.1	42
08/25/2019	1.1	43	1.1	43
08/26/2019	1.2	46	1.2	46
08/27/2019	1.2	44	1.2	43
08/28/2019	1.4	48	1.4	49
08/29/2019	1.4	48	1.3	47
08/30/2019	1.3	47	1.3	48
08/31/2019	1.2	43	1.1	43
TOTAL	26.9	1,024	26.7	1,026



Monthly Report August 2019

Paper Cal Lift Station

Date	Pump No. 1 Hours	Pump No. 1 Starts	Pump No. 2 Hours	Pump No. 2 Starts
08/01/2019	0.0	0	0.0	0
08/02/2019	0.0	0	0.0	0
08/03/2019	0.0	0	0.0	0
08/04/2019	0.0	0	0.0	0
08/05/2019	0.0	0	0.0	0
08/06/2019	0.0	0	0.0	0
08/07/2019	0.0	0	0.0	0
08/08/2019	0.0	0	0.0	0
08/09/2019	0.0	0	0.0	0
08/10/2019	0.0	0	0.0	0
08/11/2019	0.0	0	0.0	0
08/12/2019	0.0	0	0.0	0
08/13/2019	0.0	0	0.0	0
08/14/2019	0.0	0	0.0	0
08/15/2019	0.0	0	0.0	0
08/16/2019	0.0	0	0.0	0
08/17/2019	0.0	0	0.0	0
08/18/2019	0.0	0	0.0	0
08/19/2019	0.0	0	0.0	0
08/20/2019	0.0	0	0.0	0
08/21/2019	0.0	0	0.0	0
08/22/2019	0.0	0	0.0	0
08/23/2019	0.0	0	0.0	0
08/24/2019	0.0	0	0.0	0
08/25/2019	0.0	0	0.0	0
08/26/2019	0.0	0	0.0	0
08/27/2019	0.0	0	0.0	0
08/28/2019	0.0	0	0.0	0
08/29/2019	0.0	0	0.0	0
08/30/2019	0.0	0	0.0	0
08/31/2019	0.0	0	0.0	0
TOTAL	0.0	0	0.0	0



Monthly Report

August 2019

Wagner Lift Station

Date	Pump No. 1 Hours	Pump No. 1 Starts	Pump No. 2 Hours	Pump No. 2 Starts
08/01/2019	0.7	12	0.8	13
08/02/2019	0.8	13	0.7	12
08/03/2019	0.7	12	0.7	12
08/04/2019	0.7	13	0.8	14
08/05/2019	0.8	13	0.8	13
08/06/2019	0.8	13	0.7	12
08/07/2019	0.8	13	0.8	13
08/08/2019	0.7	12	0.8	12
08/09/2019	0.6	11	0.7	12
08/10/2019	0.8	13	0.7	13
08/11/2019	0.7	12	0.8	13
08/12/2019	0.8	13	0.8	13
08/13/2019	0.8	14	0.8	13
08/14/2019	0.7	12	0.8	13
08/15/2019	0.8	13	0.7	12
08/16/2019	0.8	13	0.8	13
08/17/2019	0.7	13	0.8	13
08/18/2019	1.0	16	0.9	15
08/19/2019	0.9	15	0.9	16
08/20/2019	1.0	16	1.0	16
08/21/2019	0.9	16	1.0	16
08/22/2019	1.0	16	0.9	15
08/23/2019	0.9	15	0.9	15
08/24/2019	0.8	14	0.9	15
08/25/2019	0.9	15	0.9	15
08/26/2019	0.9	15	0.9	15
08/27/2019	0.9	15	0.9	15
08/28/2019	0.9	15	0.9	15
08/29/2019	0.9	15	0.9	15
08/30/2019	0.9	14	0.9	14
08/31/2019	0.8	14	0.8	14
TOTAL	25.4	426	25.5	427