



Hillcreek Pressure Sewer Analysis - Item (J)(6)(A) - Hill Creek Pressure Sewer Analysis

From Jesse Stephens <JStephens@bcrsd.com>

Date Thu 1/15/2026 5:36 PM

To Jesse Stephens <JStephens@bcrsd.com>

Dear Board of Trustees,

Attached is some example reporting that we are getting from the interactive sewer Model that was built by Bartlett and West for the Hillcreek area. This reporting is able to simulate how often pressure spikes occur and shows what some of the baseline flows and pressures are in the line. We are still comparing this to where we've seen routine service calls, but overall the potential high pressure spikes explain why the Zoeller 815 pumps were struggling in many locations, as the pressure spikes observed are well over their operating pressure range and many have likely been deadheading or seeing fatigue failures in the stator. There will be more to report on this in the next few months. There is a consideration item to finish the South Route K sewer model which includes finishing the remaining pieces of the interactive model where Heather Hills subdivision and Quantrill's pass connect together. Finishing this model will give us a better tool for proposed South Route K lift station and treatment plant improvements.



Jesse Stephens, PE - Executive Director

Boone County Regional Sewer District (BCRSD)

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BCRSD SEWER GEMS
MODEL

HILLCREEK SUBDIVISION

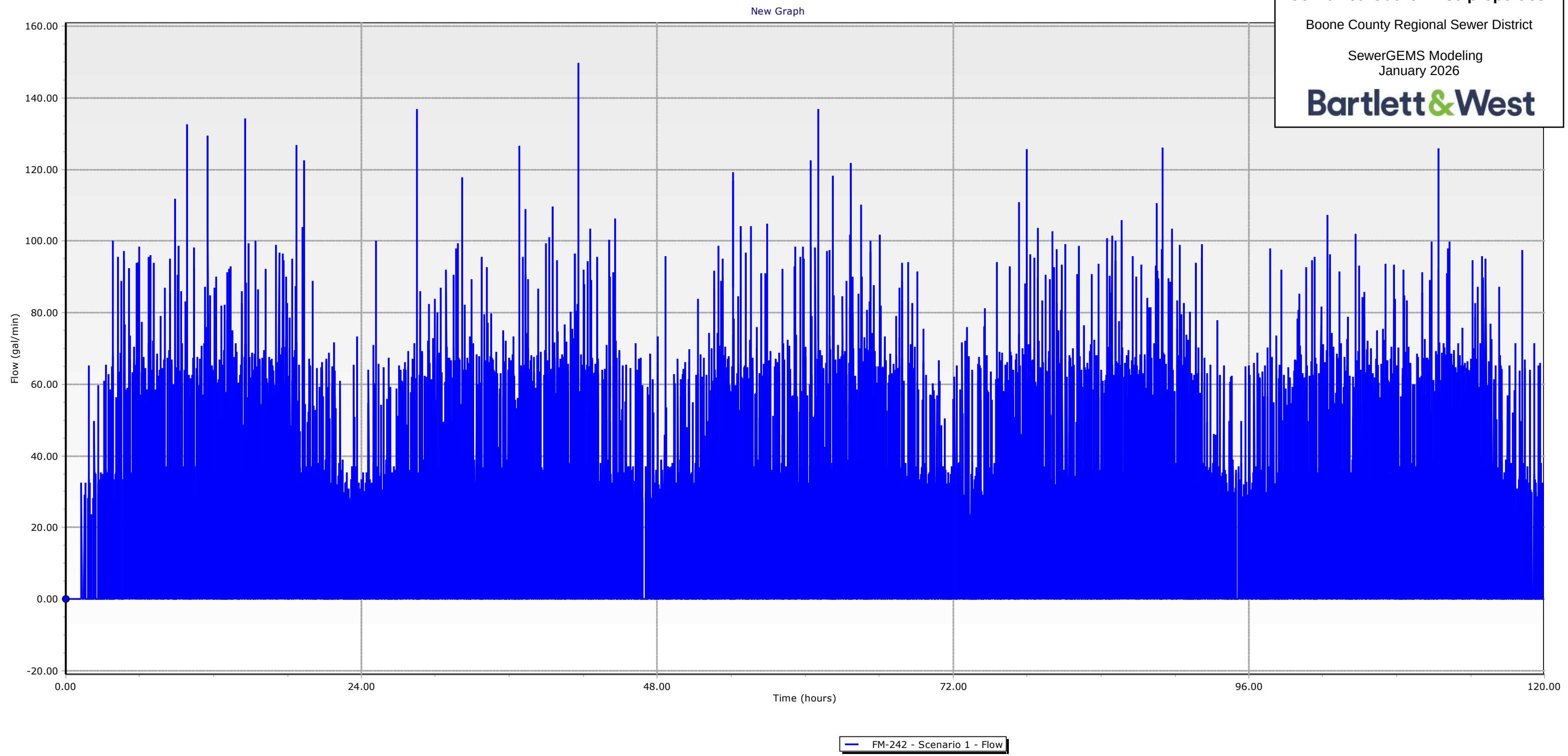
Flow (GPM) across 5 days

Combined Outflow - 89 properties

Boone County Regional Sewer District

SewerGEMS Modeling
January 2026

Bartlett & West



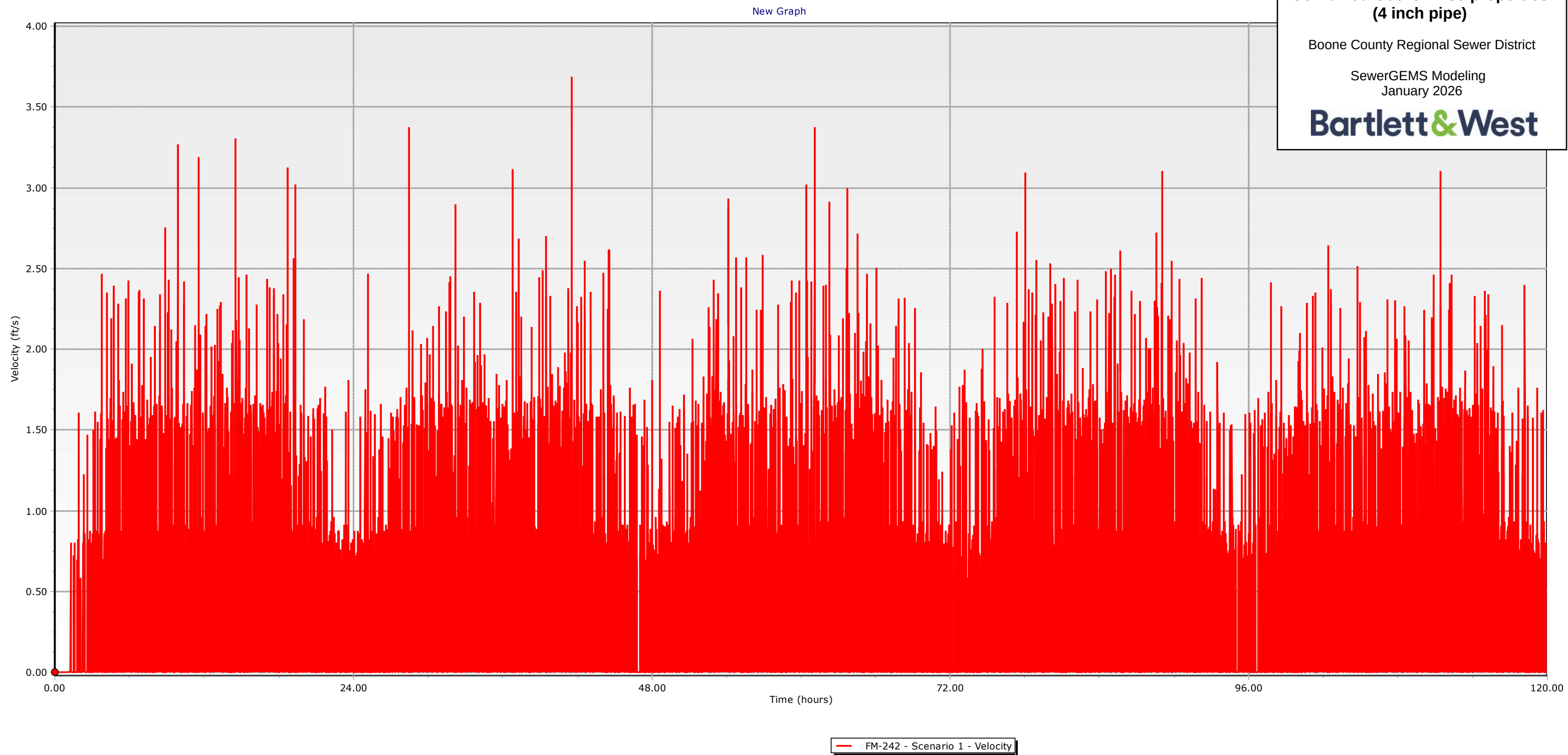
BCRSD SEWER GEMS MODEL

HILLCREEK SUBDIVISION
Velocity (ft/sec) across 5 days
Combined Outflow - 89 properties
(4 inch pipe)

Boone County Regional Sewer District

SewerGEMS Modeling
January 2026

Bartlett & West



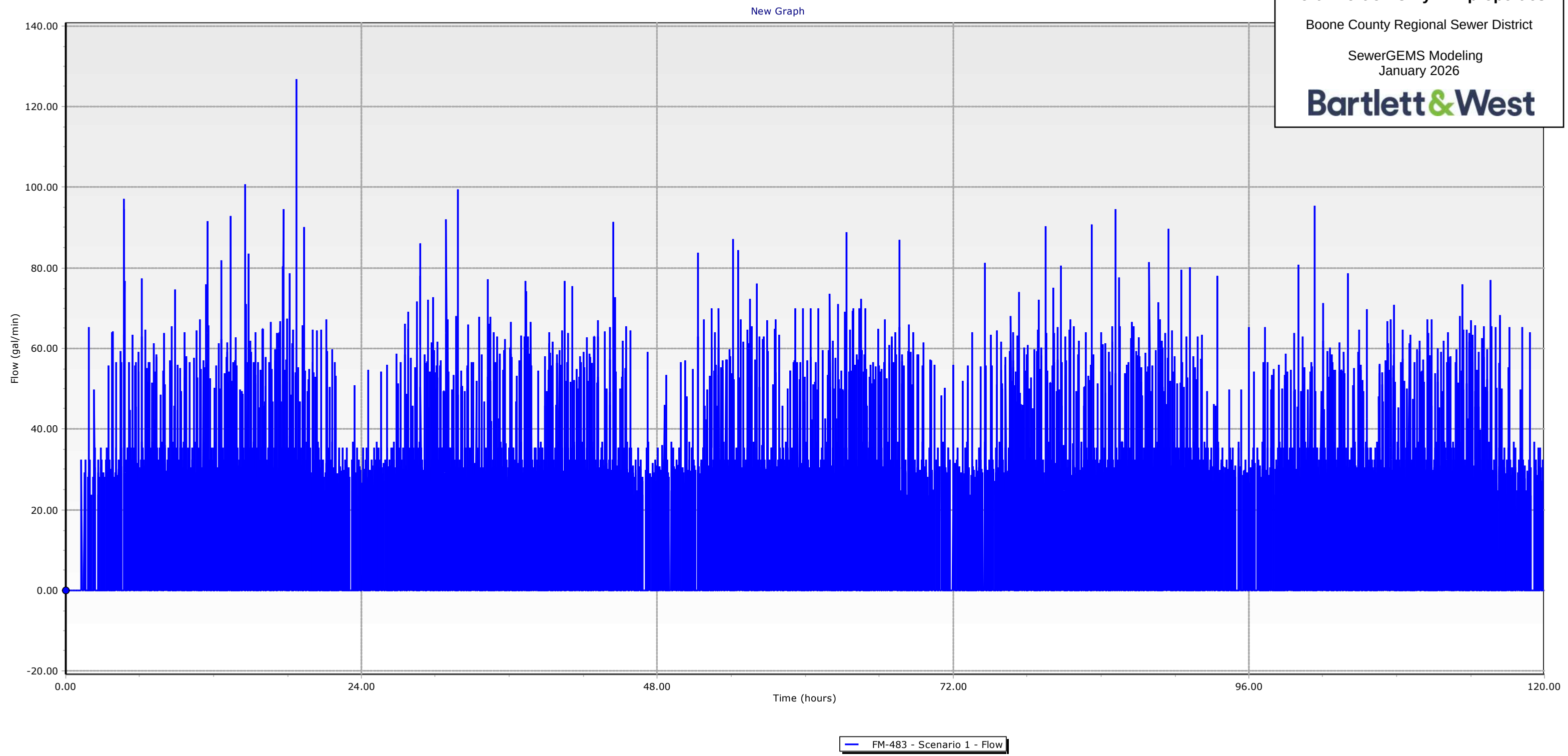
**BCRSD SEWER GEMS
MODEL**

HILLCREEK SUBDIVISION
Flow (GPM) across 5 days
North Portion Only - 24 properties

Boone County Regional Sewer District

SewerGEMS Modeling
January 2026

Bartlett & West



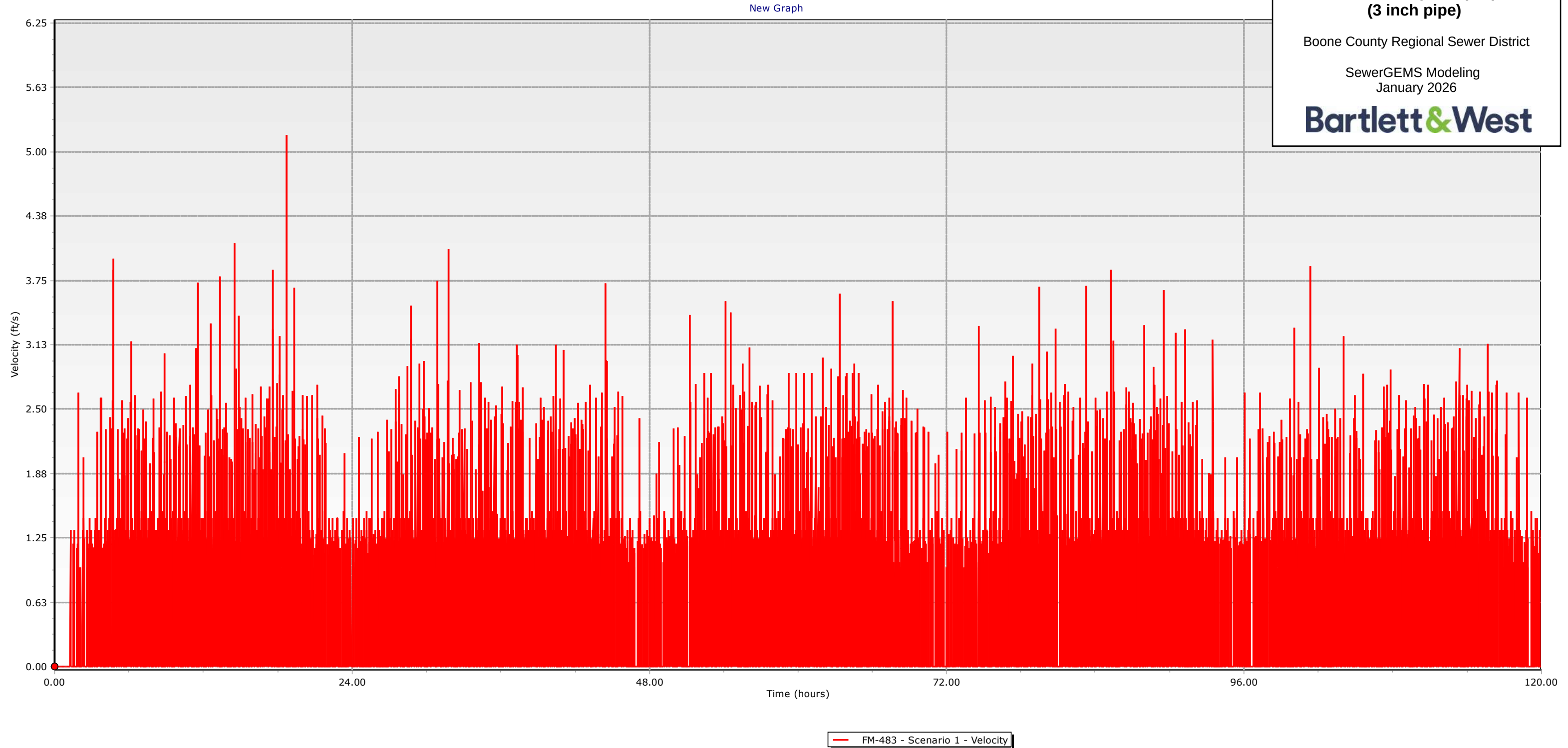
BCRSD SEWER GEMS MODEL

HILLCREEK SUBDIVISION
Velocity (ft/sec) across 5 days
North Portion Only - 24 properties
(3 inch pipe)

Boone County Regional Sewer District

SewerGEMS Modeling
January 2026

Bartlett & West



BCRSD SEWER GEMS
MODEL

HILLCREEK SUBDIVISION

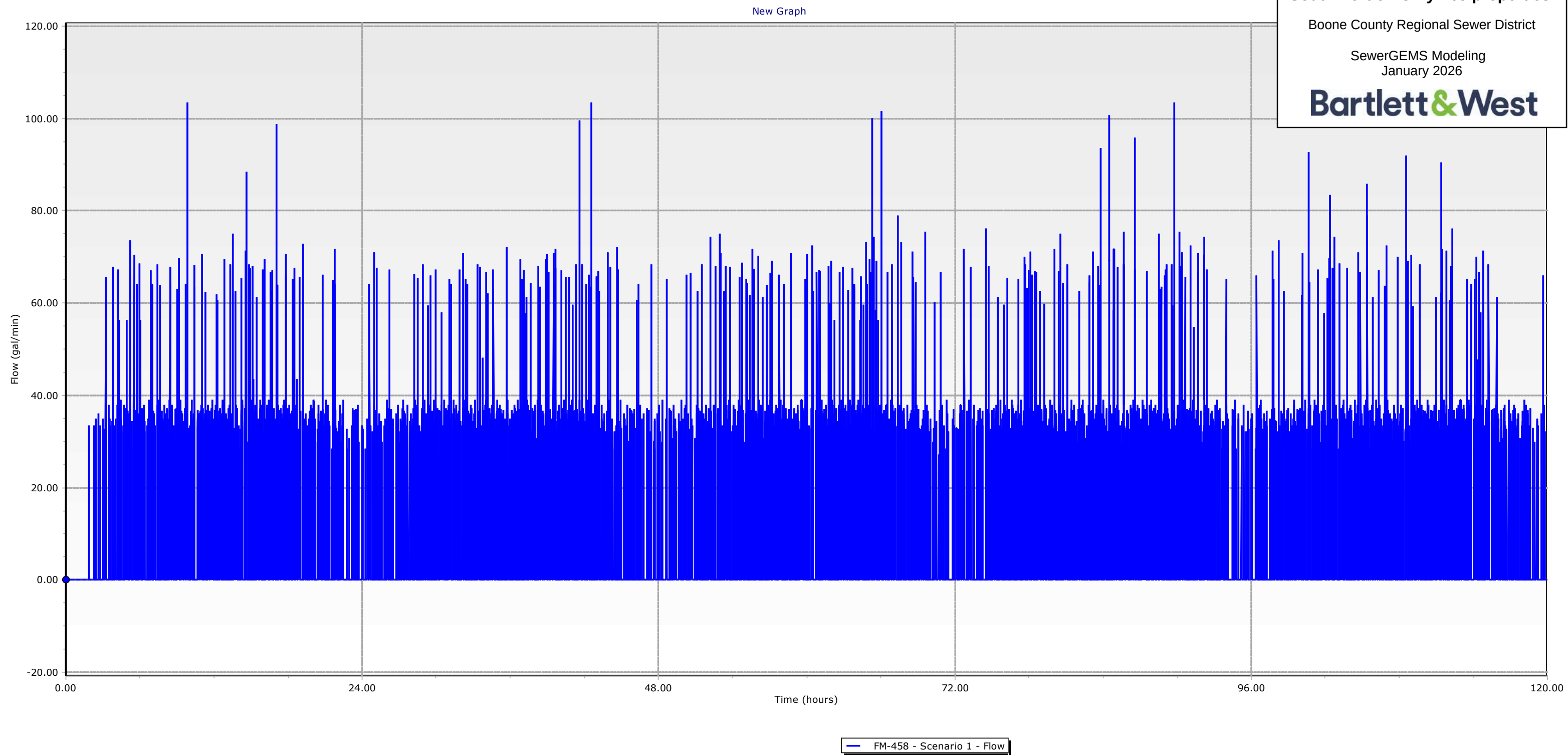
Flow (GPM) across 5 days

South Portion Only - 65 properties

Boone County Regional Sewer District

SewerGEMS Modeling
January 2026

Bartlett&West



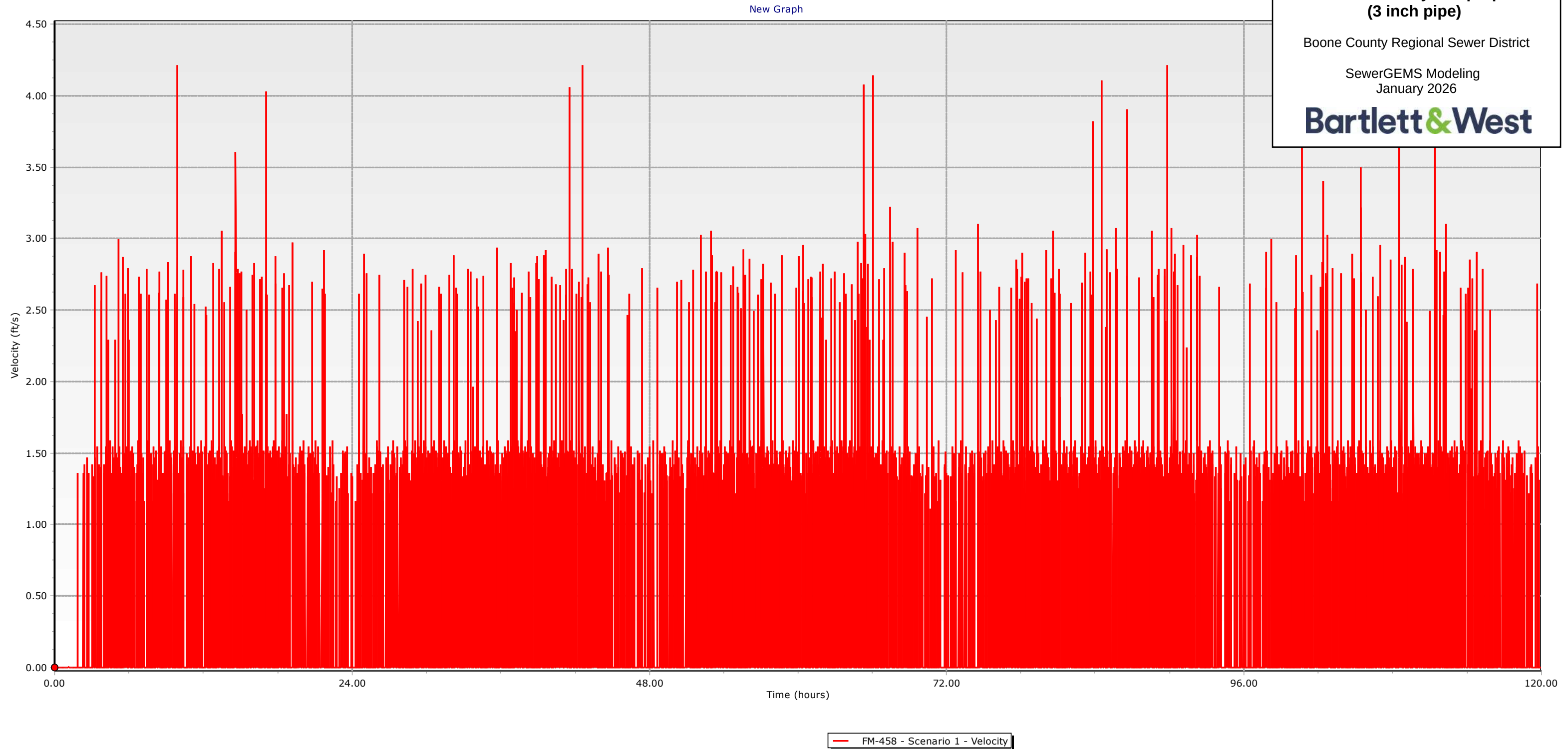
BCRSD SEWER GEMS MODEL

HILLCREEK SUBDIVISION
Velocity (ft/sec) across 5 days
South Portion Only - 65 properties
(3 inch pipe)

Boone County Regional Sewer District

SewerGEMS Modeling
January 2026

Bartlett & West



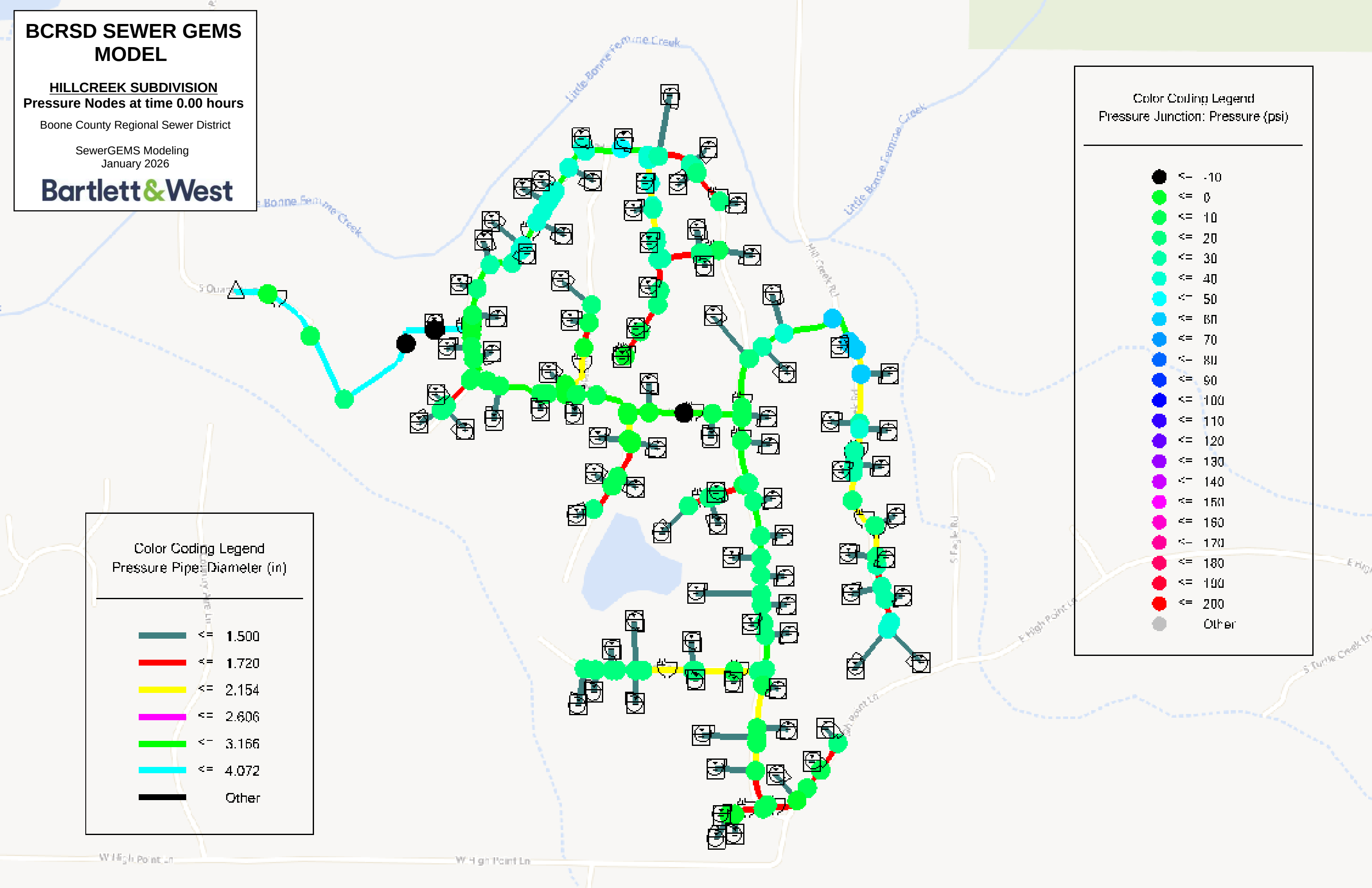
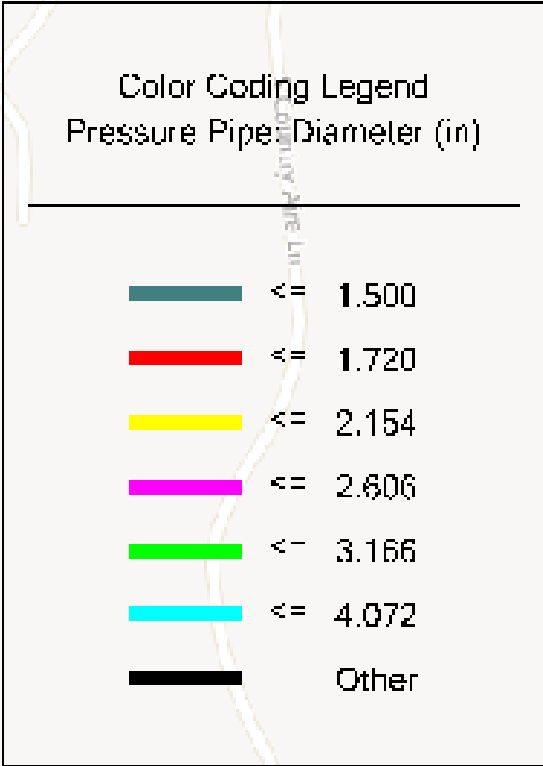
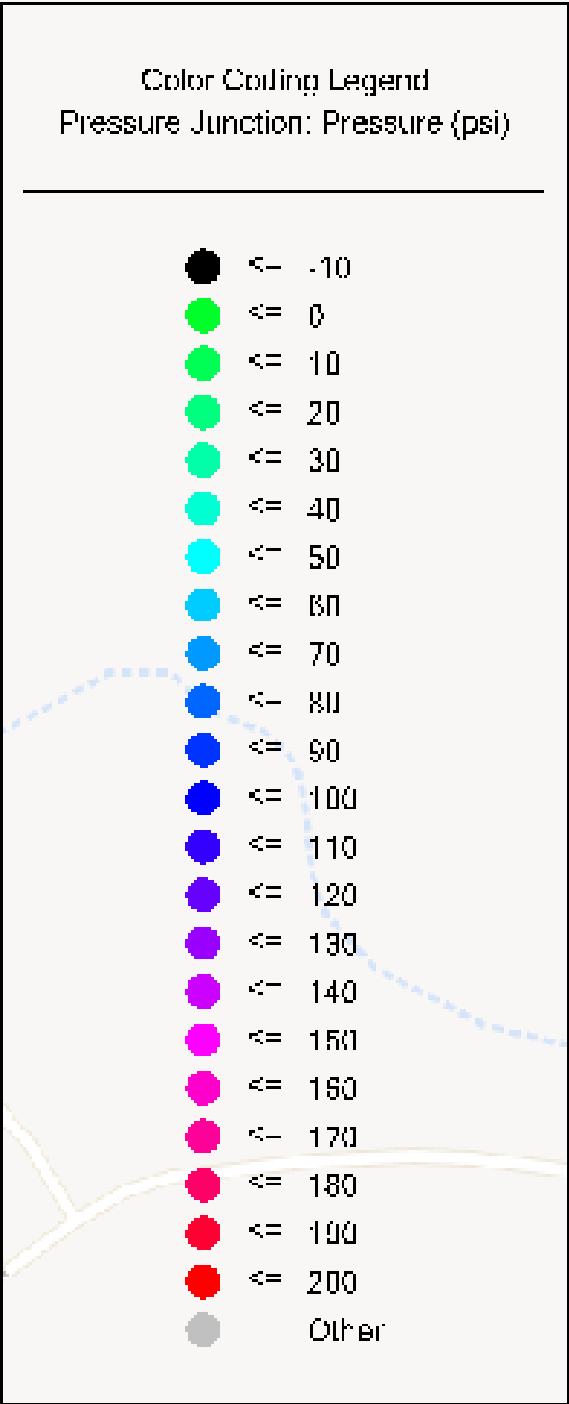
BCRSD SEWER GEMS
MODEL

HILLCREEK SUBDIVISION
Pressure Nodes at time 0.00 hours

Boone County Regional Sewer District

SewerGEMS Modeling
January 2026

Bartlett & West



Label	Elevation (Ground) (ft)	Elevation (Invert) (ft)	Elevation (On) (ft)	Elevation (Off) (ft)	Pump Definition	Flow (Pump) (gal/min)	Head (Pump) (ft)	Hydraulic Grade (Upstream) (ft)	Hydraulic Grade (Downstream) (ft)	Pressure (Discharge) (psi)	Pressure (Suction) (psi)
PMP-73	596.15	588.45	590.05	589.05	Zoeller 815 - 2011 Report	0	0	645.23	702	49	25
PMP-38	607.47	599.77	601.37	600.37	Barnes Fixed Discharge - 2020 Report	0	0	665.88	731.99	57	29
PMP-75	609.08	601.38	602.98	601.98	Zoeller 815 - 2011 Report	0	0	651.69	702	44	22
PMP-79	610.28	602.58	604.18	603.18	Barnes Fixed Discharge - 2020 Report	0	0	652.29	702	43	22
PMP-37	614.02	606.32	607.92	606.92	Barnes Fixed Discharge - 2020 Report	0	0	606.32	731.99	54	0
PMP-78	615.76	608.06	609.66	608.66	Zoeller 815 - 2011 Report	0	0	655.03	702	41	20
PMP-76	620.87	613.17	614.77	613.77	Barnes Fixed Discharge - 2020 Report	0	0	657.59	702	38	19
PMP-80	626.05	618.35	619.95	618.95	Zoeller 815 - 2011 Report	0	0	618.35	702	36	0
PMP-84	626.48	618.78	620.38	619.38	Zoeller 815 - 2011 Report	0	0	618.78	702	36	0
PMP-77	627.79	620.09	621.69	620.69	Zoeller 815 - 2011 Report	0	0	661.05	702	35	18
PMP-71	635.46	627.76	629.36	628.36	Zoeller 815 - 2011 Report	0	0	664.88	702	32	16
PMP-82	644.41	636.71	638.31	637.31	Zoeller 815 - 2011 Report	0	0	669.36	702	28	14
PMP-85	648.68	640.98	642.58	641.58	Zoeller 815 - 2011 Report	0	0	671.49	702	26	13
PMP-74	650.76	643.06	644.66	643.66	Zoeller 815 - 2011 Report	0	0	672.53	702	26	13
PMP-72	651.68	643.98	645.58	644.58	Zoeller 815 - 2011 Report	0	0	672.99	702	25	13
PMP-81	651.74	644.04	645.64	644.64	Zoeller 815 - 2011 Report	0	0	673.02	702	25	13
PMP-87	652.88	645.18	646.78	645.78	Zoeller 815 - 2011 Report	0	0	673.59	702	25	12
PMP-46	653.56	645.86	647.46	646.46	Zoeller 815 - 2011 Report	0	0	688.92	731.99	37	19
PMP-49	655.94	648.24	649.84	648.84	Zoeller 815 - 2011 Report	0	0	690.11	731.99	36	18
PMP-89	656.48	648.78	650.38	649.38	Zoeller 815 - 2011 Report	0	0	675.39	702	23	12
PMP-86	657.62	649.92	651.52	650.52	Zoeller 815 - 2011 Report	0	0	675.96	702	23	11
PMP-41	659.01	651.31	652.91	651.91	Zoeller 815 - 2011 Report	0	0	691.65	731.99	35	17
PMP-36	663.17	655.47	657.07	656.07	Zoeller 815 - 2011 Report	0	0	655.47	731.99	33	0
PMP-65	663.41	655.71	657.31	656.31	Zoeller 815 - 2011 Report	0	0	655.71	704	21	0
PMP-39	663.85	656.15	657.75	656.75	Zoeller 815 - 2011 Report	0	0	694.07	731.99	33	16
PMP-47	664.07	656.37	657.97	656.97	Zoeller 815 - 2011 Report	0	0	656.37	731.99	33	0
PMP-40	664.11	656.41	658.01	657.01	Zoeller 815 - 2011 Report	0	0	694.2	731.99	33	16
PMP-83	669.09	661.39	662.99	661.99	Zoeller 815 - 2011 Report	0	0	661.39	702	18	0
PMP-61	670.15	662.45	664.05	663.05	Zoeller 815 - 2011 Report	0	0	662.45	704	18	0
PMP-19	670.29	662.59	664.19	663.19	Barnes Fixed Discharge - 2020 Report	0	0	662.59	731.99	30	0
PMP-62	670.29	662.59	664.19	663.19	Zoeller 815 - 2011 Report	0	0	662.59	704	18	0
PMP-56	670.38	662.68	664.28	663.28	Zoeller 815 - 2011 Report	0	0	662.68	706.43	19	0
PMP-64	671.16	663.46	665.06	664.06	Zoeller 815 - 2011 Report	0	0	663.46	704	18	0
PMP-70	672.23	664.53	666.13	665.13	Zoeller 815 - 2011 Report	0	0	683.27	702	16	8
PMP-90	673.69	665.99	667.59	666.59	Zoeller 815 - 2011 Report	0	0	683.99	702	16	8
PMP-63	675.14	667.44	669.04	668.04	Zoeller 815 - 2011 Report	0	0	667.44	704	16	0
PMP-34	675.56	667.86	669.46	668.46	Zoeller 815 - 2011 Report	0	0	667.86	731.99	28	0
PMP-88	675.7	668	669.6	668.6	Zoeller 815 - 2011 Report	0	0	685	702	15	7
PMP-43	676.95	669.25	670.85	669.85	Zoeller 815 - 2011 Report	0	0	700.62	731.99	27	14
PMP-22	677.43	669.73	671.33	670.33	Zoeller 815 - 2011 Report	0	0	669.73	731.99	27	0
PMP-48	677.71	670.01	671.61	670.61	Zoeller 815 - 2011 Report	0	0	701	731.99	27	13
PMP-45	678.37	670.67	672.27	671.27	Zoeller 815 - 2011 Report	0	0	670.67	731.99	27	0
PMP-67	680.36	672.66	674.26	673.26	Zoeller 815 - 2011 Report	0	0	672.66	704	14	0
PMP-55	682.85	675.15	676.75	675.75	Zoeller 815 - 2011 Report	0	0	675.15	706.43	14	0
PMP-21	683.74	676.04	677.64	676.64	Zoeller 815 - 2011 Report	0	0	676.04	731.99	24	0
PMP-68	686.22	678.52	680.12	679.12	Zoeller 815 - 2011 Report	0	0	678.52	643	-15	0
PMP-3	686.3	678.6	680.2	679.2	Barnes Fixed Discharge - 2020 Report	0	0	705.29	731.99	23	12
PMP-17	688.94	681.24	682.84	681.84	Zoeller 815 - 2011 Report	0	0	681.24	731.99	22	0
PMP-14	689.32	681.62	683.22	682.22	Zoeller 815 - 2011 Report	0	0	681.62	731.99	22	0
PMP-58	689.76	682.06	683.66	682.66	Zoeller 815 - 2011 Report	0	0	682.06	704	9	0
PMP-53	689.79	682.09	683.69	682.69	Zoeller 815 - 2011 Report	0	0	682.09	706.43	11	0
PMP-18	689.82	682.12	683.72	682.72	Zoeller 815 - 2011 Report	0	0	682.12	731.99	22	0
PMP-25	689.9	682.2	683.8	682.8	Zoeller 815 - 2011 Report	0	0	682.2	731.99	22	0
PMP-30	689.91	682.21	683.81	682.81	Zoeller 815 - 2011 Report	0	0	682.21	731.99	22	0
PMP-15	690.64	682.94	684.54	683.54	Zoeller 815 - 2011 Report	0	0	682.94	731.99	21	0
PMP-29	691.69	683.99	685.59	684.59	Zoeller 815 - 2011 Report	0	0	683.99	731.99	21	0
PMP-54	691.71	684.01	685.61	684.61	Zoeller 815 - 2011 Report	0	0	684.01	706.43	10	0
PMP-91	692.25	684.55	686.15	685.15	Zoeller 815 - 2011 Report	0	0	693.28	702	8	4
PMP-16	692.75	685.05	686.65	685.65	Zoeller 815 - 2011 Report	0	0	685.05	731.99	20	0
PMP-42	692.91	685.21	686.81	685.81	Zoeller 815 - 2011 Report	0	0	708.6	731.99	20	10
PMP-44	693.25	685.55	687.15	686.15	Zoeller 815 - 2011 Report	0	0	685.55	731.99	20	0
PMP-24	693.34	685.64	687.24	686.24	Zoeller 815 - 2011 Report	0	0	685.64	731.99	20	0
PMP-11	694.84	687.14	688.74	687.74	Zoeller 815 - 2011 Report	0	0	687.14	731.99	19	0
PMP-57	695.44	687.74	689.34	688.34	Zoeller 815 - 2011 Report	0	0	687.74	706.43	8	0
PMP-23	695.66	687.96	689.56	688.56	Zoeller 815 - 2011 Report	0	0	687.96	731.99	19	0
PMP-26	695.79	688.09	689.69	688.69	Zoeller 815 - 2011 Report	0	0	688.09	731.99	19	0
PMP-60	696.72	689.02	690.62	689.62	Zoeller 815 - 2011 Report	0	0	689.02	704	6	0
PMP-20	697.56	689.86	691.46	690.46	Zoeller 815 - 2011 Report	0	0	689.86	731.99	18	0
PMP-35	699.14	691.44	693.04	692.04	Zoeller 815 - 2011 Report	0	0	711.72	731.99	18	9
PMP-69	702.6	694.9	696.5	695.5	Zoeller 815 - 2011 Report	0	0	698.45	702	3	2
PMP-13	706.07	698.37	699.97	698.97	Zoeller 815 - 2011 Report	0	0	698.37	731.99	15	0
PMP-10	707.31	699.61	701.21	700.21	Barnes Fixed Discharge - 2020 Report	0	0	699.61	731.99	14	0
PMP-32	709.47	701.77	703.37	702.37	Zoeller 815 - 2011 Report	0	0	716.88	731.99	13	7
PMP-92	711.48	703.78	705.38	704.38	Zoeller 815 - 2011 Report	0	0	705.89	708	2	1
PMP-5	712.02	704.32	705.92	704.92	Zoeller 815 - 2011 Report	0	0	718.16	731.99	12	6
PMP-4	712.04	704.34	705.94	704.94	Zoeller 815 - 2011 Report	0	0	718.17	731.99	12	6
PMP-28	712.09	704.39	705.99	704.99	Zoeller 815 - 2011 Report	0	0	704.39	731.99	12	0
PMP-66	712.15	704.45	706.05	705.05	Zoeller 815 - 2011 Report	0	0	704.22	704	0	0
PMP-27	712.18	704.48	706.08	705.08	Zoeller 815 - 2011 Report	0	0	704.48	731.99	12	0
PMP-59	712.92	705.22	706.82	705.82	Zoeller 815 - 2011 Report	0	0	705.22	704	-1	0
PMP-31	714.41	706.71	708.31	707.31	Zoeller 815 - 2011 Report	0	0	706.71	731.99	11	0
PMP-12	714.75	707.05	708.65	707.65	Zoeller 815 - 2011 Report	0	0	707.05	731.99	11	0
PMP-52	715.72	708.02	709.62	708.62	Zoeller 815 - 2011 Report	0	0	707.23	706.43	-1	0
PMP-50	717.88	710.18	711.78	710.78	Zoeller 815 - 2011 Report	0	0	708.31	706.43	-2	-1
PMP-9	725.29	717.59	719.19	718.19	Zoeller 815 - 2011 Report	0	0	717.59	731.99	6	0
PMP-1	728	720.3	721.9	720.9	Zoeller 815 - 2011 Report	0	0	720.3	731.99	5	0
PMP-33	728.47	720.77	722.37	721.37	Zoeller 815 - 2011 Report	0	0	726.38	731.99	5	2
PMP-7	733.35	725.65	727.25	726.25	Zoeller 815 - 2011 Report	0	0	725.65	731.99	3	0
PMP-6	734.67	726.97	728.57	727.57	Barnes Fixed Discharge - 2020 Report	0	0	726.97	731.99	2	0
PMP-8	735.47	727.77	729.37	728.37	Zoeller 815 - 2011 Report	0	0	727.77	731.99	2	0

BCRSD SEWER GEMS
MODEL

HILLCREEK SUBDIVISION
Pressure Nodes at time 12.00 hours

Boone County Regional Sewer District

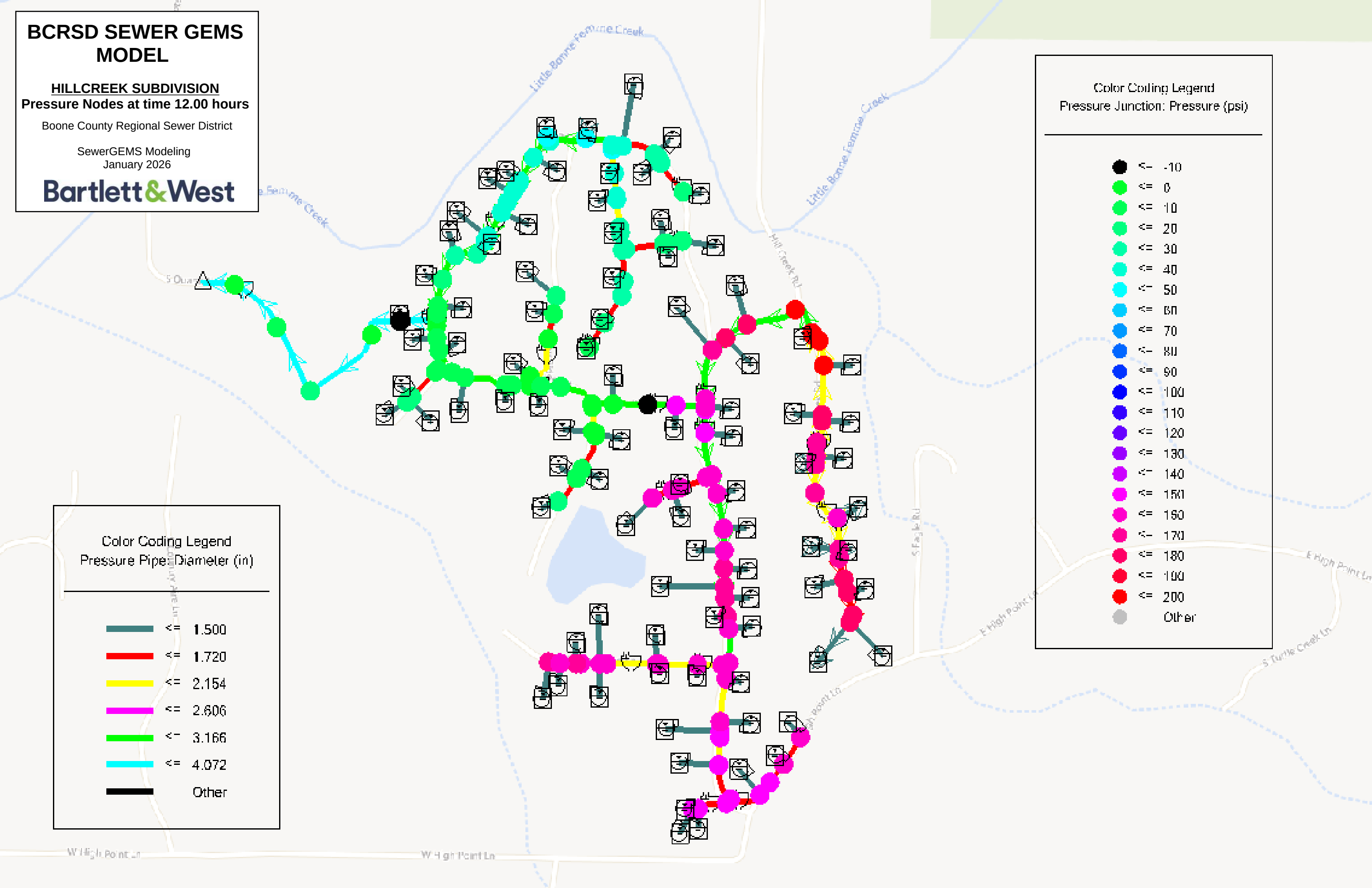
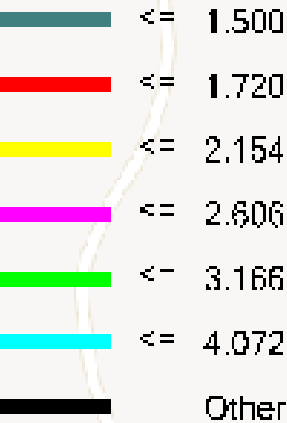
SewerGEMS Modeling
January 2026

Bartlett & West

Color Coding Legend
Pressure Junction: Pressure (psi)



Color Coding Legend
Pressure Pipe: Diameter (in)



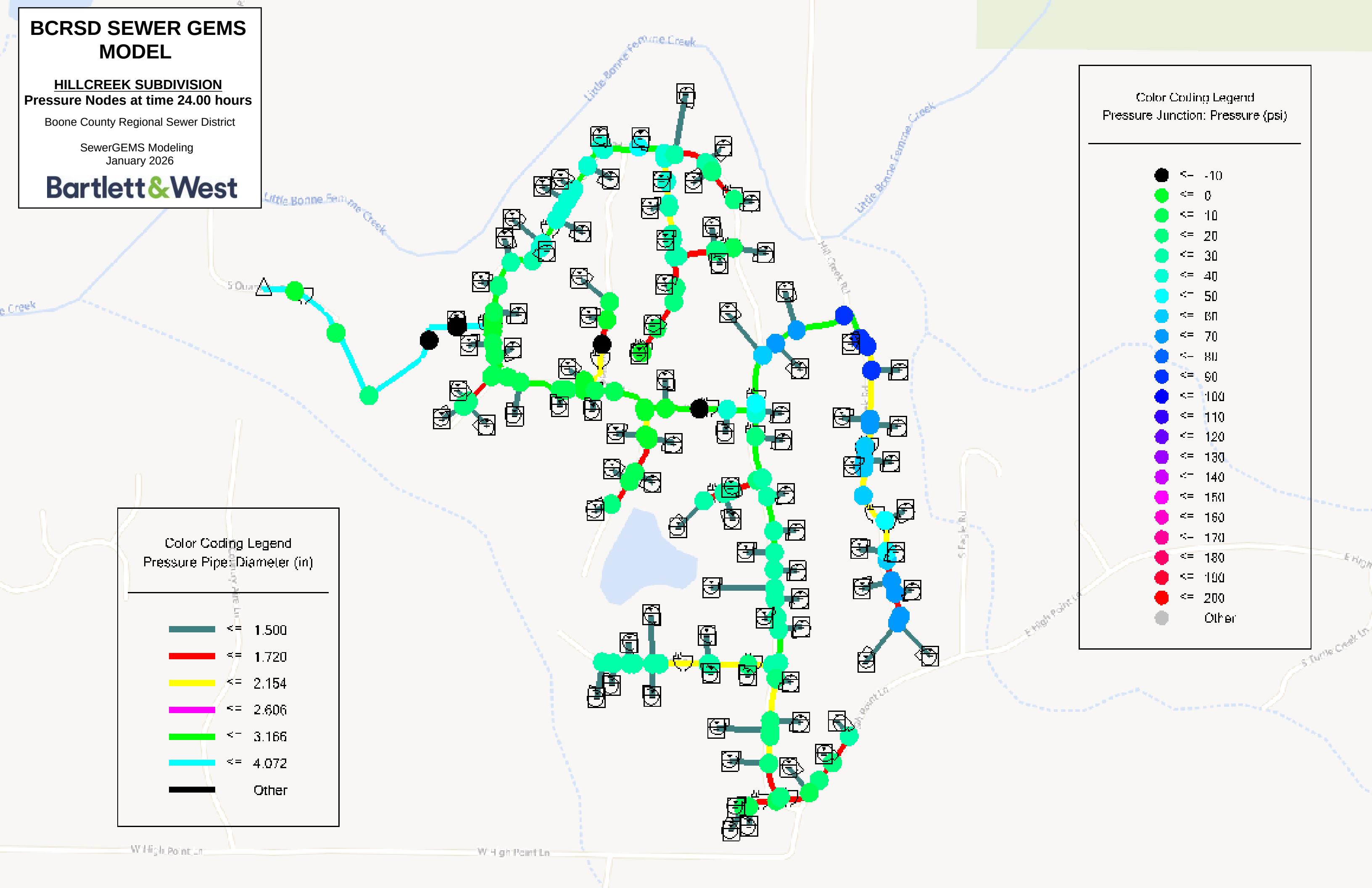
Label	Elevation (Ground) (ft)	Elevation (Invert) (ft)	Elevation (On) (ft)	Elevation (Off) (ft)	Pump Definition	Flow (Pump) (gal/min)	Head (Pump) (ft)	Hydraulic Grade (Upstream) (ft)	Hydraulic Grade (Downstream) (ft)	Pressure (Discharge) (psi)	Pressure (Suction) (psi)
PMP-73	596.15	588.45	590.05	589.05	Zoeller 815 - 2011 Report	0	0	589.3	705.01	50	0
PMP-38	607.47	599.77	601.37	600.37	Barnes Fixed Discharge - 2020 Report	0	0	834.13	1,065.50	201	101
PMP-75	609.08	601.38	602.98	601.98	Zoeller 815 - 2011 Report	0	0	602.21	706.39	45	0
PMP-79	610.28	602.58	604.18	603.18	Barnes Fixed Discharge - 2020 Report	29.75	119.36	601.22	720.59	51	-1
PMP-37	614.02	606.32	607.92	606.92	Barnes Fixed Discharge - 2020 Report	0	0	837.41	1,065.50	199	100
PMP-78	615.76	608.06	609.66	608.66	Zoeller 815 - 2011 Report	0	0	609.42	708.19	43	1
PMP-76	620.87	613.17	614.77	613.77	Barnes Fixed Discharge - 2020 Report	0	0	614.22	706.76	40	0
PMP-80	626.05	618.35	619.95	618.95	Zoeller 815 - 2011 Report	0	0	619.33	709.36	39	0
PMP-84	626.48	618.78	620.38	619.38	Zoeller 815 - 2011 Report	0	0	619.51	709.36	39	0
PMP-77	627.79	620.09	621.69	620.69	Zoeller 815 - 2011 Report	0	0	621.6	707.5	38	1
PMP-71	635.46	627.76	629.36	628.36	Zoeller 815 - 2011 Report	0	0	629.07	703.79	33	1
PMP-82	644.41	636.71	638.31	637.31	Zoeller 815 - 2011 Report	0	0	638.28	709.36	31	1
PMP-85	648.68	640.98	642.58	641.58	Zoeller 815 - 2011 Report	0	0	641.69	709.36	30	0
PMP-74	650.76	643.06	644.66	643.66	Zoeller 815 - 2011 Report	0	0	644.01	705.77	27	0
PMP-72	651.68	643.98	645.58	644.58	Zoeller 815 - 2011 Report	0	0	644.69	704.88	26	0
PMP-81	651.74	644.04	645.64	644.64	Zoeller 815 - 2011 Report	0	0	644.66	709.36	28	0
PMP-87	652.88	645.18	646.78	645.78	Zoeller 815 - 2011 Report	0	0	646.61	709.36	28	1
PMP-46	653.56	645.86	647.46	646.46	Zoeller 815 - 2011 Report	0	0	648.86	1,065.49	182	1
PMP-49	655.94	648.24	649.84	648.84	Zoeller 815 - 2011 Report	0	0	651.24	1,065.49	181	1
PMP-89	656.48	648.78	650.38	649.38	Zoeller 815 - 2011 Report	0	0	650.18	709.36	26	1
PMP-86	657.62	649.92	651.52	650.52	Zoeller 815 - 2011 Report	0	0	651.42	709.36	26	1
PMP-41	659.01	651.31	652.91	651.91	Zoeller 815 - 2011 Report	0	0	654.31	1,065.50	179	1
PMP-36	663.17	655.47	657.07	656.07	Zoeller 815 - 2011 Report	0	0	658.47	1,065.50	177	1
PMP-65	663.41	655.71	657.31	656.31	Zoeller 815 - 2011 Report	0	0	657.1	704	21	1
PMP-39	663.85	656.15	657.75	656.75	Zoeller 815 - 2011 Report	0	0	659.15	1,065.50	177	1
PMP-47	664.07	656.37	657.97	656.97	Zoeller 815 - 2011 Report	0	0	659.37	1,065.49	177	1
PMP-40	664.11	656.41	658.01	657.01	Zoeller 815 - 2011 Report	0	0	659.41	1,065.50	177	1
PMP-83	669.09	661.39	662.99	661.99	Zoeller 815 - 2011 Report	0	0	662.54	709.36	21	0
PMP-61	670.15	662.45	664.05	663.05	Zoeller 815 - 2011 Report	0	0	663.67	701.15	17	1
PMP-19	670.29	662.59	664.19	663.19	Barnes Fixed Discharge - 2020 Report	0	0	865.54	1,065.50	174	88
PMP-62	670.29	662.59	664.19	663.19	Zoeller 815 - 2011 Report	0	0	663.69	704	18	0
PMP-56	670.38	662.68	664.28	663.28	Zoeller 815 - 2011 Report	0	0	663.98	706.43	19	1
PMP-64	671.16	663.46	665.06	664.06	Zoeller 815 - 2011 Report	0	0	664.65	704	18	1
PMP-70	672.23	664.53	666.13	665.13	Zoeller 815 - 2011 Report	0	0	665.9	703.03	17	1
PMP-90	673.69	665.99	667.59	666.59	Zoeller 815 - 2011 Report	0	0	666.77	709.36	19	0
PMP-63	675.14	667.44	669.04	668.04	Zoeller 815 - 2011 Report	0	0	668.51	704	16	0
PMP-34	675.56	667.86	669.46	668.46	Zoeller 815 - 2011 Report	0	0	670.86	1,065.50	172	1
PMP-88	675.7	668	669.6	668.6	Zoeller 815 - 2011 Report	0	0	669.51	709.36	18	1
PMP-43	676.95	669.25	670.85	669.85	Zoeller 815 - 2011 Report	-0.25	393.24	672.25	1,065.49	171	1
PMP-22	677.43	669.73	671.33	670.33	Zoeller 815 - 2011 Report	0	0	671.66	1,065.50	171	1
PMP-48	677.71	670.01	671.61	670.61	Zoeller 815 - 2011 Report	-0.22	392.48	673.01	1,065.49	171	1
PMP-45	678.37	670.67	672.27	671.27	Zoeller 815 - 2011 Report	-0.19	391.83	673.67	1,065.50	171	1
PMP-67	680.36	672.66	674.26	673.26	Zoeller 815 - 2011 Report	0	0	674.12	704	14	1
PMP-55	682.85	675.15	676.75	675.75	Zoeller 815 - 2011 Report	0	0	675.77	706.43	14	0
PMP-21	683.74	676.04	677.64	676.64	Zoeller 815 - 2011 Report	0	0	677.55	1,065.50	168	1
PMP-68	686.22	678.52	680.12	679.12	Zoeller 815 - 2011 Report	0	0	680.1	644.8	-15	1
PMP-3	686.3	678.6	680.2	679.2	Barnes Fixed Discharge - 2020 Report	0	0	873.55	1,065.50	167	84
PMP-17	688.94	681.24	682.84	681.84	Zoeller 815 - 2011 Report	0	0	684.24	1,065.50	166	1
PMP-14	689.32	681.62	683.22	682.22	Zoeller 815 - 2011 Report	0	0	684.62	1,065.50	166	1
PMP-58	689.76	682.06	683.66	682.66	Zoeller 815 - 2011 Report	0	0	683.13	704	9	0
PMP-53	689.79	682.09	683.69	682.69	Zoeller 815 - 2011 Report	0	0	683.28	706.43	11	1
PMP-18	689.82	682.12	683.72	682.72	Zoeller 815 - 2011 Report	0	0	685.12	1,065.50	166	1
PMP-25	689.9	682.2	683.8	682.8	Zoeller 815 - 2011 Report	0	0	683.07	1,065.50	166	0
PMP-30	689.91	682.21	683.81	682.81	Zoeller 815 - 2011 Report	0	0	682.96	1,065.50	166	0
PMP-15	690.64	682.94	684.54	683.54	Zoeller 815 - 2011 Report	0	0	685.94	1,065.50	166	1
PMP-29	691.69	683.99	685.59	684.59	Zoeller 815 - 2011 Report	0	0	685.51	1,065.50	165	1
PMP-54	691.71	684.01	685.61	684.61	Zoeller 815 - 2011 Report	0	0	685.46	706.43	10	1
PMP-91	692.25	684.55	686.15	685.15	Zoeller 815 - 2011 Report	0	0	685.73	709.36	11	1
PMP-16	692.75	685.05	686.65	685.65	Zoeller 815 - 2011 Report	0	0	688.05	1,065.50	165	1
PMP-42	692.91	685.21	686.81	685.81	Zoeller 815 - 2011 Report	0.35	377.29	688.21	1,065.50	165	1
PMP-44	693.25	685.55	687.15	686.15	Zoeller 815 - 2011 Report	0.36	376.96	688.55	1,065.50	164	1
PMP-24	693.34	685.64	687.24	686.24	Zoeller 815 - 2011 Report	0	0	687.03	1,065.50	164	1
PMP-11	694.84	687.14	688.74	687.74	Zoeller 815 - 2011 Report	0	0	688.73	1,065.50	164	1
PMP-57	695.44	687.74	689.34	688.34	Zoeller 815 - 2011 Report	0	0	688.65	706.43	8	0
PMP-23	695.66	687.96	689.56	688.56	Zoeller 815 - 2011 Report	0	0	689.56	1,065.50	163	1
PMP-26	695.79	688.09	689.69	688.69	Zoeller 815 - 2011 Report	0	0	689.51	1,065.50	163	1
PMP-60	696.72	689.02	690.62	689.62	Zoeller 815 - 2011 Report	0	0	692.02	701.15	5	1
PMP-20	697.56	689.86	691.46	690.46	Zoeller 815 - 2011 Report	0	0	691.37	1,065.50	163	1
PMP-35	699.14	691.44	693.04	692.04	Zoeller 815 - 2011 Report	0	0	694.44	1,065.50	162	1
PMP-69	702.6	694.9	696.5	695.5	Zoeller 815 - 2011 Report	0	0	696.33	702.29	3	1
PMP-13	706.07	698.37	699.97	698.97	Zoeller 815 - 2011 Report	0	0	701.35	1,065.50	159	1
PMP-10	707.31	699.61	701.21	700.21	Barnes Fixed Discharge - 2020 Report	0	0	884.05	1,065.50	158	80
PMP-32	709.47	701.77	703.37	702.37	Zoeller 815 - 2011 Report	0	0	704.77	1,065.50	157	1
PMP-92	711.48	703.78	705.38	704.38	Zoeller 815 - 2011 Report	0	0	704.68	709.36	2	0
PMP-5	712.02	704.32	705.92	704.92	Zoeller 815 - 2011 Report	0	0	707.28	1,065.50	156	1
PMP-4	712.04	704.34	705.94	704.94	Zoeller 815 - 2011 Report	0	0	707.31	1,065.50	156	1
PMP-28	712.09	704.39	705.99	704.99	Zoeller 815 - 2011 Report	0	0	705.31	1,065.50	156	0
PMP-66	712.15	704.45	706.05	705.05	Zoeller 815 - 2011 Report	0	0	705.61	704	0	0
PMP-27	712.18	704.48	706.08	705.08	Zoeller 815 - 2011 Report	0	0	705.35	1,065.50	156	0
PMP-59	712.92	705.22	706.82	705.82	Zoeller 815 - 2011 Report	0	0	706.2	704	-1	0
PMP-31	714.41	706.71	708.31	707.31	Zoeller 815 - 2011 Report	0	0	707.39	1,065.50	155	0
PMP-12	714.75	707.05	708.65	707.65	Zoeller 815 - 2011 Report	0	0	709.96	1,065.50	155	1
PMP-52	715.72	708.02	709.62	708.62	Zoeller 815 - 2011 Report	0	0	709.58	706.43	-1	1
PMP-50	717.88	710.18	711.78	710.78	Zoeller 815 - 2011 Report	0	0	710.9	706.43	-2	0
PMP-9	725.29	717.59	719.19	718.19	Zoeller 815 - 2011 Report	0	0	718.88	1,065.50	151	1
PMP-1	728	720.3	721.9	720.9	Zoeller 815 - 2011 Report	0	0	721.65	1,065.50	149	1
PMP-33	728.47	720.77	722.37	721.37	Zoeller 815 - 2011 Report	0	0	722.21	1,065.50	149	1
PMP-7	733.35	725.65	727.25	726.25	Zoeller 815 - 2011 Report	0	0	727.13	1,065.50	147	1
PMP-6	734.67	726.97	728.57	727.57	Barnes Fixed Discharge - 2020 Report	0	200	865.5	1,065.50	146	60
PMP-8	735.47	727.77	729.37	728.37	Zoeller 815 - 2011 Report	0	0	728.5	1,065.50	146	0

BCRSD SEWER GEMS
MODEL

HILLCREEK SUBDIVISION
Pressure Nodes at time 24.00 hours
Boone County Regional Sewer District

SewerGEMS Modeling
January 2026

Bartlett&West



Color Coding Legend
Pressure Junction: Pressure (psi)

- ≤ -10
- ≤ 0
- ≤ 10
- ≤ 20
- ≤ 30
- ≤ 40
- ≤ 50
- ≤ 60
- ≤ 70
- ≤ 80
- ≤ 90
- ≤ 100
- ≤ 110
- ≤ 120
- ≤ 130
- ≤ 140
- ≤ 150
- ≤ 160
- ≤ 170
- ≤ 180
- ≤ 190
- ≤ 200
- Other

Color Coding Legend
Pressure Pipe Diameter (in)

- ≤ 1.500
- ≤ 1.720
- ≤ 2.154
- ≤ 2.606
- ≤ 3.166
- ≤ 4.072
- Other

Label	Elevation (Ground) (ft)	Elevation (Invert) (ft)	Elevation (On) (ft)	Elevation (Off) (ft)	Pump Definition	Flow (Pump) (gal/min)	Head (Pump) (ft)	Hydraulic Grade (Upstream) (ft)	Hydraulic Grade (Downstream) (ft)	Pressure (Discharge) (psi)	Pressure (Suction) (psi)
PMP-73	596.15	588.45	590.05	589.05	Zoeller 815 - 2011 Report	0	0	589.39	702	49	0
PMP-38	607.47	599.77	601.37	600.37	Barnes Fixed Discharge - 2020 Report	0	0	705.54	808.31	90	46
PMP-75	609.08	601.38	602.98	601.98	Zoeller 815 - 2011 Report	0	0	602.36	702	44	0
PMP-79	610.28	602.58	604.18	603.18	Barnes Fixed Discharge - 2020 Report	0	0	604.12	702	43	1
PMP-37	614.02	606.32	607.92	606.92	Barnes Fixed Discharge - 2020 Report	0	0	708.82	808.31	87	44
PMP-78	615.76	608.06	609.66	608.66	Zoeller 815 - 2011 Report	0	0	609.23	702	41	1
PMP-76	620.87	613.17	614.77	613.77	Barnes Fixed Discharge - 2020 Report	0	0	614.51	702	38	1
PMP-80	626.05	618.35	619.95	618.95	Zoeller 815 - 2011 Report	0	0	619.71	702	36	1
PMP-84	626.48	618.78	620.38	619.38	Zoeller 815 - 2011 Report	0	0	620.35	702	36	1
PMP-77	627.79	620.09	621.69	620.69	Zoeller 815 - 2011 Report	0	0	621.37	702	35	1
PMP-71	635.46	627.76	629.36	628.36	Zoeller 815 - 2011 Report	0	0	628.59	702	32	0
PMP-82	644.41	636.71	638.31	637.31	Zoeller 815 - 2011 Report	0	0	637.87	702	28	0
PMP-85	648.68	640.98	642.58	641.58	Zoeller 815 - 2011 Report	0	0	641.75	702	26	0
PMP-74	650.76	643.06	644.66	643.66	Zoeller 815 - 2011 Report	0	0	644.15	702	26	0
PMP-72	651.68	643.98	645.58	644.58	Zoeller 815 - 2011 Report	0	0	644.74	702	25	0
PMP-81	651.74	644.04	645.64	644.64	Zoeller 815 - 2011 Report	0	0	645.62	702	25	1
PMP-87	652.88	645.18	646.78	645.78	Zoeller 815 - 2011 Report	0	0	645.83	702	25	0
PMP-46	653.56	645.86	647.46	646.46	Zoeller 815 - 2011 Report	0	0	728.59	808.31	70	36
PMP-49	655.94	648.24	649.84	648.84	Zoeller 815 - 2011 Report	0	0	729.78	808.31	69	35
PMP-89	656.48	648.78	650.38	649.38	Zoeller 815 - 2011 Report	0	0	649.48	702	23	0
PMP-86	657.62	649.92	651.52	650.52	Zoeller 815 - 2011 Report	0	0	650.59	702	23	0
PMP-41	659.01	651.31	652.91	651.91	Zoeller 815 - 2011 Report	0	0	731.31	808.31	68	35
PMP-36	663.17	655.47	657.07	656.07	Zoeller 815 - 2011 Report	0	0	733.39	808.31	66	34
PMP-65	663.41	655.71	657.31	656.31	Zoeller 815 - 2011 Report	0	0	656.68	704	21	0
PMP-39	663.85	656.15	657.75	656.75	Zoeller 815 - 2011 Report	0	0	733.73	808.31	66	34
PMP-47	664.07	656.37	657.97	656.97	Zoeller 815 - 2011 Report	0	0	733.84	808.31	66	34
PMP-40	664.11	656.41	658.01	657.01	Zoeller 815 - 2011 Report	0	0	733.86	808.31	66	34
PMP-83	669.09	661.39	662.99	661.99	Zoeller 815 - 2011 Report	0	0	662.13	702	18	0
PMP-61	670.15	662.45	664.05	663.05	Zoeller 815 - 2011 Report	0	0	663.83	687.14	11	1
PMP-19	670.29	662.59	664.19	663.19	Barnes Fixed Discharge - 2020 Report	0	0	709.5	753.41	39	20
PMP-62	670.29	662.59	664.19	663.19	Zoeller 815 - 2011 Report	0	0	663.52	704	18	0
PMP-56	670.38	662.68	664.28	663.28	Zoeller 815 - 2011 Report	0	0	663.93	706.43	19	1
PMP-64	671.16	663.46	665.06	664.06	Zoeller 815 - 2011 Report	0	0	664.8	704	18	1
PMP-70	672.23	664.53	666.13	665.13	Zoeller 815 - 2011 Report	0	0	665.79	702	16	1
PMP-90	673.69	665.99	667.59	666.59	Zoeller 815 - 2011 Report	0	0	667.3	702	16	1
PMP-63	675.14	667.44	669.04	668.04	Zoeller 815 - 2011 Report	0	0	668.24	704	16	0
PMP-34	675.56	667.86	669.46	668.46	Zoeller 815 - 2011 Report	0	0	739.59	808.31	61	31
PMP-88	675.7	668	669.6	668.6	Zoeller 815 - 2011 Report	0	0	669.13	702	15	0
PMP-43	676.95	669.25	670.85	669.85	Zoeller 815 - 2011 Report	0	0	740.28	808.31	60	31
PMP-22	677.43	669.73	671.33	670.33	Zoeller 815 - 2011 Report	0	0	671.33	753.41	36	1
PMP-48	677.71	670.01	671.61	670.61	Zoeller 815 - 2011 Report	0	0	740.66	808.31	60	31
PMP-45	678.37	670.67	672.27	671.27	Zoeller 815 - 2011 Report	0	0	740.99	808.31	60	30
PMP-67	680.36	672.66	674.26	673.26	Zoeller 815 - 2011 Report	0	0	673.56	704	14	0
PMP-55	682.85	675.15	676.75	675.75	Zoeller 815 - 2011 Report	0	0	676.13	706.43	14	0
PMP-21	683.74	676.04	677.64	676.64	Zoeller 815 - 2011 Report	0	0	676.91	753.41	33	0
PMP-68	686.22	678.52	680.12	679.12	Zoeller 815 - 2011 Report	0	0	680.09	643	-15	1
PMP-3	686.3	678.6	680.2	679.2	Barnes Fixed Discharge - 2020 Report	0	0	679.19	753.41	32	0
PMP-17	688.94	681.24	682.84	681.84	Zoeller 815 - 2011 Report	0	0	718.83	753.41	31	16
PMP-14	689.32	681.62	683.22	682.22	Zoeller 815 - 2011 Report	0	0	719.02	753.41	31	16
PMP-58	689.76	682.06	683.66	682.66	Zoeller 815 - 2011 Report	0	0	683.63	704	9	1
PMP-53	689.79	682.09	683.69	682.69	Zoeller 815 - 2011 Report	0	0	682.95	706.43	11	0
PMP-18	689.82	682.12	683.72	682.72	Zoeller 815 - 2011 Report	0	0	719.27	753.41	31	16
PMP-25	689.9	682.2	683.8	682.8	Zoeller 815 - 2011 Report	0	0	682.92	753.41	31	0
PMP-30	689.91	682.21	683.81	682.81	Zoeller 815 - 2011 Report	0	0	719.31	753.41	31	16
PMP-15	690.64	682.94	684.54	683.54	Zoeller 815 - 2011 Report	0	0	719.68	753.41	30	16
PMP-29	691.69	683.99	685.59	684.59	Zoeller 815 - 2011 Report	0	0	685.19	753.41	30	1
PMP-54	691.71	684.01	685.61	684.61	Zoeller 815 - 2011 Report	0	0	684.98	706.43	10	0
PMP-91	692.25	684.55	686.15	685.15	Zoeller 815 - 2011 Report	0	0	686.07	702	8	1
PMP-16	692.75	685.05	686.65	685.65	Zoeller 815 - 2011 Report	0	0	720.73	753.41	30	15
PMP-42	692.91	685.21	686.81	685.81	Zoeller 815 - 2011 Report	0	0	748.26	808.31	53	27
PMP-44	693.25	685.55	687.15	686.15	Zoeller 815 - 2011 Report	0	0	748.43	808.31	53	27
PMP-24	693.34	685.64	687.24	686.24	Zoeller 815 - 2011 Report	0	0	687.07	753.41	29	1
PMP-11	694.84	687.14	688.74	687.74	Zoeller 815 - 2011 Report	0	0	688.01	753.41	29	0
PMP-57	695.44	687.74	689.34	688.34	Zoeller 815 - 2011 Report	0	0	689.15	706.43	8	1
PMP-23	695.66	687.96	689.56	688.56	Zoeller 815 - 2011 Report	0	0	689.3	753.41	28	1
PMP-26	695.79	688.09	689.69	688.69	Zoeller 815 - 2011 Report	0	0	689.53	753.41	28	1
PMP-60	696.72	689.02	690.62	689.62	Zoeller 815 - 2011 Report	0	0	691.7	687.14	-1	1
PMP-20	697.56	689.86	691.46	690.46	Zoeller 815 - 2011 Report	0	0	691.43	753.41	27	1
PMP-35	699.14	691.44	693.04	692.04	Zoeller 815 - 2011 Report	0	0	751.38	808.31	51	26
PMP-69	702.6	694.9	696.5	695.5	Zoeller 815 - 2011 Report	0	0	695.58	702	3	0
PMP-13	706.07	698.37	699.97	698.97	Zoeller 815 - 2011 Report	0	0	701.35	753.41	24	1
PMP-10	707.31	699.61	701.21	700.21	Barnes Fixed Discharge - 2020 Report	0	0	728.01	753.41	23	12
PMP-32	709.47	701.77	703.37	702.37	Zoeller 815 - 2011 Report	0	0	756.54	808.31	46	24
PMP-92	711.48	703.78	705.38	704.38	Zoeller 815 - 2011 Report	0	0	704.93	702	-1	0
PMP-5	712.02	704.32	705.92	704.92	Zoeller 815 - 2011 Report	0	0	704.78	753.41	21	0
PMP-4	712.04	704.34	705.94	704.94	Zoeller 815 - 2011 Report	0	0	705.01	753.41	21	0
PMP-28	712.09	704.39	705.99	704.99	Zoeller 815 - 2011 Report	0	0	705.11	753.41	21	0
PMP-66	712.15	704.45	706.05	705.05	Zoeller 815 - 2011 Report	0	0	705.5	704	0	0
PMP-27	712.18	704.48	706.08	705.08	Zoeller 815 - 2011 Report	0	0	705.18	753.41	21	0
PMP-59	712.92	705.22	706.82	705.82	Zoeller 815 - 2011 Report	0	0	706.79	704	-1	1
PMP-31	714.41	706.71	708.31	707.31	Zoeller 815 - 2011 Report	0	0	707.45	753.41	20	0
PMP-12	714.75	707.05	708.65	707.65	Zoeller 815 - 2011 Report	0	0	709.77	753.41	20	1
PMP-52	715.72	708.02	709.62	708.62	Zoeller 815 - 2011 Report	0	0	709.44	706.43	-1	1
PMP-50	717.88	710.18	711.78	710.78	Zoeller 815 - 2011 Report	0	0	711.4	706.43	-2	1
PMP-9	725.29	717.59	719.19	718.19	Zoeller 815 - 2011 Report	0	0	717.93	753.41	15	0
PMP-1	728	720.3	721.9	720.9	Zoeller 815 - 2011 Report	0	0	720.69	741.76	9	0
PMP-33	728.47	720.77	722.37	721.37	Zoeller 815 - 2011 Report	0	0	722.02	808.31	38	1
PMP-7	733.35	725.65	727.25	726.25	Zoeller 815 - 2011 Report	0	0	726.86	741.76	7	1
PMP-6	734.67	726.97	728.57	727.57	Barnes Fixed Discharge - 2020 Report	0	0	728.06	741.76	6	0
PMP-8	735.47	727.77	729.37	728.37	Zoeller 815 - 2011 Report	0	0	728.11	753.41	11	0

**BCRSD SEWER GEMS
MODEL**

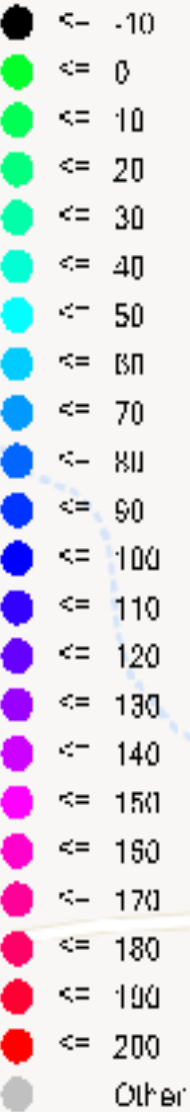
HILLCREEK SUBDIVISION
Pressure Nodes at time 48.00 hours

Boone County Regional Sewer District

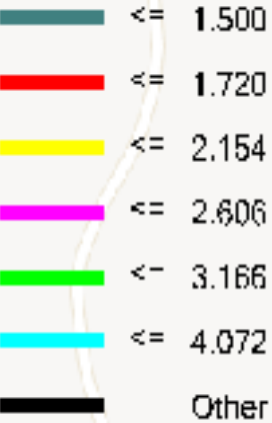
SewerGEMS Modeling
January 2026

Bartlett & West

Color Coding Legend
Pressure Junction: Pressure (psi)



Color Coding Legend
Pressure Pipe: Diameter (in)



Label	Elevation (Ground) (ft)	Elevation (Invert) (ft)	Elevation (On) (ft)	Elevation (Off) (ft)	Pump Definition	Flow (Pump) (gal/min)	Head (Pump) (ft)	Hydraulic Grade (Upstream) (ft)	Hydraulic Grade (Downstream) (ft)	Pressure (Discharge) (psi)	Pressure (Suction) (psi)
PMP-73	596.15	588.45	590.05	589.05	Zoeller 815 - 2011 Report	0	0	589.7	702.55	49	1
PMP-38	607.47	599.77	601.37	600.37	Barnes Fixed Discharge - 2020 Report	0	200	800.97	1,000.97	174	87
PMP-75	609.08	601.38	602.98	601.98	Zoeller 815 - 2011 Report	0	0	602.56	702.8	44	1
PMP-79	610.28	602.58	604.18	603.18	Barnes Fixed Discharge - 2020 Report	0	0	604.06	703.34		1
PMP-37	614.02	606.32	607.92	606.92	Barnes Fixed Discharge - 2020 Report	0	200	800.97	1,000.97	171	84
PMP-78	615.76	608.06	609.66	608.66	Zoeller 815 - 2011 Report	0	0	609.62	703.12	41	1
PMP-76	620.87	613.17	614.77	613.77	Barnes Fixed Discharge - 2020 Report	0	0	614.15	702.87	39	0
PMP-80	626.05	618.35	619.95	618.95	Zoeller 815 - 2011 Report	0	0	619.57	704.89	37	1
PMP-84	626.48	618.78	620.38	619.38	Zoeller 815 - 2011 Report	0	0	619.49	703.49	37	0
PMP-77	627.79	620.09	621.69	620.69	Zoeller 815 - 2011 Report	0	0	620.75	703	36	0
PMP-71	635.46	627.76	629.36	628.36	Zoeller 815 - 2011 Report	0	0	628.49	702.32	32	0
PMP-82	644.41	636.71	638.31	637.31	Zoeller 815 - 2011 Report	0	0	637.64	710.85	32	0
PMP-85	648.68	640.98	642.58	641.58	Zoeller 815 - 2011 Report	0	0	642.4	703.49	27	1
PMP-74	650.76	643.06	644.66	643.66	Zoeller 815 - 2011 Report	0	0	644.47	702.69	26	1
PMP-72	651.68	643.98	645.58	644.58	Zoeller 815 - 2011 Report	0	0	644.85	702.52	25	0
PMP-81	651.74	644.04	645.64	644.64	Zoeller 815 - 2011 Report	0	0	645.27	709.41	28	1
PMP-87	652.88	645.18	646.78	645.78	Zoeller 815 - 2011 Report	0	0	646.57	703.49	25	1
PMP-46	653.56	645.86	647.46	646.46	Zoeller 815 - 2011 Report	0	386.66	614.31	1,000.97	154	-14
PMP-49	655.94	648.24	649.84	648.84	Zoeller 815 - 2011 Report	0	386.66	614.31	1,000.97	153	-15
PMP-89	656.48	648.78	650.38	649.38	Zoeller 815 - 2011 Report	0	0	650.06	680	14	1
PMP-86	657.62	649.92	651.52	650.52	Zoeller 815 - 2011 Report	0	0	651.39	703.49	23	1
PMP-41	659.01	651.31	652.91	651.91	Zoeller 815 - 2011 Report	0	386.66	614.31	1,000.97	151	-16
PMP-36	663.17	655.47	657.07	656.07	Zoeller 815 - 2011 Report	0	386.66	614.31	1,000.97	149	-18
PMP-65	663.41	655.71	657.31	656.31	Zoeller 815 - 2011 Report	0	0	657.03	704	21	1
PMP-39	663.85	656.15	657.75	656.75	Zoeller 815 - 2011 Report	0	386.66	614.31	1,000.97	149	-18
PMP-47	664.07	656.37	657.97	656.97	Zoeller 815 - 2011 Report	0	386.66	614.31	1,000.97	149	-18
PMP-40	664.11	656.41	658.01	657.01	Zoeller 815 - 2011 Report	0	386.66	614.31	1,000.97	149	-18
PMP-83	669.09	661.39	662.99	661.99	Zoeller 815 - 2011 Report	12.69	57.77	662.37	720.15	25	0
PMP-61	670.15	662.45	664.05	663.05	Zoeller 815 - 2011 Report	0	386.67	691.88	1,078.55	180	13
PMP-19	670.29	662.59	664.19	663.19	Barnes Fixed Discharge - 2020 Report	0	200	800.97	1,000.97	146	60
PMP-62	670.29	662.59	664.19	663.19	Zoeller 815 - 2011 Report	0	0	663.52	704	18	0
PMP-56	670.38	662.68	664.28	663.28	Zoeller 815 - 2011 Report	0	0	663.78	706.43	19	0
PMP-64	671.16	663.46	665.06	664.06	Zoeller 815 - 2011 Report	0	0	664.52	704	18	0
PMP-70	672.23	664.53	666.13	665.13	Zoeller 815 - 2011 Report	0	0	665.15	702.19	16	0
PMP-90	673.69	665.99	667.59	666.59	Zoeller 815 - 2011 Report	0	0	666.7	703.49	16	0
PMP-63	675.14	667.44	669.04	668.04	Zoeller 815 - 2011 Report	0	0	669.03	704	16	1
PMP-34	675.56	667.86	669.46	668.46	Zoeller 815 - 2011 Report	0	386.66	614.31	1,000.97	144	-23
PMP-88	675.7	668	669.6	668.6	Zoeller 815 - 2011 Report	0	0	669.02	703.49	15	0
PMP-43	676.95	669.25	670.85	669.85	Zoeller 815 - 2011 Report	0	386.66	614.31	1,000.97	144	-24
PMP-22	677.43	669.73	671.33	670.33	Zoeller 815 - 2011 Report	0	0	670.38	1,000.97	143	0
PMP-48	677.71	670.01	671.61	670.61	Zoeller 815 - 2011 Report	0	386.66	614.31	1,000.97	143	-24
PMP-45	678.37	670.67	672.27	671.27	Zoeller 815 - 2011 Report	0	386.66	614.31	1,000.97	143	-24
PMP-67	680.36	672.66	674.26	673.26	Zoeller 815 - 2011 Report	0	0	673.54	704	14	0
PMP-55	682.85	675.15	676.75	675.75	Zoeller 815 - 2011 Report	0	0	675.9	706.43	14	0
PMP-21	683.74	676.04	677.64	676.64	Zoeller 815 - 2011 Report	0	0	676.71	1,000.97	141	0
PMP-68	686.22	678.52	680.12	679.12	Zoeller 815 - 2011 Report	0	0	679.52	643.33	-15	0
PMP-3	686.3	678.6	680.2	679.2	Barnes Fixed Discharge - 2020 Report	0	200	800.95	1,000.95	139	53
PMP-17	688.94	681.24	682.84	681.84	Zoeller 815 - 2011 Report	2.62	316.91	684.06	1,000.97	138	1
PMP-14	689.32	681.62	683.22	682.22	Zoeller 815 - 2011 Report	2.63	316.43	684.54	1,000.97	138	1
PMP-58	689.76	682.06	683.66	682.66	Zoeller 815 - 2011 Report	0	0	683.65	704	9	1
PMP-53	689.79	682.09	683.69	682.69	Zoeller 815 - 2011 Report	0	0	682.84	706.43	11	0
PMP-18	689.82	682.12	683.72	682.72	Zoeller 815 - 2011 Report	2.65	316.01	684.97	1,000.97	138	1
PMP-25	689.9	682.2	683.8	682.8	Zoeller 815 - 2011 Report	0	0	683.39	1,000.97	138	1
PMP-30	689.91	682.21	683.81	682.81	Zoeller 815 - 2011 Report	2.66	315.76	685.21	1,000.97	138	1
PMP-15	690.64	682.94	684.54	683.54	Zoeller 815 - 2011 Report	2.68	315.16	685.81	1,000.97	138	1
PMP-29	691.69	683.99	685.59	684.59	Zoeller 815 - 2011 Report	0	0	685.57	1,000.97	137	1
PMP-54	691.71	684.01	685.61	684.61	Zoeller 815 - 2011 Report	0	0	685.13	706.43	10	0
PMP-91	692.25	684.55	686.15	685.15	Zoeller 815 - 2011 Report	0	0	685.19	703.49	8	0
PMP-16	692.75	685.05	686.65	685.65	Zoeller 815 - 2011 Report	2.76	313.07	687.91	1,000.97	137	1
PMP-42	692.91	685.21	686.81	685.81	Zoeller 815 - 2011 Report	2.77	312.82	688.15	1,000.97	137	1
PMP-44	693.25	685.55	687.15	686.15	Zoeller 815 - 2011 Report	2.78	312.42	688.55	1,000.97	136	1
PMP-24	693.34	685.64	687.24	686.24	Zoeller 815 - 2011 Report	0	0	687.05	1,000.97	136	1
PMP-11	694.84	687.14	688.74	687.74	Zoeller 815 - 2011 Report	0	0	688.41	1,000.96	136	1
PMP-57	695.44	687.74	689.34	688.34	Zoeller 815 - 2011 Report	0	0	688.74	706.43	8	0
PMP-23	695.66	687.96	689.56	688.56	Zoeller 815 - 2011 Report	0	0	688.64	1,000.97	135	0
PMP-26	695.79	688.09	689.69	688.69	Zoeller 815 - 2011 Report	0	0	689.68	1,000.97	135	1
PMP-60	696.72	689.02	690.62	689.62	Zoeller 815 - 2011 Report	0	386.53	692.02	1,078.55	169	1
PMP-20	697.56	689.86	691.46	690.46	Zoeller 815 - 2011 Report	0	0	691.39	1,000.97	135	1
PMP-35	699.14	691.44	693.04	692.04	Zoeller 815 - 2011 Report	0	386.66	614.31	1,000.97	134	-33
PMP-69	702.6	694.9	696.5	695.5	Zoeller 815 - 2011 Report	0	0	696.13	702.05	3	1
PMP-13	706.07	698.37	699.97	698.97	Zoeller 815 - 2011 Report	3.26	299.83	701.14	1,000.97	131	1
PMP-10	707.31	699.61	701.21	700.21	Barnes Fixed Discharge - 2020 Report	-39.3	298.25	702.62	1,000.86	130	1
PMP-32	709.47	701.77	703.37	702.37	Zoeller 815 - 2011 Report	3.39	296.22	704.75	1,000.97	129	1
PMP-92	711.48	703.78	705.38	704.38	Zoeller 815 - 2011 Report	0	0	704.76	708	2	0
PMP-5	712.02	704.32	705.92	704.92	Zoeller 815 - 2011 Report	0	0	705.66	1,000.95	128	1
PMP-4	712.04	704.34	705.94	704.94	Zoeller 815 - 2011 Report	3.48	293.81	707.14	1,000.95	128	1
PMP-28	712.09	704.39	705.99	704.99	Zoeller 815 - 2011 Report	0	0	705.07	1,000.97	128	0
PMP-66	712.15	704.45	706.05	705.05	Zoeller 815 - 2011 Report	0	0	705.08	704	0	0
PMP-27	712.18	704.48	706.08	705.08	Zoeller 815 - 2011 Report	0	0	705.24	1,000.97	128	0
PMP-59	712.92	705.22	706.82	705.82	Zoeller 815 - 2011 Report	0	0	706.56	704	-1	1
PMP-31	714.41	706.71	708.31	707.31	Zoeller 815 - 2011 Report	0	0	707.49	1,000.97	127	0
PMP-12	714.75	707.05	708.65	707.65	Zoeller 815 - 2011 Report	3.58	291.24	709.73	1,000.97	127	1
PMP-52	715.72	708.02	709.62	708.62	Zoeller 815 - 2011 Report	0	0	708.98	706.43	-1	0
PMP-50	717.88	710.18	711.78	710.78	Zoeller 815 - 2011 Report	0	0	711.55	706.43	-2	1
PMP-9	725.29	717.59	719.19	718.19	Zoeller 815 - 2011 Report	0	0	718.59	1,000.95	123	0
PMP-1	728	720.3	721.9	720.9	Zoeller 815 - 2011 Report	0	0	721.43	866.01	63	0
PMP-33	728.47	720.77	722.37	721.37	Zoeller 815 - 2011 Report	4.05	278.68	722.29	1,000.97	121	1
PMP-7	733.35	725.65	727.25	726.25	Zoeller 815 - 2011 Report	0	0	726.95	866.01	61	1
PMP-6	734.67	726.97	728.57	727.57	Barnes Fixed Discharge - 2020 Report	0	0	727.71	866.01	60	0
PMP-8	735.47	727.77	729.37	728.37	Zoeller 815 - 2011 Report	0	0	728.77	1,000.95	118	0

BCRSD SEWER GEMS MODEL

HILLCREEK SUBDIVISION

Pressure Nodes at time 62.00 hours

Boone County Regional Sewer District

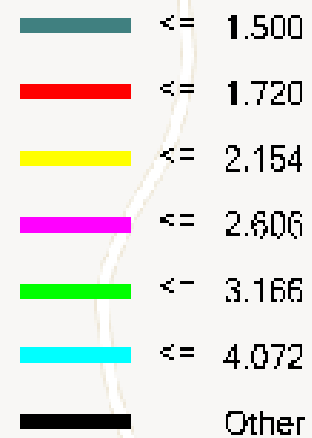
SewerGEMS Modeling
January 2026

Bartlett & West

Color Coding Legend Pressure Junction: Pressure (psi)



Color Coding Legend Pressure Pipe: Diameter (in)



Label	Elevation (Ground) (ft)	Elevation (Invert) (ft)	Elevation (On) (ft)	Elevation (Off) (ft)	Pump Definition	Flow (Pump) (gal/min)	Head (Pump) (ft)	Hydraulic Grade (Upstream) (ft)	Hydraulic Grade (Downstream) (ft)	Pressure (Discharge) (psi)	Pressure (Suction) (psi)
PMP-73	596.15	588.45	590.05	589.05	Zoeller 815 - 2011 Report	0	0	589.22	702	49	0
PMP-38	607.47	599.77	601.37	600.37	Barnes Fixed Discharge - 2020 Report	0	0	766.34	929.90	143	72
PMP-75	609.08	601.38	602.98	601.98	Zoeller 815 - 2011 Report	0	0	602.14	702	44	0
PMP-79	610.28	602.58	604.18	603.18	Barnes Fixed Discharge - 2020 Report	0	0	603.96	702	43	1
PMP-37	614.02	606.32	607.92	606.92	Barnes Fixed Discharge - 2020 Report	0	0	769.61	929.90	140	71
PMP-78	615.76	608.06	609.66	608.66	Zoeller 815 - 2011 Report	0	0	609.1	702	41	0
PMP-76	620.87	613.17	614.77	613.77	Barnes Fixed Discharge - 2020 Report	0	0	614.33	702	38	1
PMP-80	626.05	618.35	619.95	618.95	Zoeller 815 - 2011 Report	0	0	619.91	702	36	1
PMP-84	626.48	618.78	620.38	619.38	Zoeller 815 - 2011 Report	0	0	619.84	702	36	0
PMP-77	627.79	620.09	621.69	620.69	Zoeller 815 - 2011 Report	0	0	621.5	702	35	1
PMP-71	635.46	627.76	629.36	628.36	Zoeller 815 - 2011 Report	0	0	628.64	702	32	0
PMP-82	644.41	636.71	638.31	637.31	Zoeller 815 - 2011 Report	0	0	637.45	702	28	0
PMP-85	648.68	640.98	642.58	641.58	Zoeller 815 - 2011 Report	0	0	642.25	702	26	1
PMP-74	650.76	643.06	644.66	643.66	Zoeller 815 - 2011 Report	0	0	644.23	702	26	1
PMP-72	651.68	643.98	645.58	644.58	Zoeller 815 - 2011 Report	0	0	644.69	702	25	0
PMP-81	651.74	644.04	645.64	644.64	Zoeller 815 - 2011 Report	0	0	645.3	702	25	1
PMP-87	652.88	645.18	646.78	645.78	Zoeller 815 - 2011 Report	0	0	646.38	702	25	1
PMP-46	653.56	645.86	647.46	646.46	Zoeller 815 - 2011 Report	0	0	789.38	929.90	123	62
PMP-49	655.94	648.24	649.84	648.84	Zoeller 815 - 2011 Report	0	0	790.57	929.90	122	62
PMP-89	656.48	648.78	650.38	649.38	Zoeller 815 - 2011 Report	0	0	649.73	680	14	0
PMP-86	657.62	649.92	651.52	650.52	Zoeller 815 - 2011 Report	0	0	651.08	702	23	1
PMP-41	659.01	651.31	652.91	651.91	Zoeller 815 - 2011 Report	0	0	792.11	929.90	121	61
PMP-36	663.17	655.47	657.07	656.07	Zoeller 815 - 2011 Report	0	0	794.19	929.90	119	60
PMP-65	663.41	655.71	657.31	656.31	Zoeller 815 - 2011 Report	0	0	656.46	704	21	0
PMP-39	663.85	656.15	657.75	656.75	Zoeller 815 - 2011 Report	0	0	794.53	929.90	118	60
PMP-47	664.07	656.37	657.97	656.97	Zoeller 815 - 2011 Report	0	0	794.64	929.90	118	60
PMP-40	664.11	656.41	658.01	657.01	Zoeller 815 - 2011 Report	0	0	794.66	929.90	118	60
PMP-83	669.09	661.39	662.99	661.99	Zoeller 815 - 2011 Report	0	0	662.46	676	6	0
PMP-61	670.15	662.45	664.05	663.05	Zoeller 815 - 2011 Report	0	0	679.37	693.29	13	7
PMP-19	670.29	662.59	664.19	663.19	Barnes Fixed Discharge - 2020 Report	0	0	797.75	929.90	116	58
PMP-62	670.29	662.59	664.19	663.19	Zoeller 815 - 2011 Report	0	0	664.04	704	18	1
PMP-56	670.38	662.68	664.28	663.28	Zoeller 815 - 2011 Report	0	0	663.81	706.43	19	0
PMP-64	671.16	663.46	665.06	664.06	Zoeller 815 - 2011 Report	0	0	664.67	704	18	1
PMP-70	672.23	664.53	666.13	665.13	Zoeller 815 - 2011 Report	0	0	665.74	702	16	1
PMP-90	673.69	665.99	667.59	666.59	Zoeller 815 - 2011 Report	0	0	666.94	702	16	0
PMP-63	675.14	667.44	669.04	668.04	Zoeller 815 - 2011 Report	0	0	668.71	704	16	1
PMP-34	675.56	667.86	669.46	668.46	Zoeller 815 - 2011 Report	0	0	800.38	929.90	113	57
PMP-88	675.7	668	669.6	668.6	Zoeller 815 - 2011 Report	0	0	668.83	702	15	0
PMP-43	676.95	669.25	670.85	669.85	Zoeller 815 - 2011 Report	0	0	801.08	929.90	113	57
PMP-22	677.43	669.73	671.33	670.33	Zoeller 815 - 2011 Report	0	0	671.18	929.90	113	1
PMP-48	677.71	670.01	671.61	670.61	Zoeller 815 - 2011 Report	0	0	801.46	929.90	112	57
PMP-45	678.37	670.67	672.27	671.27	Zoeller 815 - 2011 Report	0	0	801.79	929.90	112	57
PMP-67	680.36	672.66	674.26	673.26	Zoeller 815 - 2011 Report	0	0	673.76	704	14	0
PMP-55	682.85	675.15	676.75	675.75	Zoeller 815 - 2011 Report	0	0	676.41	706.43	14	1
PMP-21	683.74	676.04	677.64	676.64	Zoeller 815 - 2011 Report	0	0	677.31	929.90	110	1
PMP-68	686.22	678.52	680.12	679.12	Zoeller 815 - 2011 Report	0	0	679.52	643	-15	0
PMP-3	686.3	678.6	680.2	679.2	Barnes Fixed Discharge - 2020 Report	0	0	805.75	929.90	109	55
PMP-17	688.94	681.24	682.84	681.84	Zoeller 815 - 2011 Report	0	0	807.07	929.90	108	54
PMP-14	689.32	681.62	683.22	682.22	Zoeller 815 - 2011 Report	0	0	807.26	929.90	107	54
PMP-58	689.76	682.06	683.66	682.66	Zoeller 815 - 2011 Report	0	0	682.99	704	9	0
PMP-53	689.79	682.09	683.69	682.69	Zoeller 815 - 2011 Report	0	0	682.74	706.43	11	0
PMP-18	689.82	682.12	683.72	682.72	Zoeller 815 - 2011 Report	0	0	807.51	929.90	107	54
PMP-25	689.9	682.2	683.8	682.8	Zoeller 815 - 2011 Report	0	0	683.22	929.90	107	0
PMP-30	689.91	682.21	683.81	682.81	Zoeller 815 - 2011 Report	0	0	683.46	929.90	107	1
PMP-15	690.64	682.94	684.54	683.54	Zoeller 815 - 2011 Report	0	0	807.92	929.90	107	54
PMP-29	691.69	683.99	685.59	684.59	Zoeller 815 - 2011 Report	0	0	685.15	929.90	106	1
PMP-54	691.71	684.01	685.61	684.61	Zoeller 815 - 2011 Report	0	0	684.78	706.43	10	0
PMP-91	692.25	684.55	686.15	685.15	Zoeller 815 - 2011 Report	0	0	685.93	702	8	1
PMP-16	692.75	685.05	686.65	685.65	Zoeller 815 - 2011 Report	0	0	808.98	929.90	106	54
PMP-42	692.91	685.21	686.81	685.81	Zoeller 815 - 2011 Report	0	0	688.21	929.90	106	1
PMP-44	693.25	685.55	687.15	686.15	Zoeller 815 - 2011 Report	0	0	688.55	929.90	106	1
PMP-24	693.34	685.64	687.24	686.24	Zoeller 815 - 2011 Report	0	0	686.79	929.90	106	0
PMP-11	694.84	687.14	688.74	687.74	Zoeller 815 - 2011 Report	0	0	688.12	929.90	105	0
PMP-57	695.44	687.74	689.34	688.34	Zoeller 815 - 2011 Report	0	0	688.49	706.43	8	0
PMP-23	695.66	687.96	689.56	688.56	Zoeller 815 - 2011 Report	0	0	689.24	929.90	105	1
PMP-26	695.79	688.09	689.69	688.69	Zoeller 815 - 2011 Report	0	0	689.32	929.90	105	1
PMP-60	696.72	689.02	690.62	689.62	Zoeller 815 - 2011 Report	0	0	692.02	693.29	2	1
PMP-20	697.56	689.86	691.46	690.46	Zoeller 815 - 2011 Report	0	0	691.17	929.90	104	1
PMP-35	699.14	691.44	693.04	692.04	Zoeller 815 - 2011 Report	0	0	812.17	929.90	103	52
PMP-69	702.6	694.9	696.5	695.5	Zoeller 815 - 2011 Report	0	0	695.96	702	3	0
PMP-13	706.07	698.37	699.97	698.97	Zoeller 815 - 2011 Report	0	0	699.75	929.90	100	1
PMP-10	707.31	699.61	701.21	700.21	Barnes Fixed Discharge - 2020 Report	0	0	816.26	929.90	100	50
PMP-32	709.47	701.77	703.37	702.37	Zoeller 815 - 2011 Report	0	0	817.34	929.90	99	50
PMP-92	711.48	703.78	705.38	704.38	Zoeller 815 - 2011 Report	0	0	705.01	708	2	1
PMP-5	712.02	704.32	705.92	704.92	Zoeller 815 - 2011 Report	0	0	706.32	929.90	98	1
PMP-4	712.04	704.34	705.94	704.94	Zoeller 815 - 2011 Report	0	0	706.48	929.90	98	1
PMP-28	712.09	704.39	705.99	704.99	Zoeller 815 - 2011 Report	0	0	705.99	929.90	98	1
PMP-66	712.15	704.45	706.05	705.05	Zoeller 815 - 2011 Report	0	0	705.22	704	0	0
PMP-27	712.18	704.48	706.08	705.08	Zoeller 815 - 2011 Report	0	0	705.77	929.90	98	1
PMP-59	712.92	705.22	706.82	705.82	Zoeller 815 - 2011 Report	0	0	706.1	704	-1	0
PMP-31	714.41	706.71	708.31	707.31	Zoeller 815 - 2011 Report	0	0	707.87	929.90	97	1
PMP-12	714.75	707.05	708.65	707.65	Zoeller 815 - 2011 Report	0	0	708.05	929.90	96	0
PMP-52	715.72	708.02	709.62	708.62	Zoeller 815 - 2011 Report	0	0	709.3	706.43	-1	1
PMP-50	717.88	710.18	711.78	710.78	Zoeller 815 - 2011 Report	0	0	711.04	706.43	-2	0
PMP-9	725.29	717.59	719.19	718.19	Zoeller 815 - 2011 Report	0	0	718.59	929.90	92	0
PMP-1	728	720.3	721.9	720.9	Zoeller 815 - 2011 Report	0	0	721.19	929.90	91	0
PMP-33	728.47	720.77	722.37	721.37	Zoeller 815 - 2011 Report	0	0	722.28	929.90	90	1
PMP-7	733.35	725.65	727.25	726.25	Zoeller 815 - 2011 Report	0	0	727.17	929.90	88	1
PMP-6	734.67	726.97	728.57	727.57	Barnes Fixed Discharge - 2020 Report	0.03	199.93	729.97	929.90	88	1
PMP-8	735.47	727.77	729.37	728.37	Zoeller 815 - 2011 Report	0	0	728.92	929.90	87	0

**BCRSD SEWER GEMS
MODEL**

HILLCREEK SUBDIVISION
Pressure Nodes at time 80.00 hours

Boone County Regional Sewer District

SewerGEMS Modeling
January 2026

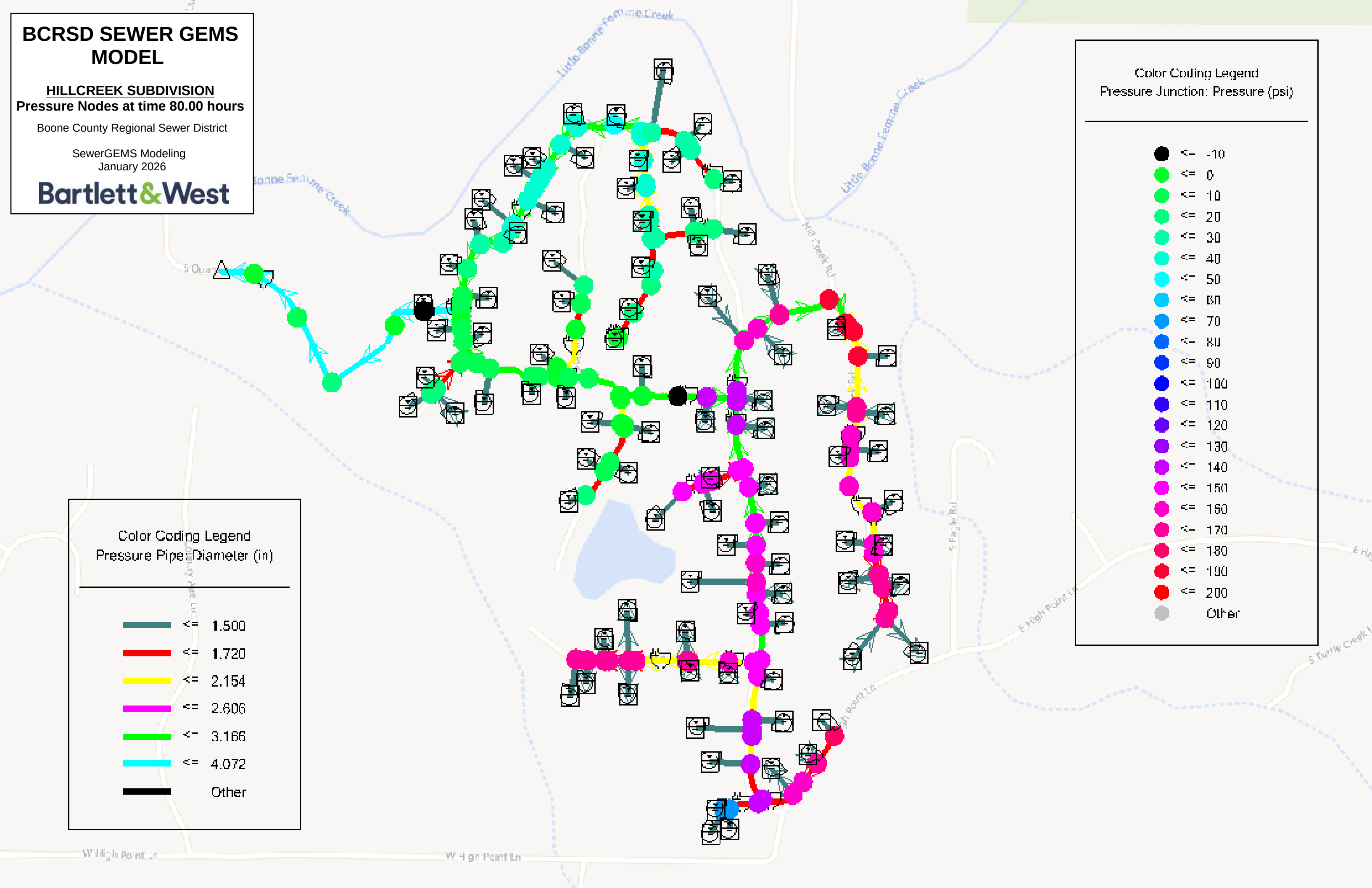
Bartlett & West

Color Coding Legend
Pressure Junction: Pressure (psi)

	<= -10
	<= 0
	<= 10
	<= 20
	<= 30
	<= 40
	<= 50
	<= 60
	<= 70
	<= 80
	<= 90
	<= 100
	<= 110
	<= 120
	<= 130
	<= 140
	<= 150
	<= 160
	<= 170
	<= 180
	<= 190
	<= 200
	Other

Color Coding Legend
Pressure Pipe: Diameter (in)

	<= 1.500
	<= 1.720
	<= 2.154
	<= 2.606
	<= 3.166
	<= 4.072
	Other



Label	Elevation (Ground) (ft)	Elevation (Invert) (ft)	Elevation (On) (ft)	Elevation (Off) (ft)	Pump Definition	Flow (Pump) (gal/min)	Head (Pump) (ft)	Hydraulic Grade (Upstream) (ft)	Hydraulic Grade (Downstream) (ft)	Pressure (Discharge) (psi)	Pressure (Suction) (psi)
PMP-73	596.15	588.45	590.05	589.05	Zoeller 815 - 2011 Report	0	0	589.95	702.54	49	1
PMP-38	607.47	599.77	601.37	600.37	Barnes Fixed Discharge - 2020 Report	0	200	840.18	1,040.19	191	104
PMP-75	609.08	601.38	602.98	601.98	Zoeller 815 - 2011 Report	0	0	602.91	702.79	44	1
PMP-79	610.28	602.58	604.18	603.18	Barnes Fixed Discharge - 2020 Report	0	0	604.09	703.33	44	1
PMP-37	614.02	606.32	607.92	606.92	Barnes Fixed Discharge - 2020 Report	-15.63	459.76	606.96	1,066.73	199	0
PMP-78	615.76	608.06	609.66	608.66	Zoeller 815 - 2011 Report	0	0	609.61	703.12	41	1
PMP-76	620.87	613.17	614.77	613.77	Barnes Fixed Discharge - 2020 Report	0	0	614.58	702.86	39	1
PMP-80	626.05	618.35	619.95	618.95	Zoeller 815 - 2011 Report	0	0	619.36	703.48	37	0
PMP-84	626.48	618.78	620.38	619.38	Zoeller 815 - 2011 Report	0	0	620.26	704.57	37	1
PMP-77	627.79	620.09	621.69	620.69	Zoeller 815 - 2011 Report	0	0	621.45	703	36	1
PMP-71	635.46	627.76	629.36	628.36	Zoeller 815 - 2011 Report	0	0	628.42	702.32	32	0
PMP-82	644.41	636.71	638.31	637.31	Zoeller 815 - 2011 Report	0	0	637.69	703.48	29	0
PMP-85	648.68	640.98	642.58	641.58	Zoeller 815 - 2011 Report	0	0	642.13	705.58	28	0
PMP-74	650.76	643.06	644.66	643.66	Zoeller 815 - 2011 Report	0	0	644.46	702.68	26	1
PMP-72	651.68	643.98	645.58	644.58	Zoeller 815 - 2011 Report	0	0	644.6	702.52	25	0
PMP-81	651.74	644.04	645.64	644.64	Zoeller 815 - 2011 Report	0	0	644.32	703.48	26	0
PMP-87	652.88	645.18	646.78	645.78	Zoeller 815 - 2011 Report	0	0	646.74	707.4	27	1
PMP-46	653.56	645.86	647.46	646.46	Zoeller 815 - 2011 Report	-0.46	399.03	648.86	1,047.89	174	1
PMP-49	655.94	648.24	649.84	648.84	Zoeller 815 - 2011 Report	-0.37	396.64	651.24	1,047.88	173	1
PMP-89	656.48	648.78	650.38	649.38	Zoeller 815 - 2011 Report	0	0	649.7	707.4	25	0
PMP-86	657.62	649.92	651.52	650.52	Zoeller 815 - 2011 Report	12.66	58.5	650.45	708.95	26	0
PMP-41	659.01	651.31	652.91	651.91	Zoeller 815 - 2011 Report	0	0	652.58	1,039.35	168	1
PMP-36	663.17	655.47	657.07	656.07	Zoeller 815 - 2011 Report	0.32	378.2	658.48	1,036.68	165	1
PMP-65	663.41	655.71	657.31	656.31	Zoeller 815 - 2011 Report	0	0	657.22	709.69	23	1
PMP-39	663.85	656.15	657.75	656.75	Zoeller 815 - 2011 Report	0.27	379.41	659.17	1,038.58	165	1
PMP-47	664.07	656.37	657.97	656.97	Zoeller 815 - 2011 Report	-0.07	388.53	659.37	1,047.90	169	1
PMP-40	664.11	656.41	658.01	657.01	Zoeller 815 - 2011 Report	0.28	379.13	659.41	1,038.54	165	1
PMP-83	669.09	661.39	662.99	661.99	Zoeller 815 - 2011 Report	0	0	662.15	703.48	18	0
PMP-61	670.15	662.45	664.05	663.05	Zoeller 815 - 2011 Report	0	0	687.48	709.5	20	11
PMP-19	670.29	662.59	664.19	663.19	Barnes Fixed Discharge - 2020 Report	0	200	877.98	1,077.98	180	93
PMP-62	670.29	662.59	664.19	663.19	Zoeller 815 - 2011 Report	0	0	663.44	704.27	18	0
PMP-56	670.38	662.68	664.28	663.28	Zoeller 815 - 2011 Report	0	0	662.9	706.43	19	0
PMP-64	671.16	663.46	665.06	664.06	Zoeller 815 - 2011 Report	12.84	53.91	663.99	717.9	24	0
PMP-70	672.23	664.53	666.13	665.13	Zoeller 815 - 2011 Report	0	0	665.25	702.19	16	0
PMP-90	673.69	665.99	667.59	666.59	Zoeller 815 - 2011 Report	0	0	666.73	707.4	18	0
PMP-63	675.14	667.44	669.04	668.04	Zoeller 815 - 2011 Report	0	0	668.86	709.22	18	1
PMP-34	675.56	667.86	669.46	668.46	Zoeller 815 - 2011 Report	0.8	365.42	670.88	1,036.30	159	1
PMP-88	675.7	668	669.6	668.6	Zoeller 815 - 2011 Report	0	0	668.65	707.4	17	0
PMP-43	676.95	669.25	670.85	669.85	Zoeller 815 - 2011 Report	0	386.67	661.24	1,047.90	164	-3
PMP-22	677.43	669.73	671.33	670.33	Zoeller 815 - 2011 Report	0.85	363.91	671.37	1,035.28	158	1
PMP-48	677.71	670.01	671.61	670.61	Zoeller 815 - 2011 Report	0.44	374.9	673.01	1,047.91	163	1
PMP-45	678.37	670.67	672.27	671.27	Zoeller 815 - 2011 Report	0.47	374.24	673.67	1,047.90	163	1
PMP-67	680.36	672.66	674.26	673.26	Zoeller 815 - 2011 Report	0	0	673.89	704.08	14	1
PMP-55	682.85	675.15	676.75	675.75	Zoeller 815 - 2011 Report	0	0	676.68	706.43	14	1
PMP-21	683.74	676.04	677.64	676.64	Zoeller 815 - 2011 Report	0	0	676.65	1,035.85	156	0
PMP-68	686.22	678.52	680.12	679.12	Zoeller 815 - 2011 Report	0	0	680.06	644.33	-15	1
PMP-3	686.3	678.6	680.2	679.2	Barnes Fixed Discharge - 2020 Report	0	200	893.25	1,093.25	179	93
PMP-17	688.94	681.24	682.84	681.84	Zoeller 815 - 2011 Report	-0.27	393.77	684.21	1,077.98	172	1
PMP-14	689.32	681.62	683.22	682.22	Zoeller 815 - 2011 Report	-0.25	393.38	684.62	1,078.00	171	1
PMP-58	689.76	682.06	683.66	682.66	Zoeller 815 - 2011 Report	0	0	683.64	704.27	10	1
PMP-53	689.79	682.09	683.69	682.69	Zoeller 815 - 2011 Report	0	0	683.32	706.43	11	1
PMP-18	689.82	682.12	683.72	682.72	Zoeller 815 - 2011 Report	-0.23	392.89	685.09	1,077.98	171	1
PMP-25	689.9	682.2	683.8	682.8	Zoeller 815 - 2011 Report	0	0	683.27	1,035.87	153	0
PMP-30	689.91	682.21	683.81	682.81	Zoeller 815 - 2011 Report	0	0	682.82	1,035.65	153	0
PMP-15	690.64	682.94	684.54	683.54	Zoeller 815 - 2011 Report	-0.2	392.07	685.91	1,077.99	171	1
PMP-29	691.69	683.99	685.59	684.59	Zoeller 815 - 2011 Report	0	0	685.37	1,035.65	152	1
PMP-54	691.71	684.01	685.61	684.61	Zoeller 815 - 2011 Report	0	0	684.94	706.43	10	0
PMP-91	692.25	684.55	686.15	685.15	Zoeller 815 - 2011 Report	0	0	685.64	707.4	10	0
PMP-16	692.75	685.05	686.65	685.65	Zoeller 815 - 2011 Report	-0.12	389.97	688.02	1,077.99	170	1
PMP-42	692.91	685.21	686.81	685.81	Zoeller 815 - 2011 Report	0	0	685.69	1,039.35	153	0
PMP-44	693.25	685.55	687.15	686.15	Zoeller 815 - 2011 Report	0	386.66	661.24	1,047.90	157	-11
PMP-24	693.34	685.64	687.24	686.24	Zoeller 815 - 2011 Report	0	0	686.94	1,035.86	152	1
PMP-11	694.84	687.14	688.74	687.74	Zoeller 815 - 2011 Report	0	0	688.31	1,035.85	151	1
PMP-57	695.44	687.74	689.34	688.34	Zoeller 815 - 2011 Report	0	0	688.55	706.43	8	0
PMP-23	695.66	687.96	689.56	688.56	Zoeller 815 - 2011 Report	0	0	689.53	1,035.85	151	1
PMP-26	695.79	688.09	689.69	688.69	Zoeller 815 - 2011 Report	0	0	689.53	1,035.88	150	1
PMP-60	696.72	689.02	690.62	689.62	Zoeller 815 - 2011 Report	0	0	692.02	709.5	9	1
PMP-20	697.56	689.86	691.46	690.46	Zoeller 815 - 2011 Report	0	0	691.24	1,035.85	150	1
PMP-35	699.14	691.44	693.04	692.04	Zoeller 815 - 2011 Report	1.7	341.35	694.43	1,035.78	149	1
PMP-69	702.6	694.9	696.5	695.5	Zoeller 815 - 2011 Report	0	0	696.32	702.05	3	1
PMP-13	706.07	698.37	699.97	698.97	Zoeller 815 - 2011 Report	0.38	376.64	701.37	1,078.01	164	1
PMP-10	707.31	699.61	701.21	700.21	Barnes Fixed Discharge - 2020 Report	0	200	835.85	1,035.85	145	59
PMP-32	709.47	701.77	703.37	702.37	Zoeller 815 - 2011 Report	2.09	331.02	704.76	1,035.77	145	1
PMP-92	711.48	703.78	705.38	704.38	Zoeller 815 - 2011 Report	0	0	705.35	707.4	2	1
PMP-5	712.02	704.32	705.92	704.92	Zoeller 815 - 2011 Report	-0.03	387.33	705.92	1,093.25	168	1
PMP-4	712.04	704.34	705.94	704.94	Zoeller 815 - 2011 Report	0.03	385.96	707.3	1,093.25	168	1
PMP-28	712.09	704.39	705.99	704.99	Zoeller 815 - 2011 Report	2.16	329.12	706.49	1,035.62	143	1
PMP-66	712.15	704.45	706.05	705.05	Zoeller 815 - 2011 Report	0	0	705.94	704.14	0	1
PMP-27	712.18	704.48	706.08	705.08	Zoeller 815 - 2011 Report	2.16	329.03	706.58	1,035.61	143	1
PMP-59	712.92	705.22	706.82	705.82	Zoeller 815 - 2011 Report	0	0	706.74	704.27	0	1
PMP-31	714.41	706.71	708.31	707.31	Zoeller 815 - 2011 Report	2.24	326.87	708.77	1,035.63	142	1
PMP-12	714.75	707.05	708.65	707.65	Zoeller 815 - 2011 Report	0.7	368	710.02	1,078.02	160	1
PMP-52	715.72	708.02	709.62	708.62	Zoeller 815 - 2011 Report	0	0	709.15	706.43	-1	0
PMP-50	717.88	710.18	711.78	710.78	Zoeller 815 - 2011 Report	0	0	711.2	706.43	-2	0
PMP-9	725.29	717.59	719.19	718.19	Zoeller 815 - 2011 Report	0	0	718.51	1,035.85	138	0
PMP-1	728	720.3	721.9	720.9	Zoeller 815 - 2011 Report	0	0	721.32	883.45	71	0
PMP-33	728.47	720.77	722.37	721.37	Zoeller 815 - 2011 Report	2.78	312.52	723.42	1,035.94	136	1
PMP-7	733.35	725.65	727.25	726.25	Zoeller 815 - 2011 Report	0	0	726.68	883.45	68	0
PMP-6	734.67	726.97	728.57	727.57	Barnes Fixed Discharge - 2020 Report	0	0	727.7	883.45	68	0
PMP-8	735.47	727.77	729.37	728.37	Zoeller 815 - 2011 Report	0	0	728.69	1,035.85	133	0

**BCRSD SEWER GEMS
MODEL**

HILLCREEK SUBDIVISION
Pressure Nodes at time 110.00 hours
Boone County Regional Sewer District

SewerGEMS Modeling
January 2026

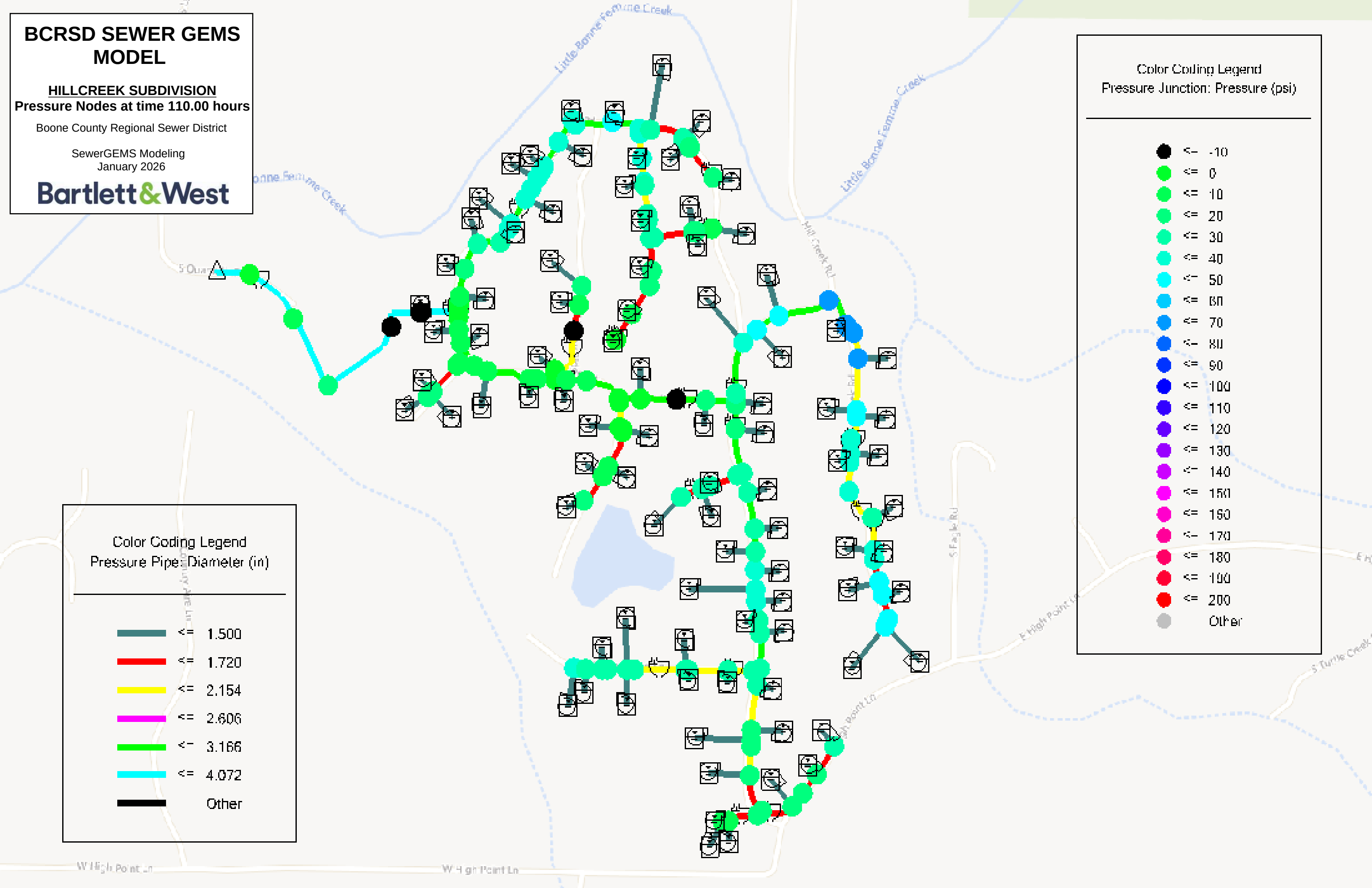
Bartlett & West

Color Coding Legend
Pressure Junction: Pressure (psi)

- ≤ -10
- ≤ 0
- ≤ 10
- ≤ 20
- ≤ 30
- ≤ 40
- ≤ 50
- ≤ 60
- ≤ 70
- ≤ 80
- ≤ 90
- ≤ 100
- ≤ 110
- ≤ 120
- ≤ 130
- ≤ 140
- ≤ 150
- ≤ 160
- ≤ 170
- ≤ 180
- ≤ 190
- ≤ 200
- Other

Color Coding Legend
Pressure Pipe: Diameter (in)

- ≤ 1.500
- ≤ 1.720
- ≤ 2.154
- ≤ 2.606
- ≤ 3.166
- ≤ 4.072
- Other



Label	Elevation (Ground) (ft)	Elevation (Invert) (ft)	Elevation (On) (ft)	Elevation (Off) (ft)	Pump Definition	Flow (Pump) (gal/min)	Head (Pump) (ft)	Hydraulic Grade (Upstream) (ft)	Hydraulic Grade (Downstream) (ft)	Pressure (Discharge) (psi)	Pressure (Suction) (psi)
PMP-73	596.15	588.45	590.05	589.05	Zoeller 815 - 2011 Report	0	0	589.27	702	49	0
PMP-38	607.47	599.77	601.37	600.37	Barnes Fixed Discharge - 2020 Report	0	0	682.47	762.17	70	36
PMP-75	609.08	601.38	602.98	601.98	Zoeller 815 - 2011 Report	0	0	602.56	702	44	1
PMP-79	610.28	602.58	604.18	603.18	Barnes Fixed Discharge - 2020 Report	0	0	603.82	702	43	1
PMP-37	614.02	606.32	607.92	606.92	Barnes Fixed Discharge - 2020 Report	0	0	685.75	762.17	67	34
PMP-78	615.76	608.06	609.66	608.66	Zoeller 815 - 2011 Report	0	0	608.96	702	41	0
PMP-76	620.87	613.17	614.77	613.77	Barnes Fixed Discharge - 2020 Report	0	0	613.9	702	38	0
PMP-80	626.05	618.35	619.95	618.95	Zoeller 815 - 2011 Report	0	0	619.85	702	36	1
PMP-84	626.48	618.78	620.38	619.38	Zoeller 815 - 2011 Report	0	0	619.87	702	36	0
PMP-77	627.79	620.09	621.69	620.69	Zoeller 815 - 2011 Report	0	0	621.07	702	35	0
PMP-71	635.46	627.76	629.36	628.36	Zoeller 815 - 2011 Report	0	0	629.32	702	32	1
PMP-82	644.41	636.71	638.31	637.31	Zoeller 815 - 2011 Report	0	0	638.01	702	28	1
PMP-85	648.68	640.98	642.58	641.58	Zoeller 815 - 2011 Report	0	0	641.84	702	26	0
PMP-74	650.76	643.06	644.66	643.66	Zoeller 815 - 2011 Report	0	0	644.53	702	26	1
PMP-72	651.68	643.98	645.58	644.58	Zoeller 815 - 2011 Report	0	0	644.97	702	25	0
PMP-81	651.74	644.04	645.64	644.64	Zoeller 815 - 2011 Report	0	0	645.58	702	25	1
PMP-87	652.88	645.18	646.78	645.78	Zoeller 815 - 2011 Report	0	0	646.66	702	25	1
PMP-46	653.56	645.86	647.46	646.46	Zoeller 815 - 2011 Report	0	0	705.52	762.17	50	26
PMP-49	655.94	648.24	649.84	648.84	Zoeller 815 - 2011 Report	0	0	706.71	762.17	49	25
PMP-89	656.48	648.78	650.38	649.38	Zoeller 815 - 2011 Report	0	0	649.97	702	23	1
PMP-86	657.62	649.92	651.52	650.52	Zoeller 815 - 2011 Report	0	0	650.58	702	23	0
PMP-41	659.01	651.31	652.91	651.91	Zoeller 815 - 2011 Report	0	0	708.24	762.17	48	25
PMP-36	663.17	655.47	657.07	656.07	Zoeller 815 - 2011 Report	0	0	710.32	762.17	46	24
PMP-65	663.41	655.71	657.31	656.31	Zoeller 815 - 2011 Report	0	0	657.1	704	21	1
PMP-39	663.85	656.15	657.75	656.75	Zoeller 815 - 2011 Report	0	0	710.66	762.17	46	24
PMP-47	664.07	656.37	657.97	656.97	Zoeller 815 - 2011 Report	0	0	710.77	762.17	46	24
PMP-40	664.11	656.41	658.01	657.01	Zoeller 815 - 2011 Report	0	0	710.79	762.17	46	24
PMP-83	669.09	661.39	662.99	661.99	Zoeller 815 - 2011 Report	0	0	662.55	702	18	1
PMP-61	670.15	662.45	664.05	663.05	Zoeller 815 - 2011 Report	0	0	665.05	692.71	13	1
PMP-19	670.29	662.59	664.19	663.19	Barnes Fixed Discharge - 2020 Report	0	0	713.88	762.17	43	22
PMP-62	670.29	662.59	664.19	663.19	Zoeller 815 - 2011 Report	0	0	663.5	704	18	0
PMP-56	670.38	662.68	664.28	663.28	Zoeller 815 - 2011 Report	0	0	663.57	706.43	19	0
PMP-64	671.16	663.46	665.06	664.06	Zoeller 815 - 2011 Report	0	0	664.77	704	18	1
PMP-70	672.23	664.53	666.13	665.13	Zoeller 815 - 2011 Report	0	0	665.45	702	16	0
PMP-90	673.69	665.99	667.59	666.59	Zoeller 815 - 2011 Report	0	0	667.56	702	16	1
PMP-63	675.14	667.44	669.04	668.04	Zoeller 815 - 2011 Report	0	0	668.9	704	16	1
PMP-34	675.56	667.86	669.46	668.46	Zoeller 815 - 2011 Report	0	0	716.52	762.17	41	21
PMP-88	675.7	668	669.6	668.6	Zoeller 815 - 2011 Report	0	0	668.68	702	15	0
PMP-43	676.95	669.25	670.85	669.85	Zoeller 815 - 2011 Report	0	0	717.21	762.17	40	21
PMP-22	677.43	669.73	671.33	670.33	Zoeller 815 - 2011 Report	0	0	670.47	762.17	40	0
PMP-48	677.71	670.01	671.61	670.61	Zoeller 815 - 2011 Report	0	0	672.47	762.17	40	1
PMP-45	678.37	670.67	672.27	671.27	Zoeller 815 - 2011 Report	0	0	717.92	762.17	40	20
PMP-67	680.36	672.66	674.26	673.26	Zoeller 815 - 2011 Report	0	0	673.72	704	14	0
PMP-55	682.85	675.15	676.75	675.75	Zoeller 815 - 2011 Report	0	0	676.19	706.43	14	0
PMP-21	683.74	676.04	677.64	676.64	Zoeller 815 - 2011 Report	0	0	676.31	762.17	37	0
PMP-68	686.22	678.52	680.12	679.12	Zoeller 815 - 2011 Report	0	0	679.29	643	-15	0
PMP-3	686.3	678.6	680.2	679.2	Barnes Fixed Discharge - 2020 Report	0	0	721.89	762.17	36	19
PMP-17	688.94	681.24	682.84	681.84	Zoeller 815 - 2011 Report	0	0	723.21	762.17	35	18
PMP-14	689.32	681.62	683.22	682.22	Zoeller 815 - 2011 Report	0	0	723.4	762.17	35	18
PMP-58	689.76	682.06	683.66	682.66	Zoeller 815 - 2011 Report	0	0	682.83	704	9	0
PMP-53	689.79	682.09	683.69	682.69	Zoeller 815 - 2011 Report	0	0	682.96	706.43	11	0
PMP-18	689.82	682.12	683.72	682.72	Zoeller 815 - 2011 Report	0	0	723.65	762.17	35	18
PMP-25	689.9	682.2	683.8	682.8	Zoeller 815 - 2011 Report	0	0	682.68	762.17	35	0
PMP-30	689.91	682.21	683.81	682.81	Zoeller 815 - 2011 Report	0	0	723.69	762.17	35	18
PMP-15	690.64	682.94	684.54	683.54	Zoeller 815 - 2011 Report	0	0	724.06	762.17	34	18
PMP-29	691.69	683.99	685.59	684.59	Zoeller 815 - 2011 Report	0	0	685.42	762.17	34	1
PMP-54	691.71	684.01	685.61	684.61	Zoeller 815 - 2011 Report	0	0	684.81	706.43	10	0
PMP-91	692.25	684.55	686.15	685.15	Zoeller 815 - 2011 Report	0	0	685.27	702	8	0
PMP-16	692.75	685.05	686.65	685.65	Zoeller 815 - 2011 Report	0	0	725.11	762.17	33	17
PMP-42	692.91	685.21	686.81	685.81	Zoeller 815 - 2011 Report	0	0	687.23	762.17	33	1
PMP-44	693.25	685.55	687.15	686.15	Zoeller 815 - 2011 Report	0	0	687.76	762.17	33	1
PMP-24	693.34	685.64	687.24	686.24	Zoeller 815 - 2011 Report	0	0	686.22	762.17	33	0
PMP-11	694.84	687.14	688.74	687.74	Zoeller 815 - 2011 Report	0	0	687.67	762.17	32	0
PMP-57	695.44	687.74	689.34	688.34	Zoeller 815 - 2011 Report	0	0	689.33	706.43	8	1
PMP-23	695.66	687.96	689.56	688.56	Zoeller 815 - 2011 Report	0	0	688.67	762.17	32	0
PMP-26	695.79	688.09	689.69	688.69	Zoeller 815 - 2011 Report	0	0	688.74	762.17	32	0
PMP-60	696.72	689.02	690.62	689.62	Zoeller 815 - 2011 Report	0	0	690.64	692.71	2	1
PMP-20	697.56	689.86	691.46	690.46	Zoeller 815 - 2011 Report	0	0	690.48	762.17	31	0
PMP-35	699.14	691.44	693.04	692.04	Zoeller 815 - 2011 Report	0	0	728.31	762.17	31	16
PMP-69	702.6	694.9	696.5	695.5	Zoeller 815 - 2011 Report	0	0	696.38	702	3	1
PMP-13	706.07	698.37	699.97	698.97	Zoeller 815 - 2011 Report	0	0	701.29	762.17	28	1
PMP-10	707.31	699.61	701.21	700.21	Barnes Fixed Discharge - 2020 Report	0	0	732.39	762.17	27	14
PMP-32	709.47	701.77	703.37	702.37	Zoeller 815 - 2011 Report	0	0	704.77	762.17	26	1
PMP-92	711.48	703.78	705.38	704.38	Zoeller 815 - 2011 Report	0	0	704.74	702	-1	0
PMP-5	712.02	704.32	705.92	704.92	Zoeller 815 - 2011 Report	0	0	704.88	762.17	25	0
PMP-4	712.04	704.34	705.94	704.94	Zoeller 815 - 2011 Report	0	0	705.16	762.17	25	0
PMP-28	712.09	704.39	705.99	704.99	Zoeller 815 - 2011 Report	0	0	705.89	762.17	25	1
PMP-66	712.15	704.45	706.05	705.05	Zoeller 815 - 2011 Report	0	0	706	704	0	1
PMP-27	712.18	704.48	706.08	705.08	Zoeller 815 - 2011 Report	0	0	705.58	762.17	25	0
PMP-59	712.92	705.22	706.82	705.82	Zoeller 815 - 2011 Report	0	0	706.38	704	-1	1
PMP-31	714.41	706.71	708.31	707.31	Zoeller 815 - 2011 Report	0	0	707.75	762.17	24	0
PMP-12	714.75	707.05	708.65	707.65	Zoeller 815 - 2011 Report	0	0	709.43	762.17	24	1
PMP-52	715.72	708.02	709.62	708.62	Zoeller 815 - 2011 Report	0	0	708.73	706.43	-1	0
PMP-50	717.88	710.18	711.78	710.78	Zoeller 815 - 2011 Report	0	0	711.69	706.43	-2	1
PMP-9	725.29	717.59	719.19	718.19	Zoeller 815 - 2011 Report	0	0	718	762.17	19	0
PMP-1	728	720.3	721.9	720.9	Zoeller 815 - 2011 Report	0	0	720.77	746.24	11	0
PMP-33	728.47	720.77	722.37	721.37	Zoeller 815 - 2011 Report	0	0	721.75	762.17	18	0
PMP-7	733.35	725.65	727.25	726.25	Zoeller 815 - 2011 Report	0	0	727.12	746.24	9	1
PMP-6	734.67	726.97	728.57	727.57	Barnes Fixed Discharge - 2020 Report	0	0	728.29	746.24	8	1
PMP-8	735.47	727.77	729.37	728.37	Zoeller 815 - 2011 Report	0	0	728.18	762.17	15	0

BCRSD SEWER GEMS
MODEL

HILLCREEK SUBDIVISION
Pressure Nodes at time 120.00 hours
Boone County Regional Sewer District
SewerGEMS Modeling
January 2026

Bartlett&West

Color Coding Legend
Pressure Pipe Diameter (in)

<= 1.500

<= 1.720

<= 2.154

<= 2.606

<= 3.166

<= 4.072

Other

Color Coding Legend
Pressure Junction: Pressure (psi)

<= -10

<= 0

<= 10

<= 20

<= 30

<= 40

<= 50

<= 60

<= 70

<= 80

<= 90

<= 100

<= 110

<= 120

<= 130

<= 140

<= 150

<= 160

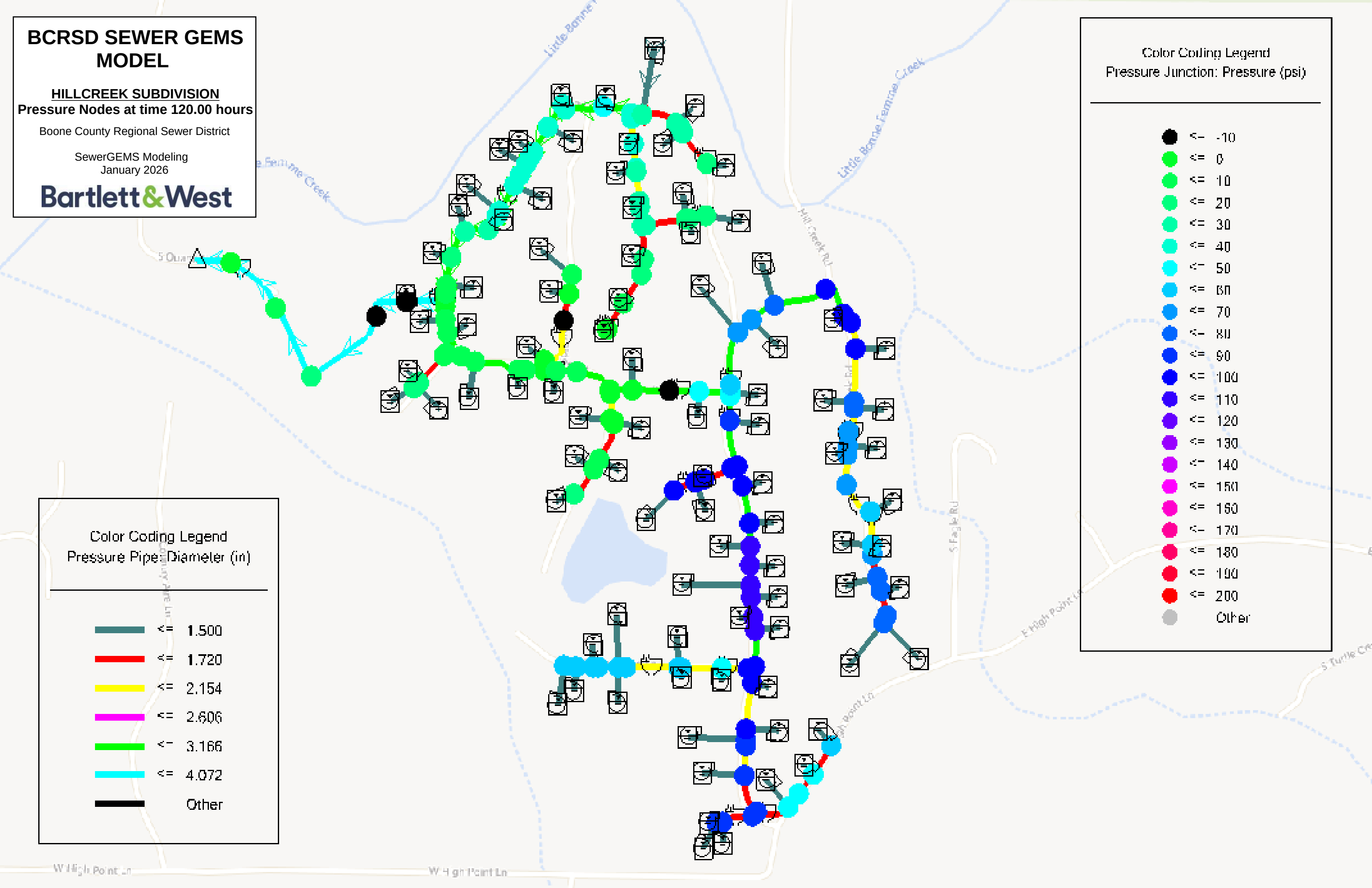
<= 170

<= 180

<= 190

<= 200

Other



Label	Elevation (Ground) (ft)	Elevation (Invert) (ft)	Elevation (On) (ft)	Elevation (Off) (ft)	Pump Definition	Flow (Pump) (gal/min)	Head (Pump) (ft)	Hydraulic Grade (Upstream) (ft)	Hydraulic Grade (Downstream) (ft)	Pressure (Discharge) (psi)	Pressure (Suction) (psi)
PMP-73	596.15	588.45	590.05	589.05	Zoeller 815 - 2011 Report	0	0	589.6	702.42	49	0
PMP-38	607.47	599.77	601.37	600.37	Barnes Fixed Discharge - 2020 Report	0	0	716.46	830.15	100	50
PMP-75	609.08	601.38	602.98	601.98	Zoeller 815 - 2011 Report	0	0	602.64	702.61	44	1
PMP-79	610.28	602.58	604.18	603.18	Barnes Fixed Discharge - 2020 Report	0	0	603.31	703.02	43	0
PMP-37	614.02	606.32	607.92	606.92	Barnes Fixed Discharge - 2020 Report	0	0	719.73	830.15	97	49
PMP-78	615.76	608.06	609.66	608.66	Zoeller 815 - 2011 Report	0	0	609.25	702.86	41	1
PMP-76	620.87	613.17	614.77	613.77	Barnes Fixed Discharge - 2020 Report	0	0	613.86	702.66	39	0
PMP-80	626.05	618.35	619.95	618.95	Zoeller 815 - 2011 Report	11.1	97.46	618.94	716.4	42	0
PMP-84	626.48	618.78	620.38	619.38	Zoeller 815 - 2011 Report	0	0	620.01	703.14	36	1
PMP-77	627.79	620.09	621.69	620.69	Zoeller 815 - 2011 Report	0	0	621.4	702.77	36	1
PMP-71	635.46	627.76	629.36	628.36	Zoeller 815 - 2011 Report	0	0	628.82	702.25	32	0
PMP-82	644.41	636.71	638.31	637.31	Zoeller 815 - 2011 Report	0	0	638.28	704.21	29	1
PMP-85	648.68	640.98	642.58	641.58	Zoeller 815 - 2011 Report	0	0	641.59	703.14	27	0
PMP-74	650.76	643.06	644.66	643.66	Zoeller 815 - 2011 Report	0	0	643.69	702.53	26	0
PMP-72	651.68	643.98	645.58	644.58	Zoeller 815 - 2011 Report	0	0	644.72	702.4	25	0
PMP-81	651.74	644.04	645.64	644.64	Zoeller 815 - 2011 Report	0	0	644.87	704.21	26	0
PMP-87	652.88	645.18	646.78	645.78	Zoeller 815 - 2011 Report	0	0	646.33	703.14	25	0
PMP-46	653.56	645.86	647.46	646.46	Zoeller 815 - 2011 Report	0	0	739.5	830.15	80	41
PMP-49	655.94	648.24	649.84	648.84	Zoeller 815 - 2011 Report	0	0	740.69	830.15	79	40
PMP-89	656.48	648.78	650.38	649.38	Zoeller 815 - 2011 Report	0	0	650.23	703.14	24	1
PMP-86	657.62	649.92	651.52	650.52	Zoeller 815 - 2011 Report	0	0	651.08	703.14	23	0
PMP-41	659.01	651.31	652.91	651.91	Zoeller 815 - 2011 Report	0	0	742.23	830.15	77	39
PMP-36	663.17	655.47	657.07	656.07	Zoeller 815 - 2011 Report	0	0	744.31	830.15	76	38
PMP-65	663.41	655.71	657.31	656.31	Zoeller 815 - 2011 Report	0	0	657.06	704	21	1
PMP-39	663.85	656.15	657.75	656.75	Zoeller 815 - 2011 Report	0	0	744.65	830.15	75	38
PMP-47	664.07	656.37	657.97	656.97	Zoeller 815 - 2011 Report	0	0	744.76	830.15	75	38
PMP-40	664.11	656.41	658.01	657.01	Zoeller 815 - 2011 Report	0	0	744.78	830.15	75	38
PMP-83	669.09	661.39	662.99	661.99	Zoeller 815 - 2011 Report	0	0	662.96	704.21	19	1
PMP-61	670.15	662.45	664.05	663.05	Zoeller 815 - 2011 Report	0	0	677.17	688.88	11	6
PMP-19	670.29	662.59	664.19	663.19	Barnes Fixed Discharge - 2020 Report	0	0	745.02	824.45	70	36
PMP-62	670.29	662.59	664.19	663.19	Zoeller 815 - 2011 Report	0	0	664.01	704	18	1
PMP-56	670.38	662.68	664.28	663.28	Zoeller 815 - 2011 Report	0	0	663.42	706.43	19	0
PMP-64	671.16	663.46	665.06	664.06	Zoeller 815 - 2011 Report	0	0	664.49	704	18	0
PMP-70	672.23	664.53	666.13	665.13	Zoeller 815 - 2011 Report	0	0	665.79	702.14	16	1
PMP-90	673.69	665.99	667.59	666.59	Zoeller 815 - 2011 Report	0	0	667.07	703.14	16	0
PMP-63	675.14	667.44	669.04	668.04	Zoeller 815 - 2011 Report	0	0	669.02	704	16	1
PMP-34	675.56	667.86	669.46	668.46	Zoeller 815 - 2011 Report	0	0	750.5	830.15	70	36
PMP-88	675.7	668	669.6	668.6	Zoeller 815 - 2011 Report	0	0	669.05	703.14	15	0
PMP-43	676.95	669.25	670.85	669.85	Zoeller 815 - 2011 Report	0	0	751.2	830.15	70	35
PMP-22	677.43	669.73	671.33	670.33	Zoeller 815 - 2011 Report	0	0	670.66	929.92	113	0
PMP-48	677.71	670.01	671.61	670.61	Zoeller 815 - 2011 Report	0	0	751.58	830.15	69	35
PMP-45	678.37	670.67	672.27	671.27	Zoeller 815 - 2011 Report	0	0	751.91	830.15	69	35
PMP-67	680.36	672.66	674.26	673.26	Zoeller 815 - 2011 Report	0	0	673.56	704	14	0
PMP-55	682.85	675.15	676.75	675.75	Zoeller 815 - 2011 Report	0	0	676.48	706.43	14	1
PMP-21	683.74	676.04	677.64	676.64	Zoeller 815 - 2011 Report	0	0	676.79	929.92	110	0
PMP-68	686.22	678.52	680.12	679.12	Zoeller 815 - 2011 Report	0	0	679.4	643.25	-15	0
PMP-3	686.3	678.6	680.2	679.2	Barnes Fixed Discharge - 2020 Report	0	0	755.3	829.01	65	33
PMP-17	688.94	681.24	682.84	681.84	Zoeller 815 - 2011 Report	0	0	754.35	824.45	62	32
PMP-14	689.32	681.62	683.22	682.22	Zoeller 815 - 2011 Report	0	0	754.54	824.45	62	32
PMP-58	689.76	682.06	683.66	682.66	Zoeller 815 - 2011 Report	0	0	682.95	704	9	0
PMP-53	689.79	682.09	683.69	682.69	Zoeller 815 - 2011 Report	0	0	683.55	706.43	11	1
PMP-18	689.82	682.12	683.72	682.72	Zoeller 815 - 2011 Report	0	0	754.79	824.45	62	31
PMP-25	689.9	682.2	683.8	682.8	Zoeller 815 - 2011 Report	0	0	683.11	929.92	107	0
PMP-30	689.91	682.21	683.81	682.81	Zoeller 815 - 2011 Report	0	0	685.21	929.92	107	1
PMP-15	690.64	682.94	684.54	683.54	Zoeller 815 - 2011 Report	0	0	755.2	824.45	61	31
PMP-29	691.69	683.99	685.59	684.59	Zoeller 815 - 2011 Report	0	0	685.05	929.92	106	0
PMP-54	691.71	684.01	685.61	684.61	Zoeller 815 - 2011 Report	0	0	684.77	706.43	10	0
PMP-91	692.25	684.55	686.15	685.15	Zoeller 815 - 2011 Report	0	0	686	703.14	8	1
PMP-16	692.75	685.05	686.65	685.65	Zoeller 815 - 2011 Report	0	0	756.25	824.45	60	31
PMP-42	692.91	685.21	686.81	685.81	Zoeller 815 - 2011 Report	0	0	688.21	830.15	63	1
PMP-44	693.25	685.55	687.15	686.15	Zoeller 815 - 2011 Report	0	0	688.55	830.15	63	1
PMP-24	693.34	685.64	687.24	686.24	Zoeller 815 - 2011 Report	0	0	686.6	929.92	106	0
PMP-11	694.84	687.14	688.74	687.74	Zoeller 815 - 2011 Report	0	0	688.09	929.92	105	0
PMP-57	695.44	687.74	689.34	688.34	Zoeller 815 - 2011 Report	0	0	689.24	706.43	8	1
PMP-23	695.66	687.96	689.56	688.56	Zoeller 815 - 2011 Report	0	0	689.21	929.92	105	1
PMP-26	695.79	688.09	689.69	688.69	Zoeller 815 - 2011 Report	0	0	689.17	929.92	105	0
PMP-60	696.72	689.02	690.62	689.62	Zoeller 815 - 2011 Report	0	0	692.02	688.88	0	1
PMP-20	697.56	689.86	691.46	690.46	Zoeller 815 - 2011 Report	0	0	691.03	929.92	104	1
PMP-35	699.14	691.44	693.04	692.04	Zoeller 815 - 2011 Report	0	0	762.29	830.15	60	31
PMP-69	702.6	694.9	696.5	695.5	Zoeller 815 - 2011 Report	0	0	696.05	702.04	3	0
PMP-13	706.07	698.37	699.97	698.97	Zoeller 815 - 2011 Report	0	0	701.24	824.45	55	1
PMP-10	707.31	699.61	701.21	700.21	Barnes Fixed Discharge - 2020 Report	0	200	729.92	929.92	100	13
PMP-32	709.47	701.77	703.37	702.37	Zoeller 815 - 2011 Report	0	0	767.46	830.15	56	28
PMP-92	711.48	703.78	705.38	704.38	Zoeller 815 - 2011 Report	0	0	705.03	708	2	1
PMP-5	712.02	704.32	705.92	704.92	Zoeller 815 - 2011 Report	0	0	705.63	829.01	54	1
PMP-4	712.04	704.34	705.94	704.94	Zoeller 815 - 2011 Report	0	0	706.97	829.01	54	1
PMP-28	712.09	704.39	705.99	704.99	Zoeller 815 - 2011 Report	0	0	705.94	929.92	98	1
PMP-66	712.15	704.45	706.05	705.05	Zoeller 815 - 2011 Report	0	0	705.52	704	0	0
PMP-27	712.18	704.48	706.08	705.08	Zoeller 815 - 2011 Report	0	0	706.04	929.92	98	1
PMP-59	712.92	705.22	706.82	705.82	Zoeller 815 - 2011 Report	0	0	706.64	704	-1	1
PMP-31	714.41	706.71	708.31	707.31	Zoeller 815 - 2011 Report	0	0	708.23	929.92	97	1
PMP-12	714.75	707.05	708.65	707.65	Zoeller 815 - 2011 Report	0	0	709.74	824.45	51	1
PMP-52	715.72	708.02	709.62	708.62	Zoeller 815 - 2011 Report	0	0	708.99	706.43	-1	0
PMP-50	717.88	710.18	711.78	710.78	Zoeller 815 - 2011 Report	0	0	711.37	706.43	-2	1
PMP-9	725.29	717.59	719.19	718.19	Zoeller 815 - 2011 Report	0	0	718.85	929.92	92	1
PMP-1	728	720.3	721.9	720.9	Zoeller 815 - 2011 Report	0	0	721.69	929.92	91	1
PMP-33	728.47	720.77	722.37	721.37	Zoeller 815 - 2011 Report	0	0	723.08	830.15	47	1
PMP-7	733.35	725.65	727.25	726.25	Zoeller 815 - 2011 Report	0	0	726.53	929.92	88	0
PMP-6	734.67	726.97	728.57	727.57	Barnes Fixed Discharge - 2020 Report	0.02	199.95	729.97	929.92	88	1
PMP-8	735.47	727.77	729.37	728.37	Zoeller 815 - 2011 Report	0	0	729	929.92	87	1