

TRACKING WATER LOSS WHEN FLUSHING HYDRANTS

By Russ Topp, Circuit Rider

In the last Good Water News magazine I wrote an article about hydrant flushing and hydrant color coding. It seems that article sparked some interest. Several operators have mentioned it; and there have been several operators wanting to use our fire flow gauges. I have recently discovered another way to determine water loss when flushing water mains.

Recently I was called to a small water system in the northern part of the state to help directional flow some water mains. The area's State Field Rep, Rich Koenig, was also there to help. This system purchases their water and is very consciences of water loss, so they wanted to know how much water would be used to flush. Rich had a table to determine the amount of water we were flushing per minute. I conveniently lost it so I could share it with you (just kidding). Rich is always willing to share information to help operators. All you need is a fire hydrant cap that has been drilled and tapped to accept a pressure gauge. You then screw the fire cap with the pressure gauge onto



one 2 ½" nozzle of the hydrant. Then open and flush the other 2 ½" nozzle and read the pressure gauge. Refer to the chart to determine the gallons per minute. Time how many minutes you flush the hydrant and multiply the two. You will find this chart at the end of this article.

Earlier I mentioned directional flushing. This is a method of flushing water mains in which you manipulate the direction of the water flow by the use of water main valves. We were able to close a couple different valves to force water down a particular water main. This is important when trying to flush water past a particular residence or business that has an aesthetic water quality problem. The problem with simply opening a fire hydrant in a looped water system to flush is you never know from which way the water is flowing. You may or may not be flushing the water main you want. The water will typically come from the way of least resistance.

If you want some help directionally flushing your distribution system give us a call. With the help of this chart, you will also be able to track how much water you used to flush your system.

OUTLET PRESSURE (PSI)	GALLONS PER MINUTE
1	170
2	240
3	290
4	340
5	380
6	410
7	440
8	480
9	500
10	530
11	560
12	580
13	610
14	630
15	650
16	670
17	690
18	710
19	730
20	750
22	790
24	820
26	860
28	890
30	920
32	950
34	980
36	1010
38	1040
40	1060

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