Thompson, Luke

From:	Caprara, Craig
Sent:	Friday, April 2, 2021 7:22 AM
То:	Brandon E. Dewey; Steve Kruse
Cc:	Adams, Shanna; Revis, Coralynn; Thompson, Luke
Subject:	RE: Fire Flow Requirements

Thanks Brandon!!

The other information needs we discussed include:

- Listing of meters by size.
 - Water use by meter (maybe for the last year).
- Production data showing daily flow pattern for a minimum day, average day, and max day condition. We are trying to determine max day, peak Hour peaking factors for the system.
- If you get new fire flow test data in the near future please pass it on.
- Max day, and max month flow data from the WWTP from the last few years.

Thanks.

Craig T. Caprara, P.E. D 406.532.2205 M 406.529.1254

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From: Brandon E. Dewey <brandon@townofstevensville.com>
Sent: Thursday, April 1, 2021 4:04 PM
To: Caprara, Craig <Craig.Caprara@hdrinc.com>; Steve Kruse <steve@townofstevensville.com>
Cc: Jeff Motley <jmotley@stevifire.com>; Lee Henderson <lhenderson@stevifire.com>; Colette Taylor
<colette@townofstevensville.com>
Subject: Fire Flow Requirements

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Craig & Steve,

You asked today about fire flow requirements in Town as you further evaluate our water storage needs. Through ISO's mitigation reports the following are our 6 highest fire flow requirements:

- 1. 115 W 3rd Street (Downtown) 3,500 gpm
- 2. 410 Church Street (Downtown) 3,500 gpm
- 3. 4071 Eastside Hwy (North Industrial Dist.) 2,500 gpm
- 4. 300 Park Avenue (School) 2,500 gpm (this one could change as sprinkers are expanded on campus this year)
- 5. 205-209 Main Street (Downtown) 1,750 gpm
- 6. 424 Main Street (Downtown) 1,750 gpm

ISO uses the Fire Suppression Rating Schedule (FSRS) to define the criteria used in the evaluation of a community's fire defenses. Within the FSRS, a section titled "Needed Fire Flow" outlines the methodology for determining the amount of

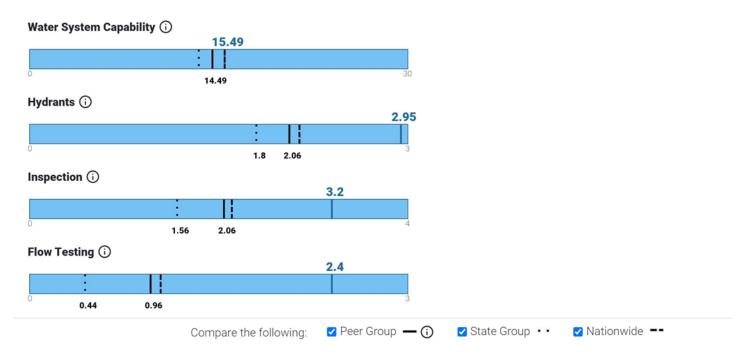
water necessary for providing fire protection at selected locations throughout the community. ISO uses the needed fire flows to:

- Determine the community's "Basic Fire Flow (BFF)." The Basic Fire Flow is the fifth highest Needed Fire Flow (NFF) in the community. ISO uses the BFF to determine the number of apparatus, the size of apparatus fire pumps, and special fire-fighting equipment needed in the community. For the Town of Stevensville, this number is 1,750 gpm.
- 2. Determine the adequacy of the water supply and delivery system. ISO calculates the NFF for selected properties and then determines the water flow capabilities at these sites. ISO then calculates a ratio considering the need (NFF) and the availability (water flow capability). ISO uses that ratio in calculating the credit points identified in the FSRS.

See the details of our last evaluation here:

Points: 24 out of 40

To simulate a change in points for any sub-category, click on an individual chart.



Ultimately, I believe the Town needs to answer the question of whether the investment is reasonable to achieve 3,500 gpm. Any future development that would ordinarily require this kind of flow would require sprinklers and would not count towards our NFF.

Let me know how I can help further.

Best,

Brandon E. Dewey, Mayor Town of Stevensville 406.777.5271 x105 <u>Brandon@townofstevensville.com</u>



"Committed to Community, Dedicated to Progress"

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