

TO: Mr. Eric Campbell, City Manager
FROM: Mike Collins, Public Utilities
DATE: July 16, 2018
RE: Water and Sewer Ordinance Revisions

Summary:

Harrisonburg Public Utilities (HPU) proposes to amend certain sections of the City Code of Ordinance for the purposes of:

- 1) Preventing future installation of sewer septic tank systems and encouraging the abandonment of existing septic tank systems; and
- 2) Establishing a foundation for enforcement for the abatement of private source infiltration and inflow into the public sewer system.

Background:

- 1) Septic tank ownership: A typical residential septic leach field system typically contributes to the environment an annual loading of 25 pounds of nitrogen and 10 pounds of phosphorous. In comparison, a typical residential discharge that was treated by HRRSA WWTP in 2017 provided an annual loading of 0.7 pounds of nitrogen and 0.05 pounds of phosphorous to the environment. The typical cost per pound to remove nitrogen and phosphorous at the HRRSA WWTP was \$5.00 and \$2.70, respectively. The annual added cost to improve septic level treatment to the environmental target level would be \$148.37 (\$121.5 for nitrogen removal and \$26.87 for phosphorous removal)
- 2) On prior occasion, I have presented to City Council the most recent update of the City of Harrisonburg "Sanitary Sewer Management Plan". As defined within, Abatement of infiltration & inflow (I&I) will be a significant future undertaking to manage treatment and interceptor capacities at HRRSA and interceptor capacities within the Harrisonburg sewer collection network. Industry evaluation for source of I&I have provided a rule of thumb that 55% of I&I has its source in the private customer systems.

Key Issues:

- 1) Proposed revisions to City Ordinance 7-3 will support HPU and Harrisonburg Public Works (HPW) collaborative efforts to discourage septic tank ownership and encourage connection to the City public sewer system through a four applications approach:
 - ❖ Overcome the stigma of "out of sight out of mind septic tank ownership" by requiring septic tank owners to inspect and maintenance tanks once every five years;
 - ❖ Set the foundation such that future sewer rates can adopt a base charge applied to septic tank owners to address the cost difference in the level of nitrogen and phosphorous discharge to the environment.

- ❖ To prohibit future septic tanks; also provide financial assistance for the removal of existing septic tanks by waiving the cost of sewer connection fees to owners of existing systems.
 - ❖ Utilize storm water fees to assist with plumbing costs for existing septic system owners to adjust private building sewers to make the connection between the building drain and the public sewer.
- 2) Proposed revisions to City Ordinance 7-3-68 will provide support for a future program that will extend I&I abatement beyond the public system into the private systems. Specific sources of I&I from the private systems include sump pumps, roof drains, floor drains, surface water connections, cleanouts, foundation drains, and poor building sewer structures. This ordinance was modelled from a policy used successfully by a municipality in Minnesota.

Environmental Impact:

- 1) There are environmental benefits to the encouragement of nitrogen and phosphorus reduction by adopting the proposed ordinance.
- 2) There are environment benefits with reduced sanitary sewer overflows by adopting the proposed I&I enforcement ordinance.

Fiscal Impact:

- 1) The septic tank ordinance will only affect owners who are currently failing to properly maintain their existing septic tanks. The future base rate environmental fee could cost all septic tank owners approximately \$150.00 per year
- 2) Violations of I&I ordinances could cost up to \$50.00 per month.

Prior Actions:

None

Alternatives:

Elect not to amend ordinances

Community Engagement:

Open for discussion at City Council

Recommendation:

Approval of recommended fate schedule but with opportunity for City Council to consider alternatives

Attachments:

- 1) Power point presentation

Review:

The initiating Department Director will place in Legistar, in sequence of transmittal, the names of each department that must initial their review in order for this item to be placed on the City Council agenda. The completion of review only addresses the readiness of the issue for Council consideration. This does not address the recommendation for approval or denial of the issue.