



Sewer Collection System Master Plan
Update

July 27, 2026

Sewer Collection System Master Plan

Update

- Project will update our existing 2019 Master Plan
 - 2019 plan available at:
 - www.hendersonvillenc.gov/water-sewer/about-us/utility-planning
- 2026 Master Plan Update Includes 4 tasks:
 1. Sewer Collection System Data & Infrastructure Review
 2. Hydraulic Model Development, Calibration, and Evaluations
 3. Risk Prioritization and Asset Management Planning
 4. Capital Improvement Plan Development and Master Plan Documentation

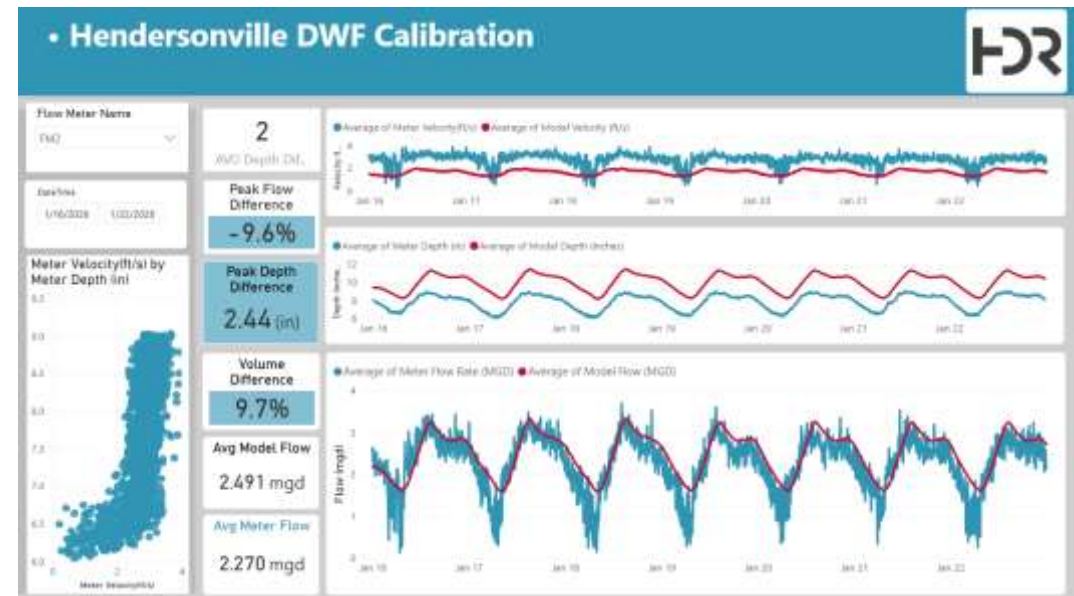


Sewer Collection System Master Plan

Update

- Latest Progress
 - Data collection for gravity sewers and force mains complete
 - Data collection for pump stations in progress
 - 1:1 digital sewer model in development
 - Risk Prioritization framework has been established*
 - Future anticipated 2045 Service Area in development*

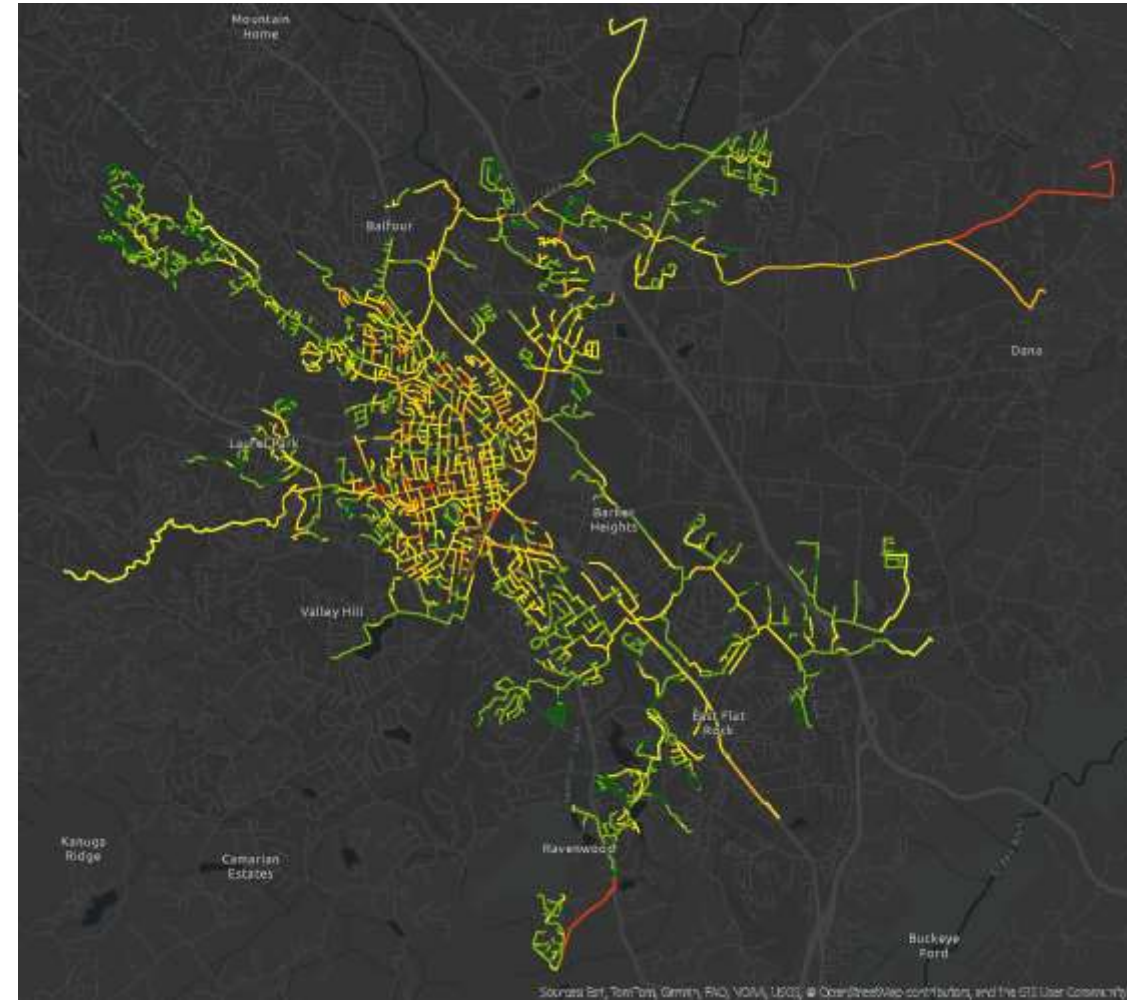
**Additional info in upcoming slides*



Sewer Collection System Master Plan

Update

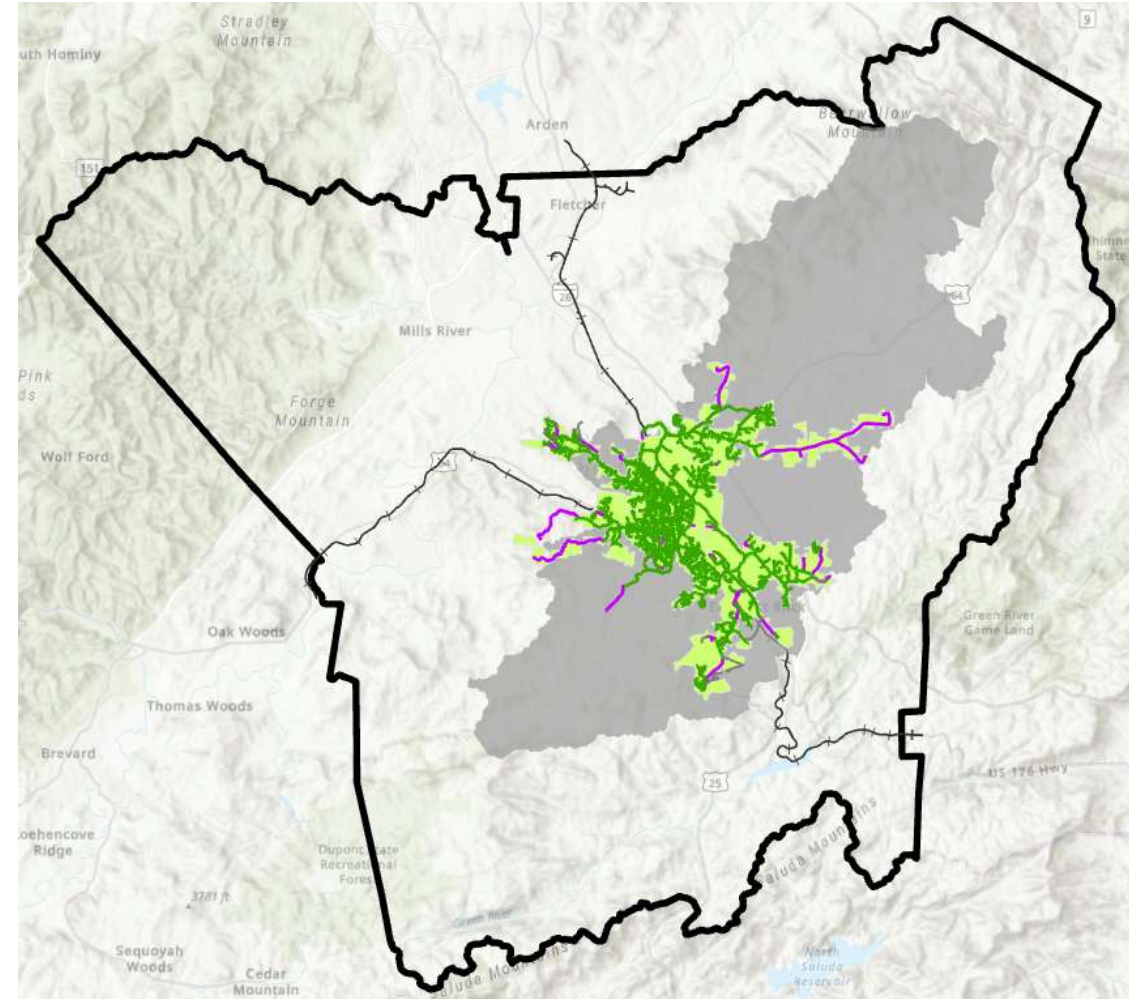
- Risk Framework
 - Lines given a Risk score of **1** to **5**
 - $[Risk] = [Likelihood\ of\ Failure] * 65\% + [Consequence\ of\ Failure] * 35\%$
 - Likelihood of Failure established by known information about asset
 - Consequence of Failure established by anticipated impacts to customers, environment, etc.



Sewer Collection System Master Plan

Update

- Service Area
 - Sewer infrastructure costs too much to not plan for tomorrow's needs today.
 - Ultimate buildout of sewer system is dependent on watersheds upstream of Wastewater Treatment Facility.
- **Realistically, what areas will need public sewer in the next 20 years?**



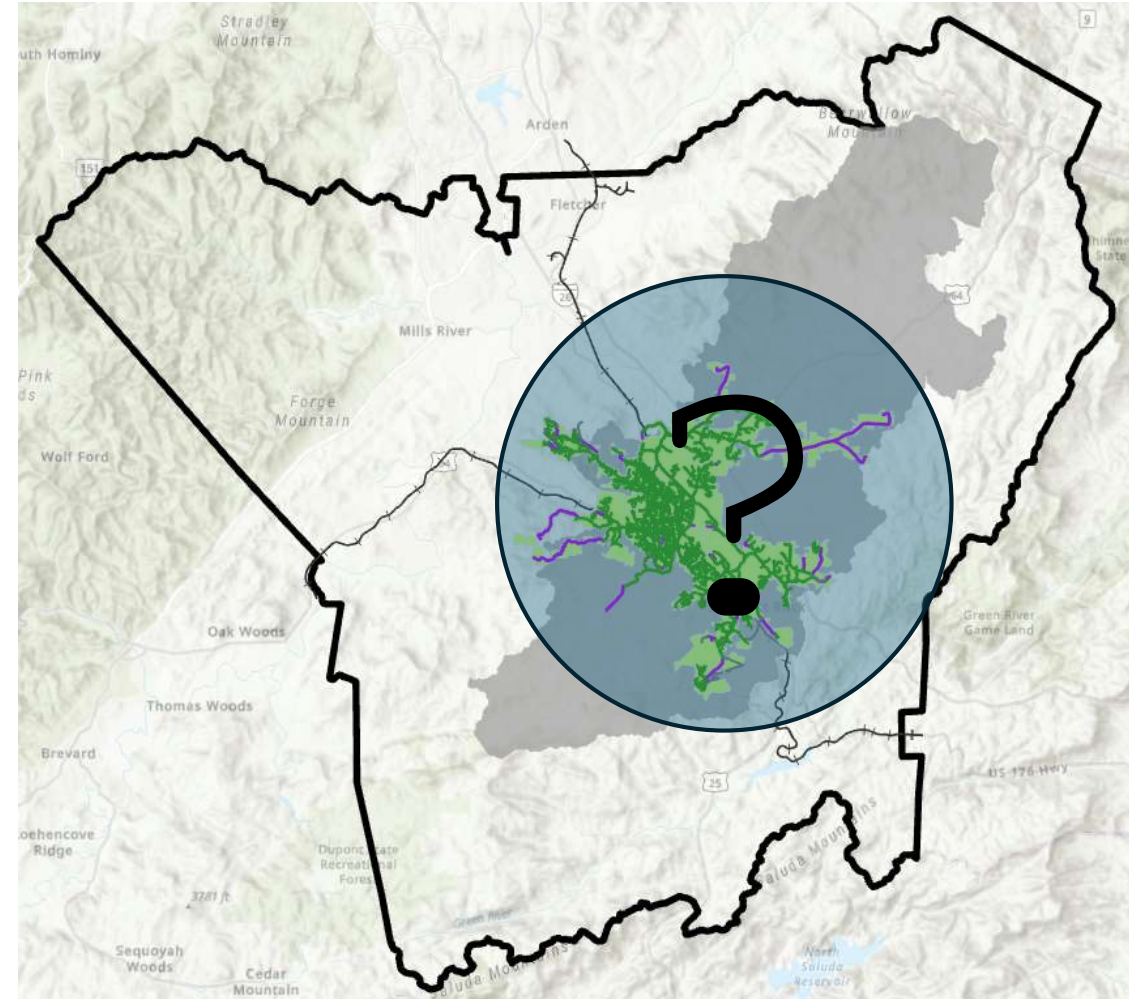
Update

- [illegible]

Sewer Collection System Master Plan

Update

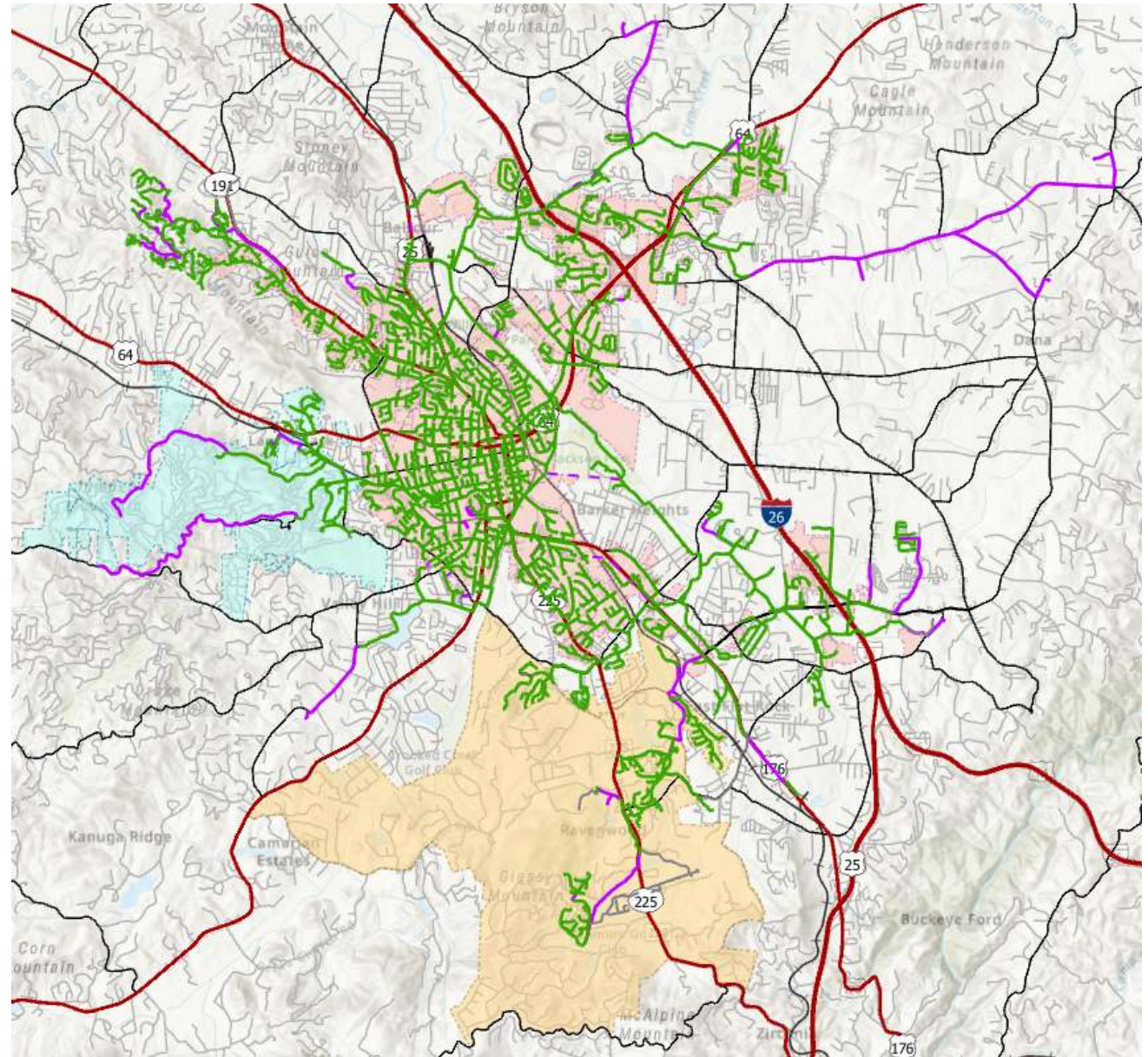
- 2045 Service Area
 - Stakeholder feedback is key to understanding future needs, and to allow us to sustainably serve our community.
- Project is seeking stakeholder engagement to establish a 2045 service area boundary.
 - **Initial feedback can be gathered today**
 - **Formal Collaborative Workshop also scheduled for Tuesday August 4th at 11:00 AM at City Hall**
 - All Advisory Board members are welcome to attend



Sewer Collection System Master Plan

Update

Questions and
initial
feedback?



Sewer Collection System Master Plan

Update

- Considerations for 2045 Service Area
 - Managing Existing Service Area
 - Existing Capacity Restrictions - Reduce SSOs / Accept Future Growth
 - Replace Aging Infrastructure / Pipes
 - Abandon Existing Pump Stations - Reduction in Operational Costs
 - Possible New Service Areas
 - New Industrial Development - Economic Development
 - New Residential Development - Where is growth going to happen? When?
 - Septic Tank Conversions - Public Health

