CITY OF HENDERSONVILLE
BUSINESS ADVISORY COMMITTEE

Operations Center - Assembly Room | 305 Williams St. | Hendersonville NC 28792
Monday, July 10, 2023 – 11:30 AM

MINUTES

Present: Ken Gordon Vice Chair, Jay Egolf, Rebecca Waggoner, Cam Boyd, Brittany Brady, John Stevens, Chris Cormier, Sarah Cosgrove, Adam Justus, Council Member Jennifer Hensley

Staff Present: City Clerk Jill Murray, Communications Manager Allison Justus, Budget Manager Adam Murr

1. CALL TO ORDER

Vice Chairman Ken Gordon called the meeting to order at 11:30 a.m. and welcomed new members, Sarah Cosgrove, Chris Cormier and Adam Justus.

2. APPROVAL OF AGENDA

Ken Gordon mentioned that he would like to add Appointment of Chair & Vice Chair as item D under New Business. John Stevens moved, seconded by Brittany Brady, to approve the agenda as amended. Motion carried unanimously.

3. APPROVAL OF MINUTES

Cam Boyed moved, seconded by Brittany Brady, to approve the minutes as presented. Motion carried unanimously.

4. OLD BUSINESS - None

5. NEW BUSINESS

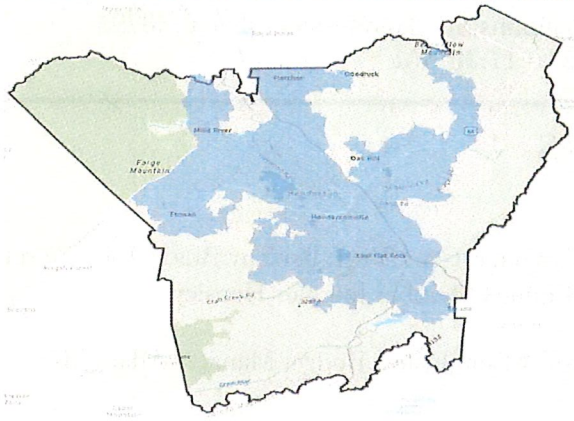
A. Approval of Amended Schedule of Regular Meetings, *John Connet, City Manager*

Due to construction at the City Operations Center, we had to move our meetings to City Hall. As a result, we must adopt an amended schedule of regular meetings. Fair Waggoner moved, seconded by Brittany Brady to approve the amended schedule of regular meetings. Motion carried.

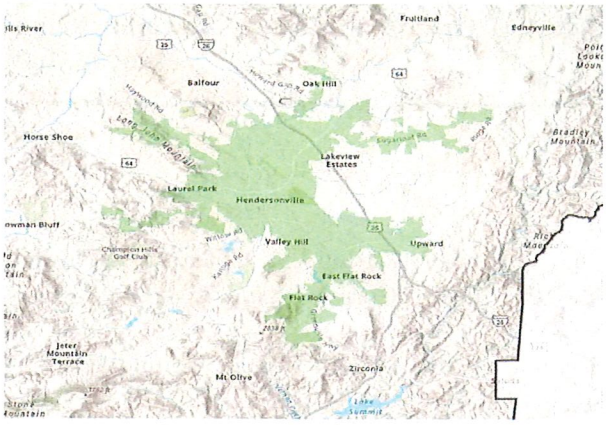
B. Update on Water and Sewer Capital Projects – *Adam Steurer*

Adam Steurer gave an update on water and sewer capital projects and showed a PowerPoint presentation.

Utility Overview



Water Service Area

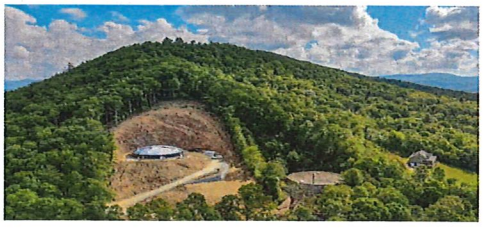


Sewer Service Area

Utility Overview

Northside (Fletcher) Water Improvements

- New pump station
- New water tank (1.1-million gal)
- Address low pressures
- Improve fire flow
- Completed 2022
- $5.3M

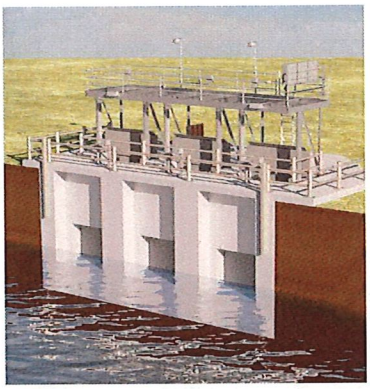


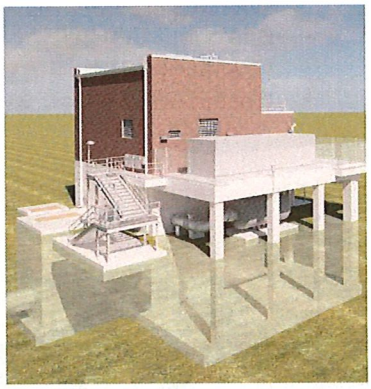
WWTF – Replacements/Repair Projects

- Ultraviolet (UV) Improvements
  - Replaces existing equipment
  - Adds capacity
  - Under construction
  - $3.9M
- Aeration Basin No. 2 Repairs and Rehabilitation
  - Repairs bowing basin wall
  - Construction beginning summer 2023
  - $1.6M
- Both projects funded mostly through a $5.0 M grant allocation

French Broad River Intake and Pumping Station

- Additional water source
- 15 mgd capacity and expandable to 21 mgd
- Under Construction – Completion Summer 2024
- $23.5M





French Broad River Intake and Pumping Station

Water Treatment Facility Expansion

- Installation of additional filter
- Additional 3 mgd capacity 12 mgd to 15 mgd
- Status: Design/Permitting
- Construction 2024
- Estimated Cost: $2.1M

NCDOT Hwy 191 Widening

- Installation of 36" and 30" water pipe along NC-191
- Status: Design
- Construction: Summer ~2024
- Estimated Cost: $12.8M

Mud Creek Sewer Interceptor Replacement

- Undersized for current and future flows
- Status: Design/Permitting
- Construction 2024
- Estimated Cost $9.3M

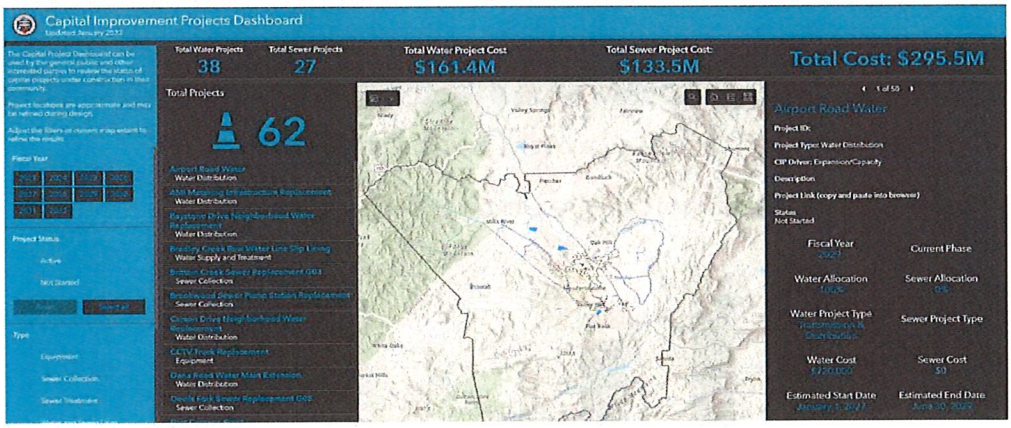
WWTF – Biosolids Thermal Dryer

- Reduce solids management costs
- Produce high-quality biosolid
- Status: Design/Permitting
- Construction 2024/2025
- Estimated Cost $12.5M

WWTF Headworks and Flow Equalization

- Expands Headworks to 6 mgd
- Status: evaluation/pre-development
- Construction: ~2026
- Estimated Cost: $29.5M

Capital Projects Dashboard



For More Information and Projects:

Water & Sewer CIP Dashboard

C. Water & Sewer System Development Fees – *Adam Murr, Budget Manager*

Through the FY24 Budget Process, Hendersonville City Council directed Staff to further pursue information on System Development Fees (SDFs). SDFs are one-time charges paid by a new customer to recover a portion or all the cost of constructing water and sewer system capacity. The fees can also be assessed for existing customers requiring increased system capacity. In general, SDFs are based upon the costs of current and/or future utility infrastructure including, but not limited to, water supply facilities, treatment facilities, effluent disposal facilities, and transmission mains. SDFs serve as the mechanism by which growth can "pay its own way" and minimize the extent to which existing customers must bear the cost of facilities that will be used to serve new customers. Currently, the City does not assess SDFs and therefore does not recover the cost of providing water and sewer capacity from new connections to the utility systems. Staff are continuing to work with a consulting firm, Stantec, to explore various SDF scenarios and impacts. Ahead of presentations in October with Stantec, Staff would like to receive additional feedback from the Business Advisory Committee, Water and Sewer Advisory Committee, and City Council. Adam Steurer presented a PowerPoint presentation to explain System Development Fees further.

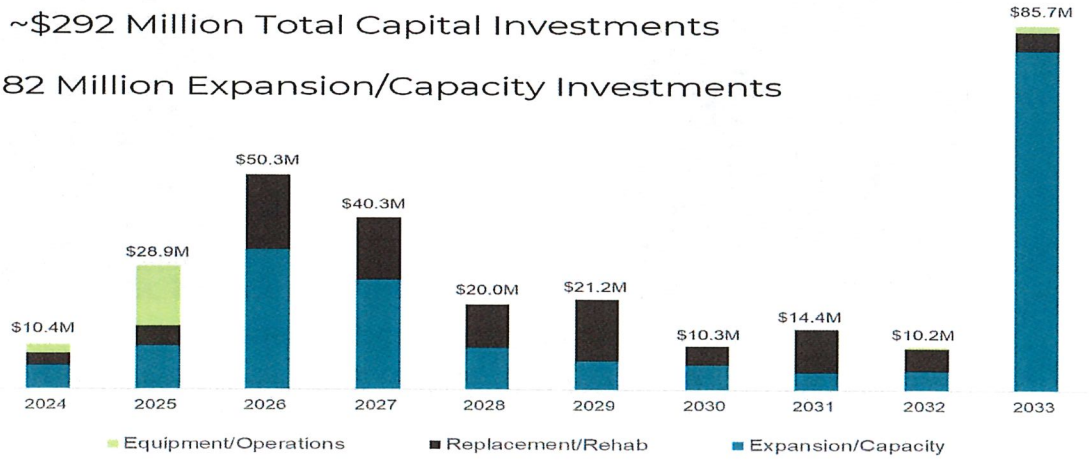
System Development Fees

- Fees charged for new connections joining the water and wastewater system and connections requiring additional system capacity
- Intended to recover the cost of constructing water and wastewater capacity, "growth pays for growth"
- Fees are applied based on units of service (representing potential demand on utility system / large user vs. small user)

Capital Improvement Plan FY2023

~$292 Million Total Capital Investments

~$182 Million Expansion/Capacity Investments



SDF Background

- Hendersonville assessed water/sewer SDFs until September 2016
- 2016 Town of Carthage, NC lawsuit
  - Challenged authority to charge certain water/sewer fees including SDFs
- Fees are legislated in North Carolina
  - Public Water and Sewer System Development Fee Act (NC General Statutes - Chapter 162A Article 8) approved July 2017

Considerations

- SDFs allow the utility to recover at least a portion of cost of constructing system infrastructure
- Lack of SDFs places the full cost of infrastructure on user rates
- SDFs have a potential impact on development but are very common in North Carolina
  - 81 NC utilities charge SDFs (2018/2019)
- Requirements and limitations on the use of SDFs given legislation
  - Separate tracking of revenues from SDFs
  - Limitations on the use of proceeds depending on the approach

Assessment Methodologies

Methodology	Description	Appropriate For
Buy-In Method	Fees are based on cost of constructing existing utility system.	System with ample existing capacity to sell.
Incremental Cost Method	Fees are based on planned growth-related capital improvements	System with limited or no existing capacity to sell.
Combined Method	Fees are based on cost of existing system and planned capital improvements	System with existing capacity to sell and with planning growth-related capital projects.

Recommend the use of the combined method for water and sewer SDFs

Combined Method Calculation

$$\text{System Development Fee} = \frac{\text{Value of System} - \text{Credit}}{\text{System Capacity}}$$

1. **Value of Utility System**
   - Depreciated value of current assets in place, escalated to current replacement cost
   - Plus: The value of future planned capital projects that will add capacity to the system (10-Year Capital Plan)
2. **Credit**
   - Outstanding principal on existing utility debt
   - NPV of principal on future debt over planning period (must equal at least 25% of expansion capital projects, if not additional credit required.
   - Donated/Contributed and non-core system assets
3. **System Capacity**
   - Total capacity in the utility system measured in units of services (Equivalent Residential Units or ERUs) with the existing system and expansion of the system.

Units of Service

Water System (based on historical demands)

Type	Average Consumption (gpd)
Single Family (1 equivalent residential unit - ERU)	136
Multi-Family	85
Mobile / Manufactured Home	133

Water System ERU Calculation	
Daily Usage per ERU (gpd)	136
Max Day Peaking Factor	1.64
Peak Day Usage per ERU (gpd)	**223**
Multi-Family Units (ERUs per Unit)	0.63

Sewer System (NC Planning Requirements)

Sewer System ERU Calculation	
State Standard Flow Rate (gpd) per Bedroom	120
Planning # of Bedrooms	2
Sewer Use per ERU (gpd)	**240**
Multi-Family Units (ERUs per Unit)	0.63

Water SDF Calculation

	Source / Treatment	Transmission / Distribution	Total
Replacement Value of Existing Depreciated Assets	$34,607,998	$51,705,500	$86,313,497
Expansion Capital Projects	63,485,535	45,005,000	108,490,535
Total Value	**$98,093,533**	**$96,710,500**	**$194,804,032**
Less Credits			
Outstanding Debt Principal	($7,240,635)	($10,817,749)	($18,058,384)
Donated and Non-Core Assets	(1,219,302)	(8,960,275)	(10,179,577)
Revenue Credit (NPV of future debt principal over period)	(26,613,455)	(18,866,322)	(45,479,777)
Net System Value	**$63,020,141**	**$58,066,154**	**$121,086,295**
System Capacity - Million Gallons per Day*	18	18	
Level of Service per ERU (gallons per day)	223	223	
Equivalent Residential Units (ERU)	**80,703**	**80,703**	
Water System Development Fee Per ERU	**$781**	**$720**	**$1,501**

**Includes 6 MGD WTP plant expansion*

Sewer SDF Calculation

	Treatment	Conveyance / Collection	Total
Replacement Value of Existing Depreciated Assets	$28,145,176	$35,802,595	$63,947,771
Expansion Capital Projects	57,750,769	16,212,000	73,962,769
Total Value	**$85,895,945**	**$52,014,595**	**$137,910,540**
Less Credits			
Outstanding Debt Principal	($6,446,996)	($8,201,021)	($14,648,017
Donated and Non-Core Assets	(63,282)	(2,629,945)	(2,693,227)
Revenue Credit (NPV of future debt principal over period)	(24,209,412)	(6,796,152)	(31,005,564)
Net System Value	**$55,176,255**	**$34,387,477**	**$89,563,732**
System Capacity - Million Gallons per Day*	7.8	7.8	
Level of Service per ERU (gallons per day)	240	240	
Equivalent Residential Units (ERU)	**28,139**	**28,139**	
Wastewater System Development Fee Per ERU	**$1,698**	**$1,058**	**$2,756**

**Includes 3 MGD WWTP plant expansion*

Assessment of System Development Fees

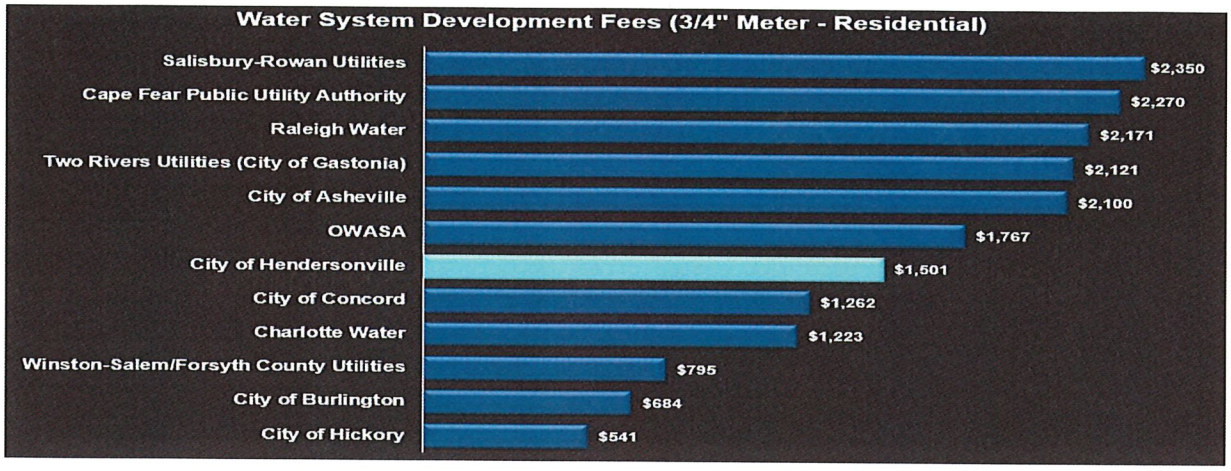
- SDFs must be applied based on units of service (represents potential demand)
- SDFs can be scaled by meter size based on hydraulic capacity of meter
- Recommend the use of American Water Works Association (AWWA) meter equivalents
- Consider master-metered Multi-family per unit

Meter size	Equivalent Residential Units (ERU)
3/4"	1.00
1"	1.67
1 ½"	3.33
2"	5.33
3"	11.67
4"	21.00
6"	43.33
8"	93.33
Multi-Family (per unit)	0.63

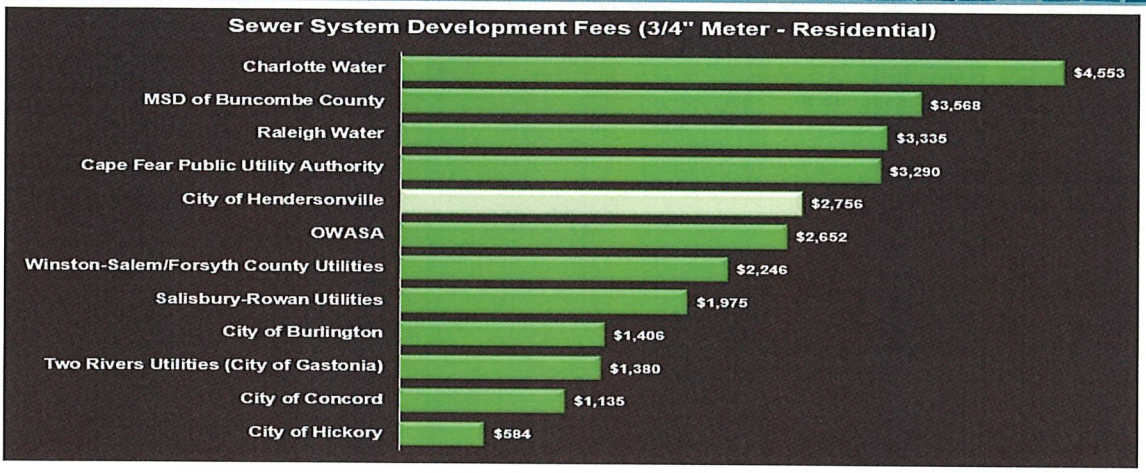
Calculated System Development Fees

Meter size	Calculated Water SDF	Current No. of Water Meters	Calculated Wastewater SDF	Current No. of Wastewater Customers	Combined SDF
3/4"	$1,501	29,564	$2,756	9,767	$4,257
1"	$2,502	622	$4,593	297	$7,095
1 ½"	$5,003	317	$9,187	177	$14,190
2"	$8,005	142	$14,699	79	$22,704
3"	$17,512	24	$32,153	12	$49,665
4"	$31,521	11	$57,876	4	$89,397
6"	$65,043	11	$119,427	2	$184,470
8"	$140,093	0	$257,227	0	$397,320
Multi-Family (per Unit)	$938		$1,736		$2,674

Water SDF Comparison



Sewer SDF Comparison



MSD of Buncombe County: - Multi-family per unit $2,390 (67% of single family)
- Affordable Housing per unit $844

Residential SDFs

Meter Size Approach

Example	Master Meter Size	Water SDF	Sewer SDF	Combined SDF
Apartment A	3"	$17,512	$32,153	$49,665
Apartment B	3"	$17,512	$32,153	$49,665
Apartment C	4"	$31,521	$57,876	$89,397

Dwelling Unit Approach

Example	Number of Dwelling Units	Water SDF	Sewer SDF	Combined SDF
Apartment A	208	$195,130	$361,146	$556,276
Apartment B	324	$303,953	$562,555	$866,507
Apartment C	340	$318,963	$590,335	$909,298

Single-Family Development

Example	Single-Family Units	Water SDF	Sewer SDF	Combined SDF
SF Subdivision A	208	$312,208	$573,248	$885,456
SF Subdivision B	324	$486,324	$892,944	$1,379,268
SF Subdivision C	340	$510,340	$937,040	$1,447,380

Policy Considerations

1. Level of Fee Adoption
   - Study has identified maximum allowable SDF
   - Option to adopt an SDF that is less than the calculated amounts

2. Multi-Family Residential Approach
   - Use of meter size or dwelling unit approach

3. Affordable Housing
   - Reduced fee for affordable housing

SDF- Key Takeaways

- Fees assessed to new connections or connections requiring additional capacity.
- Fees recovers costs necessary for system expansion and additional capacity - "Growth pays for Growth"
- Lack of SDFs places full cost of infrastructure on user rates
- Reduction in future rate increase possible
- Fees assessed equitably based on units of service/demands

D. Appointment of Chair and Vice Chair – *Ken Gordon, Vice Chair*

Fair Waggoner moved, seconded by Cam Boyd to appoint Ken Gordon as Chair of the Business Advisory Committee.

Jay Egolf moved, seconded by Brittany Brady to appoint Fair Waggoner as the Vice Chair of the Business Advisory Committee.

John Stevens moved, seconded by Brittany Brady to approve both nominations. Motion carried unanimously.

6. OTHER BUSINESS – None

7. ADJOURNMENT

Ken Gordon moved, seconded by Jay Egolf to adjourn. There being no further discussion the meeting was adjourned at 12:24 p.m. upon unanimous assent of the Committee.

Ken Gordon, Vice, Chair

ATTEST:

Jill Murray, City Clerk