



CITY OF HENDERSONVILLE
WATER SEWER ADVISORY COUNCIL
Water Treatment Facility | 4139 Haywood Rd. | Mills River, NC 28759
Monday, July 22, 2024 – 4:00 PM

AGENDA

1. CALL TO ORDER

2. APPROVAL OF AGENDA

A. Approval of Agenda – *Dr. Jennifer Hensley, Chairperson*

3. APPROVAL OF MINUTES

A. Approval of Minutes – *Dr. Jennifer Hensley, Chairperson*

4. OLD BUSINESS

5. NEW BUSINESS

A. Tour of French Broad River Pumping Station and Intake – *City staff, Black and Veatch, Crowder Construction*

6. OTHER BUSINESS

7. ADJOURNMENT

The City of Hendersonville is committed to providing accessible facilities, programs and services for all people in compliance with the Americans with Disabilities Act (ADA). Should you need assistance or an accommodation for this meeting please contact the City Clerk no later than 24 hours prior to the meeting at 697-3005.



**CITY OF HENDERSONVILLE
WATER AND SEWER ADVISORY COUNCIL
AGENDA ITEM SUMMARY**

SUBMITTER: Brent Detwiler, Public Services Director **MEETING DATE:** 7/22/2024

AGENDA SECTION: APPROVAL OF AGENDA **DEPARTMENT:** Public Services

TITLE OF ITEM: Approval of Agenda – *Dr. Jennifer Hensley, Chairperson*

SUGGESTED MOTION(S):

I move that the Water and Sewer Advisory Council approve the agenda for the July 22, 2024 meeting.

SUMMARY:

The agenda for the July 22, 2024 meeting of the Water and Sewer Advisory Council is submitted for your approval.

BUDGET IMPACT: N/A

Is this expenditure approved in the current fiscal year budget? N/A

If no, describe how it will be funded. N/A

ATTACHMENTS:

Agenda



**CITY OF HENDERSONVILLE
WATER AND SEWER ADVISORY COUNCIL
AGENDA ITEM SUMMARY**

SUBMITTER: Brent Detwiler, Public Services Director **MEETING DATE:** 7/22/2024

AGENDA SECTION: APPROVAL OF MINUTES **DEPARTMENT:** Public Services

TITLE OF ITEM: Approval of Minutes – *Dr. Jennifer Hensley, Chairperson*

SUGGESTED MOTION(S):

I move that the Water and Sewer Advisory Council approve the minutes for the April 22, 2024 meeting.

SUMMARY:

The minutes from the April 22, 2024 meeting of the Water and Sewer Advisory Council are submitted for your approval.

BUDGET IMPACT: N/A

Is this expenditure approved in the current fiscal year budget? N/A

If no, describe how it will be funded. N/A

ATTACHMENTS:

Draft Minutes



CITY OF HENDERSONVILLE
WATER SEWER ADVISORY COUNCIL
 2nd Floor Meeting Room | 160 6th Avenue E. | Hendersonville NC 28792
 Monday, April 22, 2024 – 4:00 PM

MINUTES

Present: City of Hendersonville Council Member & Chair Jennifer Hensley, County Commissioner & Vice Chairman Daniel Andreotta, Town of Laurel Park Council Member Paul Hansen, Town of Mills River Councilwoman Sandra Goode; Henderson County Water/Sewer Customer Representative Andrew Riddle; Partnership for Economic Development Representative Carsten Erkel, Chamber of Commerce Jay Frazier

Absent: City of Saluda Council Member, Stan Walker
 Village of Flat Rock Council Member, Cheryl Stuller
 City of Hendersonville Water/Sewer Customer Representative Chuck McGrady
 Town of Fletcher Council Member Sheila Franklin

Staff Present: City Manager John Connet, City Clerk Jill Murray, Budget Manager Adam Murr, Public Service Director Brent Detwiler, and Utilities Director Adam Steurer and others.

1. CALL TO ORDER

Chairman Jennifer Hensley called the meeting to order at 4:00 p.m. and welcomed those in attendance.

2. APPROVAL OF AGENDA

Paul Hansen, seconded by Andrew Riddle, to approve the agenda as presented. A unanimous vote of the Committee Members present followed. Motion carried.

3. APPROVAL OF MINUTES

A. Approval of the January 22, 2024 Minutes

Andrew Riddle moved, seconded by Paul Hansen, to approve the minutes of January 22, 2024 as presented. A unanimous vote of the Committee Members present followed. Motion carried.

4. OLD BUSINESS - None

5. NEW BUSINESS

A. Water and Sewer System Development Fees Implementation Update - Adam Steurer, Utilities Director

Adam Steurer gave an update on the Water and Sewer System Development Fee Implementation and showed the following PowerPoint.



CITY OF HENDERSONVILLE

Water and Sewer
System Development Fees

April 22, 2024

System Development Fees (SDFs)

- Fees assessed to new development for water and sewer capacity.
- SDFs recover costs necessary for expansion and additional capacity
- “Growth pays for Growth”
- Lack of SDFs places the full cost of infrastructure capacity on existing ratepayers
- SDFs should be viewed as a mechanism to ensure the equitable distribution of cost responsibilities between existing and future utility customers

Process and Engagement

Group	Action	Date
Staff	SDF written analysis begins	9/7/2022
Water & Sewer Advisory Committee	SDF 101 presentation	10/24/2022
City Council	SDF 101 presentation	10/26/2022
City Council	Initial results presentation	4/26/2023
Buisness Advisory Committee	Presentation	7/10/2023
Water & Sewer Advisory Committee	Presentation	7/24/2023
City Council	Presentation	8/23/2023
Buisness Advisory Committee	Final Presentation & board recommendations	10/9/2023
Water & Sewer Advisory Committee	Final Presentation & board recommendations	10/23/2023
City Council	Final Presentation & council recommendations	10/25/2023
Public	Written analysis available for public comment	11/1/2023 - 12/18/2023
Chamber of Commerce-Public Policy Committee	Presentation	12/14/2023
City Council	Public Hearing	3/7/2024

Residential Calculated SDFs

Dwelling Heated Sq Ft	Calculated Water SDF	Calculated Wastewater SDF	Combined SDF
<1000	\$1,247	\$2,048	\$3,295
1,000 - 1,500	\$1,332	\$2,188	\$3,519
1,501 - 2,000	\$1,359	\$2,233	\$3,592
2,001 - 2,500	\$1,443	\$2,370	\$3,813
2,501 - 3,000	\$1,500	\$2,465	\$3,965
3,001 - 3,500	\$1,613	\$2,650	\$4,263
3,501 - 4,000	\$1,724	\$2,833	\$4,558
4,000+	\$1,992	\$3,273	\$5,265
Multi-Family (per unit)	\$894	\$1,469	\$2,364
Mobile Home Park (per unit)	\$1,399	\$2,299	\$3,699

Non-Residential Calculated SDFs

Meter Size	Calculated Water SDF	Calculated Wastewater SDF	Combined SDF
3/4"	\$2,494	\$4,097	\$6,591
1"	\$4,156	\$6,828	\$10,984
1 1/2"	\$8,312	\$13,657	\$21,969
2"	\$13,300	\$21,850	\$35,150
3"	\$29,093	\$47,798	\$76,891
4"	\$52,368	\$86,036	\$138,405
6"	\$108,062	\$177,535	\$285,597
8"	\$232,748	\$382,383	\$615,131
10"	\$349,122	\$573,575	\$922,697

SDF Implementation

Beginning July 1, 2026

July 1, 2025 – July 1, 2026

Jan 1, 2025 – July 1, 2025

	100%			50%			25%		
	Water	Wastewater	Combined	Water	Wastewater	Combined	Water	Wastewater	Combined
RESIDENTIAL									
<1000 sq ft	\$1,247	\$2,048	\$3,295	\$624	\$1,024	\$1,648	\$312	\$512	\$824
1,000 - 1,500 sq ft	\$1,332	\$2,188	\$3,519	\$666	\$1,094	\$1,760	\$333	\$547	\$880
1,501 - 2,000 sq ft	\$1,359	\$2,233	\$3,592	\$680	\$1,117	\$1,796	\$340	\$558	\$898
2,001 - 2,500 sq ft	\$1,443	\$2,370	\$3,813	\$722	\$1,185	\$1,907	\$361	\$593	\$953
2,501 - 3,000 sq ft	\$1,500	\$2,465	\$3,965	\$750	\$1,233	\$1,983	\$375	\$616	\$991
3,001 - 3,500 sq ft	\$1,613	\$2,650	\$4,263	\$807	\$1,325	\$2,132	\$403	\$663	\$1,066
3,501 - 4,000 sq ft	\$1,724	\$2,833	\$4,558	\$862	\$1,417	\$2,279	\$431	\$708	\$1,140
4,000+ sq ft	\$1,992	\$3,273	\$5,265	\$996	\$1,637	\$2,633	\$498	\$818	\$1,316
Multi-Family Master Meter (per unit)	\$894	\$1,469	\$2,364	\$447	\$735	\$1,182	\$224	\$367	\$591
Mobile Home Park (per unit)	\$1,399	\$2,299	\$3,699	\$700	\$1,150	\$1,850	\$350	\$575	\$925
NON-RESIDENTIAL									
3/4" meter	\$2,494	\$4,097	\$6,591	\$1,247	\$2,049	\$3,296	\$624	\$1,024	\$1,648
1" meter	\$4,156	\$6,828	\$10,984	\$2,078	\$3,414	\$5,492	\$1,039	\$1,707	\$2,746
1 1/2" meter	\$8,312	\$13,657	\$21,969	\$4,156	\$6,829	\$10,985	\$2,078	\$3,414	\$5,492
2" meter	\$13,300	\$21,850	\$35,150	\$6,650	\$10,925	\$17,575	\$3,325	\$5,463	\$8,788
3" meter	\$29,093	\$47,798	\$76,891	\$14,547	\$23,899	\$38,446	\$7,273	\$11,950	\$19,223
4" meter	\$52,368	\$86,036	\$138,405	\$26,184	\$43,018	\$69,203	\$13,092	\$21,509	\$34,601
6" meter	\$108,062	\$177,535	\$285,597	\$54,031	\$88,768	\$142,799	\$27,016	\$44,384	\$71,399
8" meter	\$232,748	\$382,383	\$615,131	\$116,374	\$191,192	\$307,566	\$58,187	\$95,596	\$153,783
10" meter	\$349,122	\$573,575	\$922,697	\$174,561	\$286,788	\$461,349	\$87,281	\$143,394	\$230,674

Reduced SDF – Revenue Projections

	100%			50%			25%		
	Water	Wastewater	Combined	Water	Wastewater	Combined	Water	Wastewater	Combined
Projected Annual SDF Revenue	\$ 1,420,000.00	\$ 1,360,000.00	\$ 2,780,000.00	\$ 710,000.00	\$ 680,000.00	\$ 1,390,000.00	\$ 355,000.00	\$ 340,000.00	\$ 695,000.00
Conservative Annual SDF Revenue	\$ 596,000.00	\$ 545,000.00	\$ 1,141,000.00	\$ 298,000.00	\$ 272,500.00	\$ 570,500.00	\$ 149,000.00	\$ 136,250.00	\$ 285,250.00

Projected Annual Revenue: 50% of current projects in development process are completed

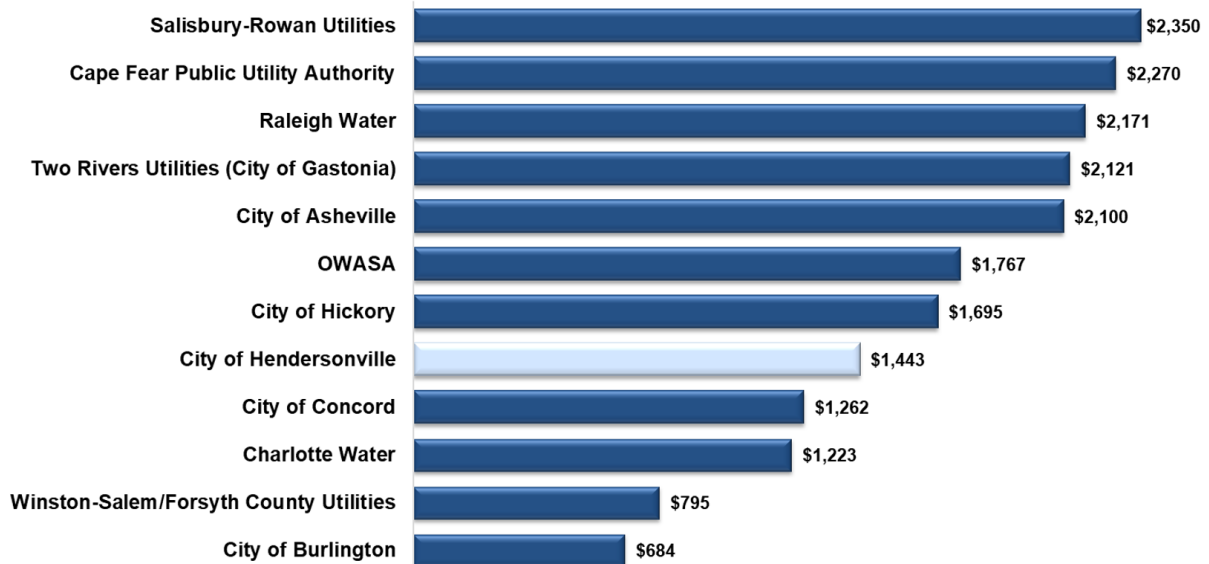
Conservative Annual Revenue: 20% of current projects in development process are completed

Implementation

- Commitment of Utility Service - Current
 - 1) Service already established and meter in place
OR
 - 2) A complete service application submitted, payment of tap/meter fee, AND building permit issued.
- Commitment of Utility Service – After SDF Adoption
 - 1) Payment of SDF and issuance of Letter of Commitment

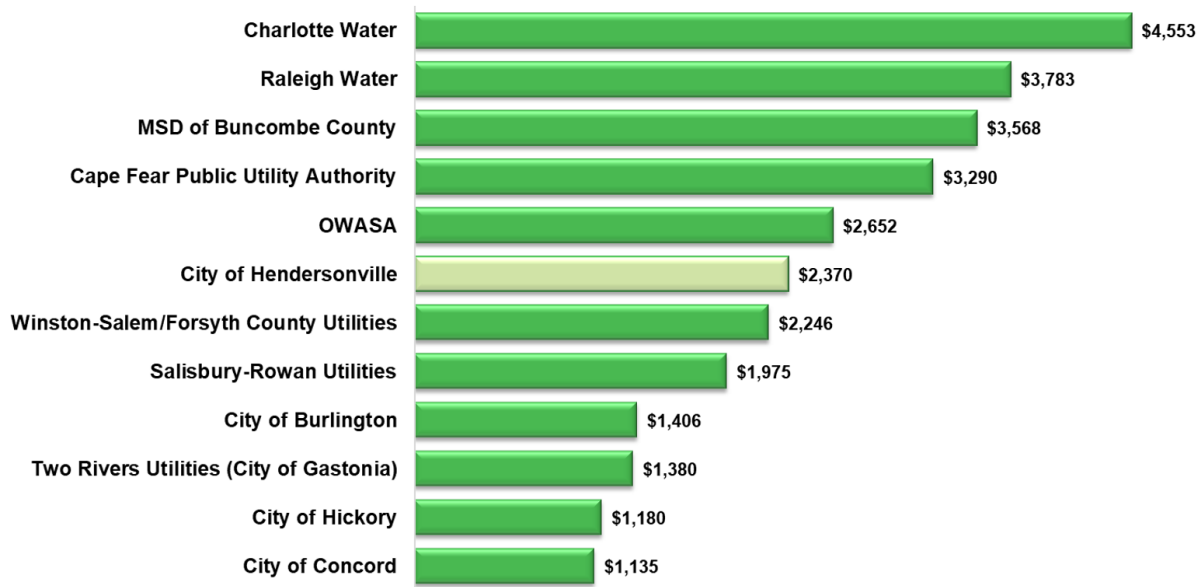
Water SDF – Residential Comparison

Figure 3.1 - Water System Development Fees (Residential 2,100 Sq. Ft.)



Sewer SDF – Residential Comparison

Figure 3.2 - Sewer System Development Fees (Residential 2,100 Sq. Ft.)



MSD of Buncombe County: - Multi-Family per unit \$2,390 (67% of single family)

B. Water and Sewer Project Updates - Brent Detwiler, Public Services Director

Brent Detwiler gave an update on all of the water and sewer projects and showed the following PowerPoint. Some that have been completed, some that are ongoing and some that will be done in the future.



North Fork Reservoir Dredging

- Removal of accumulated sediment, maintenance
- Status: Complete
- Cost: ~\$900,000



North Fork Reservoir Dredging



Mr. Detwiler explained that our next meeting on July 22, 2024, will be held at the French Broad River Intake and Pumping Station to show it off and for you to see the work that has gone into this project that has been in planning since around 2008/2009. This will increase our water source capacity to 15mgd up and is expandable to 21mgd. This project has been under construction for about a year and a half and will be complete this summer.

French Broad River Intake and Pumping Station

- Drought-resilient water source
- 15 mgd capacity and expandable to 21 mgd
- Under Construction – Completion Summer 2024
- \$23.5M SRF



French Broad River Intake and Pumping Station



WWTP Aeration Basin Repair/Rehab

- Structural Repair of Wall
- Basin Coating System
- Status: Complete
- Cost: \$1.5M Grant



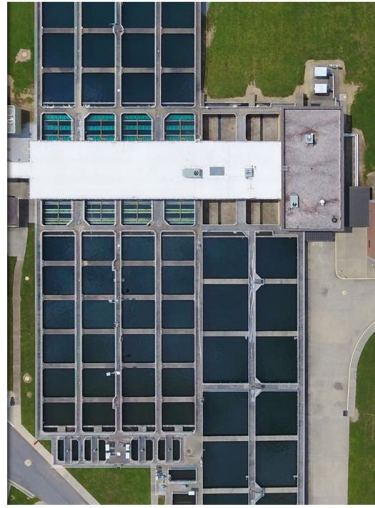
WWTP Ultraviolet Disinfection Improvements

- Replacement of aging equipment
- Additional capacity
- Redundancy
- Energy Savings
- Status: Construction
- Cost: ~\$3.9M Grant



Water Treatment Facility Expansion – 15 mgd

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



WWTP Biosolids Thermal Dryer

- Produce high-quality biosolid
- Reduction in solids management costs
- Solar Photovoltaic System
- Status: Design/Permitting
- Construction: beginning late 2024
- Estimated Cost: ~\$17M
- Received Grant: \$14.75M



Sewer Collections Master Plan Update

- Update to 2019 Master Plan
- Population projections
- Identify deficiencies
- Prioritize projects
- Status: Preliminary



WWTP 6mgd Expansion and Improvements

- Influent Pump Station and Headworks
- Equalization Basin (reduce SSOs)
- Blower Improvements
- Filter Replacement
- Additional Capacity – 6.0mgd
- Status: Preliminary
- Estimated Cost: ~\$34M



Future WWTP Improvements

- Recycle Pumping Station, \$1.1M, FY26
- Sludge Thickening, \$5.9M, FY28
- Dewatering Facility Lightning Protection, \$500k, FY28
- Status: Preliminary



Mud Creek Sewer Interceptor Replacement

- Undersized for current and future flows
- Status: Design/Permitting
- Construction 2025
- Estimated Cost \$9.3M



NCDOT Hwy 191 Widening

- Installation of 36" and 30" water pipe along NC-191
- Status: Design
- Construction: 2025
- Estimated Cost: \$12.8M

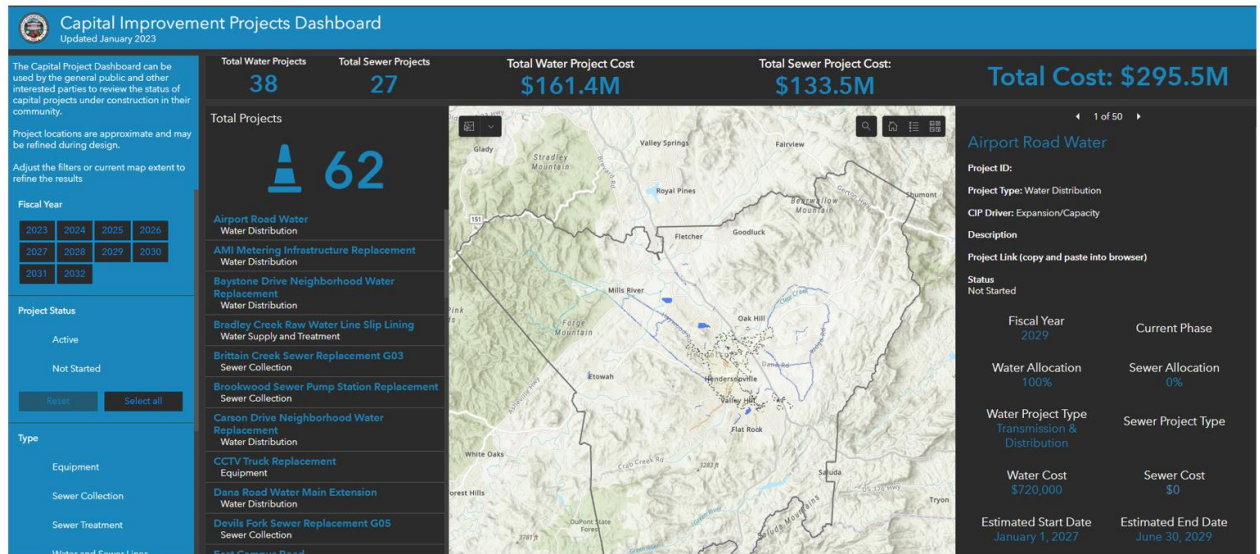


Long John Mountain Water Improvements

- Project identified in 2017 Water System Master Plan
- Connect the valley along NC 191 with the valley along US 64
- Construction of water lines, at-grade water storage tank, and pump station
- Elimination of approximately 11 existing pump stations and 2 tanks
- 20-year present worth operational savings of over \$2.7M
- Significant decrease in power consumption
- Status: Preliminary, Design Commencing FY25
- Estimated Cost: \$12M



Other Projects



More information: Water & Sewer CIP Dashboard

Andrew Riddle brought up trying to get the city and the county to work together better and wanted to know if there were any updates on that.

John Connet said there are some land use decisions the county needs to make. The outline of this board is to talk about utilities in general and to work together with the County, Mills River etc.

Jennifer Hensley said that the city is more than willing to get together with the county to discuss ideas of where this board is going and discuss running these utilities as a business and not a political entity. We need to get everyone to the table at the same time to discuss. That would be a good discussion for our next meeting.

Mr. Riddle asked County Commissioner Andreotta about the County's Farmland Preservation Task Force and Mr. Andreotta said that the county is focusing on programs that will help bridge the gap between farmland value and development value.

6. OTHER BUSINESS - None

7. ADJOURNMENT

There being no further business, the meeting was adjourned at 5:00 p.m.

Jennifer Hensley, City Council Member & Chairman

ATTEST:

Jill Murray, City Clerk



**CITY OF HENDERSONVILLE
WATER AND SEWER ADVISORY COUNCIL
AGENDA ITEM SUMMARY**

SUBMITTER: Brent Detwiler, Public Services Director **MEETING DATE:** 7/22/2024

AGENDA SECTION: NEW BUSINESS **DEPARTMENT:** Public Services

TITLE OF ITEM: Tour of French Broad River Pumping Station and Intake – *City staff, Black and Veatch, Crowder Construction*

SUGGESTED MOTION(S):

N/A

SUMMARY:

City staff, Black and Veatch, and Crowder Construction will provide a brief tour of the nearby French Broad River Pumping Station and Intake site.

If there is time permitting after we return, Ricky Levi, Water Treatment Facility Manager, will lead us on a tour of the Water Treatment Facility.

BUDGET IMPACT: N/A

Is this expenditure approved in the current fiscal year budget? N/A

If no, describe how it will be funded. N/A

ATTACHMENTS:

None