

**CITY OF MONROE  
PUBLIC ENTERPRISE COMMITTEE  
300 W. CROWELL STREET, MONROE, NC 28112  
TUESDAY, AUGUST 2, 2022 - 4:00 PM  
AGENDA  
[www.monroenc.org](http://www.monroenc.org)**

1. Minutes of April 5, 2022 Public Enterprise Committee Meeting
2. Asphalt Paving Program for 2022-2023
3. Resolution Approving Local Water Supply Plan

**Public Enterprise Committee Minutes**  
**April 5, 2022**  
**City Hall Conference Room**  
**4:00 p.m.**

**Members Present:** Council Member Freddie Gordon (Chair), Council Member James Kerr, Council Member Julie Thompson, Committee Member Loretta Melancon

**Staff:** Robert Miller, Mujeeb Shah-Khan, Russ Colbath, Cathy Nance

Council Member Freddie Gordon called the April 5, 2022 Public Enterprise Committee meeting to order at 4 p.m.

**Item #1: Adoption of Minutes of the Meeting**

**Recommendation:**

Council Member Kerr made a motion that the Minutes of the February 15, 2022 Public Enterprise Committee be approved.

**Motion:** Adopt February 15, 2022 PEC Meeting Minutes

**Motion made by:** Council Member James Kerr

**Second:** Council Member Julie Thompson

**Voting:** **In Favor** – Council Member James Kerr, Committee Member Loretta Melancon, Council Member Freddie Gordon and Council Member Julie Thompson

**Opposed** – None

**Action:** Motion adopted

**Item #2. Staff Report - request to consider a Resolution that is required as part of NCDEQ funding applications for City projects**

**Recommendations:**

Staff recommends that the Public Enterprise Committee approve Resolution 2022-30 and forward to City Council for consideration on the April 12, 2022 consent agenda.

**Presentation and Discussion:**

Water Resources Director Russell Colbath said for consideration this afternoon is a Resolution that is required as part of a funding application we are recommending that the City pursue for some DEQ funding that is related to the stimulus fund. So 2021 had some big programs roll out in federal legislation. The ARPA program, which you are well aware of, and the City received their own allocation of that. But the state also received an allocation and they have finalized their plan for water infrastructure funding and that will be managed by the NCDEQ so it goes thru DEQ for application purposes. They had \$800M to start with, and over \$700 million was earmarked for distressed utilities. Distressed utilities are utilities whose rates are high, they are having compliance issues, are ready to fail, basically. They are trying to

prop up those typically smaller systems. That means if you run a good utility, and keep your rates low, you don't get free money.

Council Member Gordon asked, of the total number you mentioned previously, how much of the amount went to this.

Mr. Colbath said so out of 800 million, almost 750 million went to distressed, but there is still about 54 million left. We feel like we have a decent chance to get some, and so some of the items that we have shown here we think we should apply for that are already in our CIP. So you'll be considering the fiscal 23 items for approval here in just a couple of weeks. And then fiscal '24. So we think there's a chance to get this money. We're going to spend a little bit of engineering dollars with a consultant to which we already have the money. I've got 20,000 to help us. Even if we get one of these projects funded, we are well in the black. Another thing I will mention before I repeat the recommendation and that's in your staff report. There is a second pot of money, a separate bill that was the infrastructure investment JOBS Act, that's a much bigger pot of money. The ARPA is first and the infrastructure bill is second. If we're unsuccessful with all of these projects in the spring cycle, I highly recommend a reapplication in the fall cycle. Because it's a much larger pot of money. I can't remember, about 1.3 billion. It's a big, it's a big pot. And since they've already helped the distressed utilities, hopefully less of a percentage will go to those folks in the second pot of money. We have a better chance.

Council Member Thompson asked when would you know if we receive this?

Mr. Colbath stated the end of the summer, July August timeframe, for the spring cycle. We've listed four projects that are total of 4.6 million, you could be awarded up to 5 million in this first pot. That's why we chose this combination. It was just under the ceiling.

Council Member Kerr asked who was hiring a grant writer?

City Attorney Mujeeb Shah-Khan said that is finance, finance related ARPA issues.

Mr. Colbath said in my time here has been multiple movements by either council or whatever. Do we need a grant writer? We just do our own.

Council Member Kerr asked if it was funded would you use it?

City Attorney Shah-Khan said if it's been funded and I'm not sure if it is. I think it was more of an administration issue as opposed to actual grant writer but the finance director will be the person that could tell us all that.

Mr. Colbath said I'm sorry, I don't have that information because it wasn't part of Water Resources. But we're going to do our own application with a little bit of help from WK Dickson, a consulting firm that got us the grant we got two years ago. We got \$300,000 free money, a grant for our mobile work orders.

Committee Member Melancon said you have a good track record, I think, from what I remember.

Mr. Colbath said I think this and the fall cycle, the bigger infrastructure and Jobs Act, I think we have a pretty good chance to get a good amount of this funded which would be fantastic. So our recommendation

is in your staff report and the resolution is also attached and we would just recommend you approve this and forward it to City Council consent agenda for the 12th and I have put it on that agenda, but we could pull it if you didn't want to do it.

Council Member Gordon asked if there were any other questions, comments, or concerns.

Council Member Thompson said she makes a motion to approve.

**Motion:** Motion to approve Resolution 2022-30 and forward to City Council for consideration on the April 12, 2022 consent agenda  
**Motion made by:** Council Member Julie Thompson  
**Second:** Council Member James Kerr  
**Voting:** **In Favor** – Council Member James Kerr, Committee Member Loretta Melancon, Council Member Freddie Gordon and Council Member Julie Thompson  
**Opposed** – None  
**Action:** Motion adopted

**Item # 3: Staff Report – Award of a Contract Utilizing a Master Supply Agreement with WESCO.**

**Recommendation:**

Staff recommends that the Public Enterprise Committee approve the recommendation of award of a Master Supply Agreement with WESCO to City Council and authorize the Interim City Manager to execute the contract on behalf of the City of Monroe.

**Presentation and Discussion:**

Robert Miller, Interim Director of Energy Services, stated thank you for your time today. We're requesting the Public Enterprise Committee consider award of the contract various purchases of electric commodities utilizing a master supply agreement with WESCO. We've been in negotiations with various vendors and municipalities in an attempt to solve supply chain issues. If you guys recall several months ago this came up on whether or not we could serve certain neighborhoods due to transformer availability. We also had some electric wire issues with long lead times. So we've been able to reach an agreement with WESCO for a master supply agreement that guarantees the City firm pricing and a stable availability.

So WESCO will achieve this through competitively bidding on behalf of one or more public procurement units with various manufacturers, as the material will be specified by the City. The City of Monroe is authorized to utilize this contract per general statute 143 129.3 exception to competitive bidding requirements. Participating manufacturers have an agreement with WESCO competitively solicited ministers each contract providing cost and stable supply stability for us. This agreement is an initial three year term and purchase requirements reviewed quarterly and modified accordingly. So basically, we approve everything. Our recommendation is that Public Enterprise approve the recommendation of the award of master supply agreement with WESCO to the City Council and authorize the Interim City Manager to execute the contract on behalf of the City. We also request this item is placed on the consent agenda.

Committee Member Melancon asked is there a charge by WESCO for this service.

Mr. Miller said no, there is not. So they make their money by selling us the product either by directly bidding it as they do now. We're in the same situation under this contract. We're going to buy the equipment. This just locks in our place in the supply chain. I mean, municipal bidding is the lower 10% of what people are after. They're chasing IOUs and the co-ops in the larger contracts. And then you have cities of, all individually bidding. Our business is getting to the point where they're not even interested. So this contract allows us to leverage the larger distributors' buying power.

Committee Member Melancon asked have we not done this contract in the past for any reason. It sounds like a good idea.

Mr. Miller answered we didn't have to. Until the supply chain issues came up in the past two years, we were getting regular bids in which lead times were reasonable, eight to 12 weeks, prices were competitive, we would get three, four, five manufacturers because they had as much supply as demand was out there. Now there's more demand than there is supply, to where they're not interested in bidding everything.

Committee Member Melancon asked so if you do the contract sooner than later, it sounds like you don't have to do the contract. There's an advantage? If you do it sooner than later, are you up higher, like a higher number in who gets first attention? If I mean, other people are going to do the contract, right?

Mr. Miller said we're the first municipal in North Carolina to get this contract. We're just trying to address an issue. And there are others that have reached out to us about the same model. It's a reasonable thing that didn't have to be done before. Electricities is also working jointly to do something amongst all the cities. We don't fit into that because we operate under a different voltage. We end up being the oddball specification in that group. So their model may be as successful as this, but this controls Monroe's destiny. The City was planning to participate in theirs as well, but I don't think it gives us any advantage. But there are other people trying to solve this.

Committee Member Melancon said I'm all for being proactive in these terrible times.

Mr. Miller said we're still getting competitive bids, which is key. Because we have to do that as a municipality.

Council Member Gordon asked if there were any questions or concerns?

**Motion:** Approve the recommendation of award of a Master Supply Agreement with WESCO to City Council and authorize the Interim City Manager to execute the contract on behalf of the City of Monroe.

**Motion made by:** Committee Member Loretta Melancon

**Second:** Council Member Julie Thompson

**Voting:** **In Favor** – Council Member James Kerr, Committee Member Loretta Melancon, Council Member Freddie Gordon and Council Member Julie Thompson  
**Opposed** – None

**Action:** Motion adopted

Mr. Miller said he'd like to confirm that that can be placed on the consent agenda.

Council Member Gordon said yes.

**Item #4. Other**

Council Member Gordon asked if there were additional concerns or questions.

Committee Member Melancon said she is passionate about litter but another thing she is passionate about is communication. She said Mayor Holloway said something about there being a newsletter.

City Attorney Shah-Khan said it was the City Manager’s Report, which is on the front page of the City’s website.

Council Member Gordon asked if there were other concerns or questions.

Council Member Kerr made a motion to adjourn.

**Recommendation:** Adjourn meeting at 4:26 p.m.

**Motion:** Adjourn Public Enterprise Committee meeting

**Motion made by:** Council Member James Kerr

**Second:** Council Member Julie Thompson

**Voting:** **In Favor** – Council Member Julie Thompson, Committee Member Loretta Melancon, Council Member Freddie Gordon and Council Member James Kerr

**Opposed** – None

**Action:** Motion is approved

There being no further business, the meeting adjourned at 4:26 p.m.

---

Freddie Gordon, Chair

**Next Meeting** – May 3, 2022 at 4:00 p.m.



**STAFF REPORT**

**TO:** Public Enterprise Committee  
**VIA:** Brian Borne, CMSM, MBA, BLA, City Manager  
**DATE:** August 2, 2022  
**FROM:** Sarah McAllister, P.E., Engineering Director  
**PREPARED BY:** Sarah McAllister, P.E., Engineering Director  
**SUBJECT:** Proposed Pavement Resurfacing Contract

---

---

**SUMMARY STATEMENT**

The Public Enterprise Committee is requested to consider information related to the proposed 2022 – 2023 Asphalt Paving Program.

---

---

**REVIEW**

The budget for resurfacing by contract totals \$3,425,200 which includes funds from fiscal years 2022 and 2023. Funds from fiscal year 2022 include vehicle tax receipts in the amount of \$833,700 and \$1,000,000 from the General Fund. Funds from 2023 include vehicle tax receipts in the amount of \$864,500, \$500,000 from the General Fund and \$227,000 in Powell Bill allocations. Staff has proposed a number of streets to be included in the resurfacing contract based on the priority street resurfacing cycle goal and the latest pavement condition survey. The streets are listed below along with a brief description of the proposed improvements:

Recommended list of streets:

- Concord Avenue (Walnut Street to US Hwy 74 Overpass) – mill, full depth patch, crack relief layer and overlay (0.85 miles)
- Brekonridge Center Drive (US Hwy 74 to Dewberry Lane) – reclamation with cement and overlay (0.66 miles)
- Wilson Avenue (Old Charlotte Hwy to US Hwy 74) – reclamation with cement and overlay (0.50 miles)

- Hickory Grove Drive (John Moore Road to End) – reclamation with cement and overlay (0.11 miles)
- Johnson Street (Franklin Street to Lancaster Avenue) – reclamation with cement and overlay (0.51 miles)
- Icemorlee Street (N. Johnson Street to Goldmine Road) – reclamation with cement and overlay (0.77 miles)
- Engleside Street (Johnson Street to Icemorlee Street) – reclamation with cement and overlay (0.13 miles)
- Gleneagles Drive (Stevens Road to End) – reclamation with cement and overlay (0.26 miles)
- White Marsh Lane (Gleneagles Drive to End) – reclamation with cement and overlay (0.08 miles)
- Lasalle Street (US Hwy 74 to End) – reclamation with cement and overlay (0.54 miles)
- Green Street (Maurice Street to Thompson Street) – reclamation with cement and overlay (0.31 miles)
- Cuthbertson Street (Walkup Avenue to southern end) – reclamation with cement and overlay (0.43 miles)
- Cuthbertson Street (Walkup Avenue to Riverside Lane) – reclamation with cement and overlay (0.13 miles)
- Davis Street (Cuthbertson Street to End) – reclamation with cement and overlay (0.16 miles)

The project was advertised on June 21, 2022 with two sealed bids being received on July 21, 2022. The formal bid process requires at least three bids to be received to open the bids after the first advertisement. Therefore, the project was re-advertised on July 22, 2022 with a bid opening date of July 29, 2022. Following is summary of the bids received:

Contractor	Bid Amount	DBE %	Comment
Lynches River Contracting, Inc.	\$2,936,900.75	10.0%	Recommend Award
Blythe Construction, Inc.	\$3,210,446.89	10.0%	

The low bid was submitted by Lynches River Contracting, Inc. in the amount of \$2,936,900.75. The Engineer’s estimate for the project was \$3,154,857.40. A contingency amount of \$50,000 is recommended to cover possible change orders during the course of work. Construction inspection, quality assurance testing and project oversight will be provided by the Engineering Department Staff and On-Spec Engineering, PC. The contract includes a 10 percent goal for minority business participation which was met by the low bidder. Upon award, the construction period will begin with the Notice to Proceed and end June 15, 2023 with liquidated damages occurring at a rate of \$500.00 per day thereafter.

In addition, there are funds in the amount of \$316,808.95 in project account RD 1901 for paving repairs at the Operations Center. Staff plans to add these pavement repairs to the contract via a future change order in an amount not to exceed the available budget.

Sufficient funds are budgeted in account nos. 1103020-423010, 1103025-441010, and Project RD 1901.

---

---

### **RECOMMENDATION**

The Public Enterprise Committee is requested to recommend the following to City Council:

- A. Award of the 2022-2023 Asphalt Paving Program to Lynches River Contracting, Inc. in the amount of \$2,936,900.75;
- B. Authorization of contingency allowance in the amount of \$50,000;
- C. Authorization of a future change order not to exceed the budgeted amount of \$316,808.95 for pavement repairs at the Operations Center.
- D. Authorization of the City Manager to execute the documents including Contract, future Change Order 1 increasing the contract amount, and future change orders if required.

If the Public Enterprise Committee is in agreement, the items will be placed on the consent agenda for consideration by City Council at the next meeting on August 9, 2022.



## STAFF REPORT

**TO:** Public Enterprise Committee  
**VIA:** Brian Borne, City Manager  
**DATE:** August 2, 2022  
**FROM:** Scott Clark, Water Resources Director  
**SUBJECT:** Local Water Supply Plan Approval from NCDEQ

---

---

### **SUMMARY STATEMENT**

The Public Enterprise Committee is requested to approve the attached Local Water Supply Plan and associated Resolution R-2022-56.

---

---

### **REVIEW**

Water Resources Department Staff completed a draft Local Water Supply Plan (LWSP) and submitted it to NCDEQ as part of a 5-year cycle of LWSP renewal. The plan used 2020 as a baseline for data. Staff received confirmation that NCDEQ has approved the plan. To finalize the LWSP, City Council must approve the plan to comply with NCGS 143-355 (1). This is the normal approval process.

Attached are the LWSP and Resolution for consideration. The LWSP outlines information about the City's water system, water demands, and water sources. The water supply planning section examines water demands and supplies and indicates that at an average annual growth of 1.5%, the City's current supplies will last beyond 2050. Staff has also updated the graphs showing a sensitivity analysis for 1.0, 1.5, and 2.0% demand growth (attached). These graphs are not part of the NCDEQ plan, but used for internal planning purposes.

The graphs and LWSP show that additional supplies should be developed in the 2050 time frame prior to demands reaching 80% of supplies. This provides for supply contingency and added drought resilience. Future supply sources identified in the plan include a potential 2.0 MGD from the Rocky River, and potential 2.0 MGD from future participation in the Yadkin Pee Dee regional system.

The city also has potential to develop reclaimed water systems for non-potable uses, and for indirect reclaimed water uses for watershed and lake recharge per the city's Reclaimed Water Master Plan. All potential supplies will be more fully evaluated for cost and reliability as the

2050 time frame approaches. All future recommendations and actions will be adjusted based on economic conditions and City Council direction.

---

---

**RECOMMENDATION**

The Public Enterprise Committee is requested to approve the attached Local Water Supply Plan and associated Resolution R-2022-56 and forward to City Council for approval.

Attachment R-2022-56

**RESOLUTION APPROVING WATER SUPPLY PLAN  
R-2022-56**

**WHEREAS**, North Carolina General Statute 143-355(l) requires that each unit of local government that provides public water services, or plans to provide such services, shall, either individually or together with other such units of local government, prepare and submit a Local Water Supply Plan; and

**WHEREAS**, as required by the statute and in the interests of sound local planning, a Water Supply Plan for the City of Monroe has been prepared; and

**WHEREAS**, the North Carolina Department of Environment and Natural Resources has found said Water Supply Plan to be in accordance with the provisions of North Carolina General Statute 143-355(l) and it will provide appropriate guidance for the future development of water supplies for the City of Monroe, as well as useful information to the Department of Environment and Natural Resources for the development of a state water supply plan as required by statute.

**NOW, THEREFORE, BE IT RESOLVED** by the City Council of the City of Monroe, that the Local Water Supply Plan attached hereto, is hereby approved and shall be submitted to the Department of Environment and Natural Resources, Division of Water Resources.

**BE IT FURTHER RESOLVED** that the City Council of the City of Monroe intends that this Plan shall be revised to reflect changes in relevant data and projections at least once every five years or as otherwise requested by the Department, in accordance with the statute and sound planning practice.

Adopted this the 9<sup>th</sup> day of August, 2022.

Attest:

---

Marion L. Holloway, Jr., Mayor

---

Bridgette H. Robinson, City Clerk

# Monroe

2021

The Division of Water Resources (DWR) provides the data contained within this Local Water Supply Plan (LWSP) as a courtesy and service to our customers. DWR staff does not field verify data. Neither DWR, nor any other party involved in the preparation of this LWSP attests that the data is completely free of errors and omissions. Furthermore, data users are cautioned that LWSPs labeled **PROVISIONAL** have yet to be reviewed by DWR staff. Subsequent review may result in significant revision. Questions regarding the accuracy or limitations of usage of this data should be directed to the water system and/or DWR.

## 1. System Information

### Contact Information

Water System Name: **Monroe** PWSID: **01-90-010**  
 Mailing Address: **P.O. Box 69** Ownership: **Municipality**  
**Monroe, NC 28111**  
 Contact Person: **David Rankin** Title: **WTP Superintendent**  
 Phone: **704-282-4668** Cell/Mobile: **704-661-2131**

**Complete**

### Distribution System

Line Type	Size Range (Inches)	Estimated % of lines
Asbestos Cement	4-16	23.90 %
Cast Iron	2-12	6.50 %
Ductile Iron	6-30	16.70 %
Galvanized Iron	2	4.20 %
Polyvinyl Chloride	2-12	48.70 %

What are the estimated total miles of distribution system lines? **301 Miles**  
 How many feet of distribution lines were replaced during 2021? **8,643 Feet**  
 How many feet of new water mains were added during 2021? **26,531 Feet**  
 How many meters were replaced in 2021? **112**  
 How old are the oldest meters in this system? **19 Year(s)**  
 How many meters for outdoor water use, such as irrigation, are not billed for sewer services? **438**  
 What is this system's finished water storage capacity? **7.2500 Million Gallons**  
 Has water pressure been inadequate in any part of the system since last update? *Line breaks that were repaired quickly should not be included.* **No**

### Programs

Does this system have a program to work or flush hydrants? **Yes, Annually**  
 Does this system have a valve exercise program? **Yes, 2 Years or More**  
 Does this system have a cross-connection program? **Yes**  
 Does this system have a program to replace meters? **Yes**  
 Does this system have a plumbing retrofit program? **No**  
 Does this system have an active water conservation public education program? **Yes**  
 Does this system have a leak detection program? **Yes**

Basic program to inspect right of ways and use audio listeners to pinpoint leaks.

### Water Conservation

What type of rate structure is used? **Uniform**

How much reclaimed water does this system use? **0.0000 MGD** For how many connections? **1**

Does this system have an interconnection with another system capable of providing water in an emergency? **Yes**

Bulk reclaimed water at WWTP per NCDEQ permit.

## 2. Water Use Information

### Service Area

Sub-Basin(s)	% of Service Population	County(s)	% of Service Population
Rocky River (18-4)	98 %	Union	100 %
Catawba River (03-1)	2 %		

What was the year-round population served in 2021? **33,830**

Has this system acquired another system since last report? **No**

Current map file still valid.

### Water Use by Type

Type of Use	Metered Connections	Metered Average Use (MGD)	Non-Metered Connections	Non-Metered Estimated Use (MGD)
Residential	11,147	1.8200	0	0.0000
Commercial	2,087	0.8650	0	0.0000
Industrial	52	2.3100	0	0.0000
Institutional	98	0.2430	0	0.0000

How much water was used for system processes (backwash, line cleaning, flushing, etc.)? **0.6070 MGD**

### Water Sales

Purchaser	PWSID	Average Daily Sold (MGD)	Days Used	MGD	Contract Expiration	Recurring	Required to comply with water use restrictions?	Pipe Size(s) (Inches)	Use Type
Union County	01-90-413	0.0000	0	0.0000	2120	Yes	Yes	8-16	Emergency

## 3. Water Supply Sources

### Monthly Withdrawals & Purchases

	Average Daily Use (MGD)	Max Day Use (MGD)		Average Daily Use (MGD)	Max Day Use (MGD)		Average Daily Use (MGD)	Max Day Use (MGD)
Jan	5.9100	7.3050	May	6.7700	9.8000	Sep	6.7300	9.1300
Feb	6.0300	7.7060	Jun	6.7400	9.6200	Oct	6.7100	9.3400
Mar	5.9800	8.0500	Jul	6.8100	9.1600	Nov	5.9700	8.6500
Apr	6.6700	7.8700	Aug	6.7700	9.3100	Dec	5.9600	7.6800



### Surface Water Sources

Stream	Reservoir	Average Daily Withdrawal		Maximum Day Withdrawal (MGD)	Available Raw Water Supply		Usable On-Stream Raw Water Supply Storage (MG)
		MGD	Days Used		MGD	* Qualifier	
Richardson Creek	Lake Lee and Monroe	0.0000	0	0.0000	2.3000	SY50	690.0000
Stewart Creek	Lake Twitty	5.9968	365	7.7520	7.1000	SY50	2,074.0000

\* Qualifier: C=Contract Amount, SY20=20-year Safe Yield, SY50=50-year Safe Yield, F=20% of 7Q10 or other instream flow requirement, CUA=Capacity Use Area Permit

### Surface Water Sources (continued)

Stream	Reservoir	Drainage Area (sq mi)	Metered?	Sub-Basin	County	Year Offline	Use Type
Richardson Creek	Lake Lee and Monroe	52	Yes	Rocky River (18-4)	Union		Regular

Stewart Creek      Lake Twitty      34      Yes      Rocky River (18-4)      Union      Regular

What is this system's off-stream raw water supply storage capacity? 2,760 Million gallons

Are surface water sources monitored? **Yes, Daily**

Are you required to maintain minimum flows downstream of its intake or dam? **No**

Does this system anticipate transferring surface water between river basins? **No**

Lake Lee and Monroe are included in metered totals for Lake Twitty

**Water Purchases From Other Systems**

Seller	PWSID	Average Daily Purchased (MGD)	Days Used	MGD	Contract Expiration	Recurring	Required to comply with water use restrictions?	Pipe Size(s) (Inches)	Use Type
Union County	01-90-413	1.1400	136	1.9900	2099	Yes	No	8-16	Regular

**Water Treatment Plants**

Plant Name	Permitted Capacity (MGD)	Is Raw Water Metered?	Is Finished Water Output Metered?	Source
John Glenn WTP	11.0000	Yes	Yes	Lakes Twitty, Lee, and Monroe

Did average daily water production exceed 80% of approved plant capacity for five consecutive days during 2021? **No**

If yes, was any water conservation implemented?

Did average daily water production exceed 90% of approved plant capacity for five consecutive days during 2021? **No**

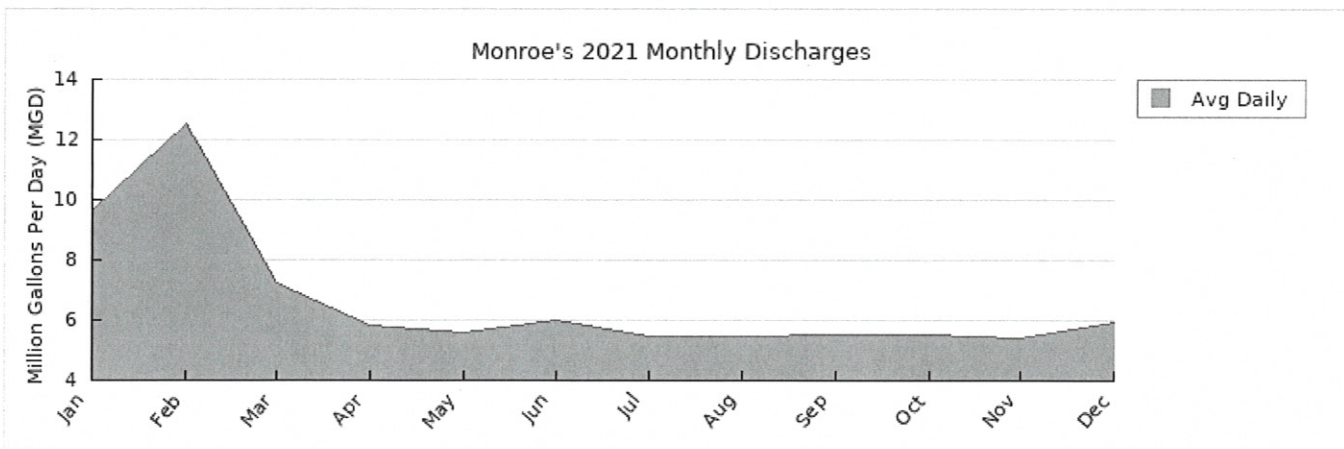
If yes, was any water conservation implemented?

Are peak day demands expected to exceed the water treatment plant capacity in the next 10 years? **No**

**4. Wastewater Information**

**Monthly Discharges**

	Average Daily Discharge (MGD)		Average Daily Discharge (MGD)		Average Daily Discharge (MGD)
Jan	9.6662	May	5.5842	Sep	5.5139
Feb	12.5584	Jun	5.9774	Oct	5.5163
Mar	7.2586	Jul	5.4510	Nov	5.4398
Apr	5.8479	Aug	5.4470	Dec	5.9485



How many sewer connections does this system have? 11,622

How many water service connections with septic systems does this system have? 1,034

Are there plans to build or expand wastewater treatment facilities in the next 10 years? **Yes**

Yes-Planned 3.0 MGD expansion scheduled to be complete 2029.

**Wastewater Permits**

Permit Number	Receiving Stream	Receiving Basin

	Permitted Capacity (MGD)	Design Capacity (MGD)	Average Annual Daily Discharge (MGD)	Maximum Day Discharge (MGD)		
nc0024333	10.4000	10.4000	6.0780	20.3100	Richardson Creek	Rocky River (18-4)
NC0080381	0.8980	1.4000	0.6070	1.1070	Stewart Creek	Rocky River (18-4)

Wastewater Interconnections

Water System	PWSID	Type	Average Daily Amount		Contract Maximum (MGD)
			MGD	Days Used	
Union County	01-90-413	Receiving	1.2740	365	2.6500

5. Planning

Projections

	2021	2030	2040	2050	2060	2070
Year-Round Population	33,830	40,430	49,284	60,077	73,233	89,271
Seasonal Population	0	0	0	0	0	0
Residential	1.8200	2.1750	2.6500	3.2300	3.9400	4.8000
Commercial	0.8650	1.0300	1.2600	1.5300	1.8700	2.2800
Industrial	2.3100	2.4160	2.5400	2.6700	2.8100	2.9500
Institutional	0.2430	0.2900	0.3500	0.4300	0.5300	0.6400
System Process	0.6070	0.7250	0.8800	1.0800	1.3000	1.6000
Unaccounted-for	0.5766	0.6870	0.7500	0.8300	0.9100	1.0000

UIA Water projected at 2% annual growth

Future Supply Sources

Source Name	PWSID	Source Type	Additional Supply	Year Online	Year Offline	Type
Lake Twitty - Effluent Augmentation Ph. 1	01-90-010	Surface	2.0000	2028		Regular
Lake Twitty - Effluent Augmentation Ph. 2	01-90-010	Surface	2.0000	2052		Regular
Union County - Catawba Ph1	01-90-413	Purchase	0.0000	2032		Regular
Union County - Catawba Ph2	01-90-413	Purchase	0.0000	2042		Regular
Union County Yadkin Ph1	01-90-413	Purchase	0.0000	2062		Regular

The following note is from Union County: We have had discussions with Monroe on the potential to supply them more water from the Catawba River Water Supply Project. As no official agreement has been reached yet, we would prefer to leave specific amounts out of our LWSP this year.

As a result of the above note, future supply amounts from Union County have been removed from the plan.

Demand v/s Percent of Supply

	2021	2030	2040	2050	2060	2070
Surface Water Supply	9.4000	9.4000	9.4000	9.4000	9.4000	9.4000
Ground Water Supply	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Purchases	1.9900	1.9900	1.9900	1.9900	1.9900	1.9900
Future Supplies		2.0000	2.0000	2.0000	4.0000	4.0000
Total Available Supply (MGD)	11.3900	13.3900	13.3900	13.3900	15.3900	15.3900
Service Area Demand	6.4216	7.3230	8.4300	9.7700	11.3600	13.2700
Sales	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Future Sales		0.0000	0.0000	0.0000	0.0000	0.0000
Total Demand (MGD)	6.4216	7.3230	8.4300	9.7700	11.3600	13.2700
Demand as Percent of Supply	56%	55%	63%	73%	74%	86%



The purpose of the above chart is to show a general indication of how the long-term per capita water demand changes over time. The per capita water demand may actually be different than indicated due to seasonal populations and the accuracy of data submitted. Water systems that have calculated long-term per capita water demand based on a methodology that produces different results may submit their information in the notes field.

Your long-term water demand is 54 gallons per capita per day. What demand management practices do you plan to implement to reduce the per capita water demand (i.e. conduct regular water audits, implement a plumbing retrofit program, employ practices such as rainwater harvesting or reclaimed water)? If these practices are covered elsewhere in your plan, indicate where the practices are discussed here. **No changes**

Are there other demand management practices you will implement to reduce your future supply needs? **No changes**

What supplies other than the ones listed in future supplies are being considered to meet your future supply needs? **Additional reclaimed water use or added Yadkin Supply via Union County or Anson County.**

How does the water system intend to implement the demand management and supply planning components above? **Combined internal staff expertise, engineering consultants and use of new Yadkin River Basin model.**

#### Additional Information

Has this system participated in regional water supply or water use planning? **Yes, Ongoing negotiation with surrounding systems including Union and Anson County**

What major water supply reports or studies were used for planning? **City Master Plans, Union County EIS and Master Plans, new Yadkin River Model will be used in the future.**

Please describe any other needs or issues regarding your water supply sources, any water system deficiencies or needed improvements (storage, treatment, etc.) or your ability to meet present and future water needs. Include both quantity and quality considerations, as well as financial, technical, managerial, permitting, and compliance issues: **Included above**

The Division of Water Resources (DWR) provides the data contained within this Local Water Supply Plan (LWSP) as a courtesy and service to our customers. DWR staff does not field verify data. Neither DWR, nor any other party involved in the preparation of this LWSP attests that the data is completely free of errors and omissions. Furthermore, data users are cautioned that LWSPs labeled **PROVISIONAL** have yet to be reviewed by DWR staff. Subsequent review may result in significant revision. Questions regarding the accuracy or limitations of usage of this data should be directed to the water system and/or DWR.

**City of Monroe Water Demand and Supply Projections  
Maximum Day (MGD)  
Build-Out Demand 22 MGD +/-**

