F

Appendix F – Critical Reservoir Elevation Compilation

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Appendix F – Critical Reservoir Elevation Compilation

Reservoir Intake Level (based on as-built pumping capacity) as of July 2025, updated June 2026

Notes: IWRP critical intake levels are defined in **GREEN** text. Orange highlights indicated a modified intake elevation as compared to the Water Supply Master Plan (WSMP) of 2015. Intakes are listed in order from highest to lowest elevation reported in the WSMP.

Lake System	Entity/ Source Description	Facility	Lake / River	Description	WSMP Elevation (ft. msl.)	Updated and Confirmed IWRP Elevation (ft. msl.)	IWRP Comments
Lake James							
	Full Pond Elevation			**Full Pond**	**1200.00**		
	Hydro Operations			**Hydro**	**1150.00**		
Lake Rhodhiss							
	City of Morganton	Catawba River WTP	River	Top of Weir	1004.00	1004.00	
	Full Pond Elevation			**Full Pond**	**995.10**		
	Town of Valdese	Valdese WTP	Lake	Intake	984.50	**986.50**	Full pipe in intake
	Town of Granite Falls	Granite Falls WTP	Lake	Intake	977.80		
	Hydro Operations			**Hydro**	**974.20**		
	City of Lenoir	Lenoir WTP	Lake	Intake	970.20	964.10	Multilevel Intake; Elevation representative of deepest intake level
Lake Hickory							
	Full Pond Elevation			**Full Pond**	**935.00**		
	City of Hickory	Hickory WTP	Lake	Intake	926.00	926.00 / 927.00	Elevation is 1.5 inch above pipe survey / Listed CRE in Agreement
	Town of Longview	Longview WTP	Lake	Intake	925.00	-- / 929.00	Not in service, is future resource for City of Hickory
	Hydro Operations			**Hydro**	**908.00**		

Lake System	Entity/ Source Description	Facility	Lake / River	Description	WSMP Elevation (ft. msl.)	Updated and Confirmed IWRP Elevation (ft. msl.)	IWRP Comments
Lookout Shoals Lake							
	Full Pond Elevation			**Full Pond**	**838.10**		
	City of Statesville	Statesville WTP	Lake	Intake	813.00	813.00	
	Hydro Operations			**Hydro**	**811.00**		
Lake Norman							
	Full Pond Elevation			**Full Pond**	**760.00**		
	Duke Energy Corporation	McGuire Nuclear Station	Lake	Intake	750.00	750.00	Thermal limitation; Potential modification to 746.0 ft after Marshall Steam Station is retired is being evaluated.
	Town of Mooresville	Mooresville WTP	Lake	Intake	745.00	741.00	Centerline of upper screen on intake structure; Assumed to support hydraulics of lower screen pumping requirements
	Charlotte-Mecklenburg	Lee Dukes WTP	Lake	Intake	745.00	736.00	Elevation at which Raw Water Rate restricted
	Lincoln County	Lincoln County WTP	Lake	Intake	743.00		
	Burlington/Spillman	Mooresville WTP	Lake	Intake	735.00	--	No longer in service
	Duke Energy Corporation	Marshall Steam Station	Lake	Intake	735.00		
	Hydro Operations			**Hydro**	**725.00**		

Lake System	Entity/Source Description	Facility	Lake / River	Description	WSMP Elevation (ft. msl.)	Updated and Confirmed IWRP Elevation (ft. msl)	IWRP Comments
Mountain Island Lake							
	Full Pond Elevation			**Full Pond**	**647.50**		
	Duke Energy Corporation	Riverbend Steam Station	Lake	Intake	641.75	--	Retired facility
	City of Mount Holly	Mount Holly WTP	Lake	Intake	638.00	638.00	
	City of Gastonia	Gastonia WTP	Lake	Intake	637.50		
	Charlotte-Mecklenburg	Franklin and Vest WTP	Lake	Intake	635.50	635.50	Future Pump Issues
	Hydro Operations			**Hydro**	**625.00**		
Lake Wylie							
	Full Pond Elevation			**Full Pond**	**569.40**		
	Clariant Corporation	Mt. Holly Plant	Lake	Intake	562.00	562.00	
	Confidential Industry	Dyeing & Finishing Plant 15	Lake	Intake	561.70	561.70	Confirmed intake is in use
	City of Belmont	Belmont WTP	Lake	Intake	561.40	561.4/563.00	Temporary intake obstruction at 561.4, requires access to raw water pump house at 563.0
	Duke Energy Corporation	Catawba Nuclear Station	Lake	Intake	559.40		
	Siemens Westinghouse	Siemens Westinghouse	Lake	Intake	559.00		
	Rock Hill	Rock Hill WTP	Lake	Intake	555.50	555.50	
	Duke Energy Corporation	Allen Steam Plant	Lake	Intake	555.00	--	Retired Facility
	Hydro Operations			**Hydro**	**543.50**		

Lake System	Entity/Source Description	Facility	Lake / River	Description	WSMP Elevation (ft. msl.)	Updated and Confirmed IWRP Elevation (ft. msl)	IWRP Comments
Fishing Creek Reservoir							
	Rock Hill	Emergency Intake	River	Intake	490.00	490.00	
	Celanese Acetate	Celriver Plant	River	Intake	455.00		
	Union County/ Lancaster County	Catawba River Plant	River	Intake	447.00	444.83	New Intake since WSMP; Reflects minimum river elevation to supply design point of pumps
	Bowater	Pulp and Paper Mill	River	Intake	445.00		
	Full Pond Elevation			**Full Pond**	**417.20**		
	Chester Metro	Chester Metro WTP	Lake	Intake	412.00	407.00	Minimum elevation for operation based on submergence calculations
	Springs Industrial	Grace Complex	River/ Backwater	Intake	408.00		
	Hydro Operations			**Hydro**	**395.10**		
	Nation Ford Chemical	Industrial Facility	River	Intake			
Great Falls-Dearborn Reservoir							
	Full Pond Elevation			**Full Pond**	**355.80**		
	Hydro Operations			**Hydro**	**343.00**		
Cedar Creek Reservoir							
	Full Pond Elevation			**Full Pond**	**284.40**		
	Hydro Operations			**Hydro**	**264.70**		
Lake Wateree							
	Full Pond Elevation			**Full Pond**	**225.50**		
	Camden	Camden WTP	Lake	Intake	218.00	218.00	Minimum water level per intake design
	Lugoff Elgin Water Authority	Lugoff Elgin WTP	Lake	Intake	213.00	215.50	Vortex below this elevation
	Hydro Operations			**Hydro**	**199.50**		

From: Jennifer Gibson <JGibson@cityofbelmont.org>
Sent: Friday, August 22, 2025 2:12 PM
To: Yeh, Sara
Subject: Re: CWWMG: Intake Elev - Belmont

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They agreed that after the intake is dredged and everything is working the way it should, we could go back to 561.4 ft.

Thanks and have a great weekend!

Jennifer Gibson, ORC

Water Plant Superintendent, City of Belmont

D 704.901.2077 | O 704.825.2625

jgibson@cityofbelmont.org

www.cityofbelmont.org

PO Box 431, Belmont, NC 28012

205 N 10th St., Belmont, NC 28012

From: Jennifer Gibson <JGibson@cityofbelmont.org>
Sent: Friday, August 22, 2025 7:38 AM
To: Yeh, Sara <Sara.Yeh@hdrinc.com>
Subject: Re: CWWMG: Intake Elev - Belmont

Sara,

Let me consult with our engineer and public works director before I answer this. I am inclined to say yes, but the bottom of the river has changed so much. I think it happened slowly over many years, but was quickly intensified by Helene. It is much more shallow in places than it used to be. I just don't want to misspeak.

I will be in touch.

Jennifer Gibson, ORC

Water Plant Superintendent, City of Belmont

D 704.901.2077 | O 704.825.2625

jgibson@cityofbelmont.org

www.cityofbelmont.org

PO Box 431, Belmont, NC 28012

205 N 10th St., Belmont, NC 28012

From: Yeh, Sara <Sara.Yeh@hdrinc.com>
Sent: Thursday, August 21, 2025 5:35 PM
To: Jennifer Gibson <JGibson@cityofbelmont.org>
Subject: RE: CWWMG: Intake Elev - Belmont

WARNING: This email originated from outside of the City of Belmont network.

Hi Jennifer,

Thanks again for your feedback on Belmont's current intake elevation to enable access to the side of the raw water pump house at 563 ft. I also wanted to ask about the intake within the context of longer-term planning. If we assume your intake is dredged and screen cleared in the next few years, would it be correct to assume that the minimum operational intake elevation will go back to 561.4 ft?

Many thanks,
Sara

Sara Yeh
D 919.900.1618 **M** 919.274.4361

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From: Jennifer Gibson <JGibson@cityofbelmont.org>
Sent: Tuesday, June 24, 2025 2:04 PM
To: Yeh, Sara <Sara.Yeh@hdrinc.com>; Robinnette, Tim <trobinette@cityofbelmont.org>
Cc: Jamison, Reya <Reya.Jamison@hdrinc.com>
Subject: Re: CWWMG: Intake Elev - Belmont

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Sara,

We found out early in the year that our intake needs to be dredged. We are working on getting a permit from Duke Energy currently. We aren't sure how much water we are getting through our intake screen, versus how much is coming through an opening in the side of the raw pump house. To be absolutely safe, the water should be at an elevation of 563 ft.

Let me know if you have any questions.

Thanks,

Jennifer Gibson, ORC
Water Plant
Superintendent, City of Belmont
D 704.901.2077 | O 704.825.2625
jgibson@cityofbelmont.org
www.cityofbelmont.org
PO Box 431, Belmont, NC 28012
205 N 10th St., Belmont, NC 28012

From: Yeh, Sara <Sara.Yeh@hdrinc.com>
Sent: Tuesday, June 24, 2025 12:12 PM
To: Jennifer Gibson <JGibson@cityofbelmont.org>; Tim Robinette <trobinette@cityofbelmont.org>
Cc: Jamison, Reya <Reya.Jamison@hdrinc.com>
Subject: CWWMG: Intake Elev - Belmont

WARNING: This email originated from outside of the City of Belmont network.

Good afternoon,

During the 2014/15 CWWMG Water Supply Master Plan and 2014 Raw Water Intake Contingency Planning efforts, your organization provided the following information regarding your Catawba-Wateree Basin intake. Please confirm that this elevation is your current withdrawal limitation based on your as-built pumping capacity, or provide any updated information. If you have a multi-level intake system, please provide context regarding what this elevation refers to.

Safe Yield - Reservoir Intake Level Evaluation (based on as-built pumping capacity)

Lake System	Entity/Source Description	Facility	Lake/River	Description	Elevation (FT MSL)[1]	
LAKE WYLIE						
	Full Pond Elevation			**Full Pond**	**569.40**	
	Clariant Corporation[5]	Mt. Holly Plant	Lake	Intake	562.00	Estimat
	Confidential Industry[5]	Dyeing & Finishing Plant 15	Lake	Intake	561.70	Not use
	City of Belmont[5]	Belmont WTP	Lake	Intake	561.40	

Please provide your response and any questions to me and Reya Jamison (copied).
We request feedback by July 3rd.

Thank you,
Sara

Sara Yeh
Project Manager - Water Resources

HDR
555 Fayetteville Street, Suite 900
Raleigh, North Carolina 27601
D 919.900.1618 **M** 919.274.4361

sara.yeh@hdrinc.com

hdrinc.com/follow-us

Please note upcoming out-of-office dates:

From: David Enlow <denlow@camdensc.org>
Sent: Wednesday, June 25, 2025 9:32 AM
To: Yeh, Sara; Jack Thornsberry
Cc: Jamison, Reya
Subject: RE: CWWMG: Intake Elev - Camden
Attachments: 013-C-2.1.pdf

You don't often get email from denlow@camdensc.org. Learn why this is important

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good morning Sara.

Please see the attached drawing of our intake lines. It should confirm the 218' MSL limit.
Please let me know if there are any questions.

Thanks,

David Enlow
Water Plant Manager
City of Camden

From: Yeh, Sara <Sara.Yeh@hdrinc.com>
Sent: Tuesday, June 24, 2025 12:15 PM
To: Jack Thornsberry <jthornsberry@camdensc.org>; David Enlow <denlow@camdensc.org>
Cc: Jamison, Reya <Reya.Jamison@hdrinc.com>
Subject: CWWMG: Intake Elev - Camden

Good afternoon,

During the 2014/15 CWWMG Water Supply Master Plan and 2014 Raw Water Intake Contingency Planning efforts, your organization provided the following information regarding your Catawba-Wateree Basin intake. Please confirm that this elevation is your current withdrawal limitation based on your as-built pumping capacity, or provide any updated information. If you have a multi-level intake system, please provide context regarding what this elevation refers to.

Safe Yield - Reservoir Intake Level Evaluation (based on as-built pumping capacity)

Lake System	Entity/Source Description	Facility	Lake/River	Description	Elevation (FT MSL)[1]

Please provide your response and any questions to me and Reya Jamison (copied).
We request feedback by July 3rd.

Thank you,
Sara

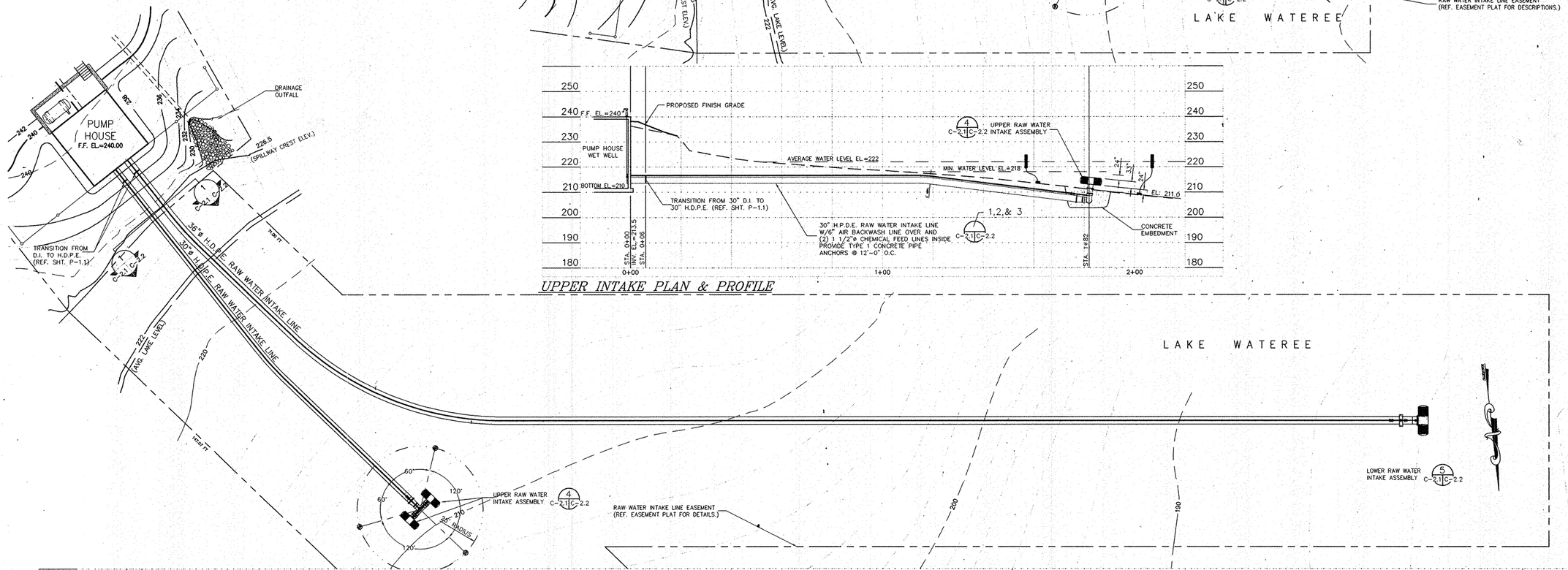
Sara Yeh
Project Manager - Water Resources

HDR
555 Fayetteville Street, Suite 900
Raleigh, North Carolina 27601
D 919.900.1618 **M** 919.274.4361

sara.yeh@hdrinc.com

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Please note upcoming out-of-office dates:
June 30 – July 11



UPPER INTAKE PLAN & PROFILE

LOWER INTAKE PLAN & PROFILE

DATE	NO.	REVISION	BY
JULY '96	A	RELEASE FOR SCDHEC & OWNER REVIEW	RDW
SEPT. '96	B	RELEASE FOR BUILDING OFFICIAL REVIEW	RDW
OCT. '96	0	INC. REVIEW COMMENTS; REL. FOR CONSTRUCTION	RDW
JUNE '99	**1**	**RECORD DRAWINGS**	**RDW**

erc
ENGINEERING RESOURCES CORPORATION
ORANGEBURG, SOUTH CAROLINA

CITY OF CAMDEN
POTABLE WATER FACILITIES
WATER TREATMENT PLANT
(CONTRACT 1)

PROJECT NO. 680 | SCALE 1" = 20' | DATE JUNE 1996

DSGN JWH
DWN JKP
CKD JWH
APPR JWH

SOUTH CAROLINA REGISTERED No. 14274 PROFESSIONAL ENGINEER HERBERT L. SHULER 9-9-97

SOUTH CAROLINA ENGINEERING RESOURCES CORPORATION NO. C00051 CERTIFICATE OF AUTHORIZATION

RAW WATER INTAKE LINES
PLAN & PROFILE

C-2.1
SHEET NO.

C:\PROJE\680-03\BASEPRINTS Wed Sep 11 14:20:13 1996 ERC CAD STA. 'A'
9/11/96

From: Brad Bucy <bbucy@lcwasd.org>
Sent: Tuesday, June 24, 2025 2:02 PM
To: Yeh, Sara; aculp; Randy Hawkins; Aubrey Lofton
Cc: Jamison, Reya; Wes Carter
Subject: RE: CWWMG: Intake Elev - CRSWP

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Sara:

We constructed a new intake for the CRWSP facility in the Catawba River around the time the 2014 Water Supply Master Plan was being completed. The critical elevation (min river elevation) to supply the design point of the pumps is 444.83 ft MSL. Keep in mind, this is a run of the river intake, so it does not directly correlate to the Fishing Creek Reservoir Dam; however, that would be the next downstream impoundment.

Thanks!
Brad

From: Yeh, Sara <Sara.Yeh@hdrinc.com>
Sent: Tuesday, June 24, 2025 12:07 PM
To: aculp <aculp@crwtp.org>; Randy Hawkins <rhawkins@crwtp.org>; Brad Bucy <bbucy@lcwasd.org>; Aubrey Lofton <aubrey.lofton@unioncountync.gov>
Cc: Jamison, Reya <Reya.Jamison@hdrinc.com>
Subject: CWWMG: Intake Elev - CRSWP

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Good afternoon,

During the previous CWWMG Water Supply Master Plan and 2014 Raw Water Intake Contingency Planning efforts, your organization provided the following information regarding your Catawba-Wateree Basin intake. Please confirm that this elevation is your current withdrawal limitation based on your as-built pumping limitation, or provide any updated information or commentary. If you have a multi-level intake system, please provide context regarding what this elevation refers to.

Safe Yield - Reservoir Intake Level Evaluation (based on as-built pumping capacity)

Lake System	Entity/Source Description	Facility	Lake/River	Description	Elevation (FT MSL)[1]	
FISHING CREEK RESERVOIR						
	Rock Hill	Emergency Intake	River	Intake	490.00	
	Celanese Acetate	Celriver Plant	River	Intake	455.00	Retired
	Union County/Lancaster County	Catawba River Plant	River	Intake	447.00	

Please provide your response and any questions to me and Reya Jamison (copied).
We request feedback by July 3rd.

Thank you,
Sara

Sara Yeh
Project Manager - Water Resources

HDR
555 Fayetteville Street, Suite 900
Raleigh, North Carolina 27601
D 919.900.1618 **M** 919.274.4361

sara.yeh@hdrinc.com

hdrinc.com/follow-us

Please note upcoming out-of-office dates:
June 30 – July 11

From: Andy Litten <alitten@chestermetrosc.com>
Sent: Tuesday, June 24, 2025 5:01 PM
To: Yeh, Sara; fcastles
Cc: Jamison, Reya
Subject: RE: CWWMG: Intake Elev - CMD
Attachments: CMD Intake.pdf

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Sara/Reya,

Based on the information on the attached plan sheet and the minimum submergence calculation (6'), the minimum elevation for operation of our intake is 407.00. Please let us know if you have any questions.

Thanks,

Andy Litten, PE
Engineering & Operations Manager
(O) 803-581-9263

From: Yeh, Sara <Sara.Yeh@hdrinc.com>
Sent: Tuesday, June 24, 2025 12:11 PM
To: Fred Castles III <fcastles@chestermetrosc.com>; Andy Litten <alitten@chestermetrosc.com>
Cc: Jamison, Reya <Reya.Jamison@hdrinc.com>
Subject: CWWMG: Intake Elev - CMD

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good afternoon,

During the 2014/15 CWWMG Water Supply Master Plan and 2014 Raw Water Intake Contingency Planning efforts, your organization provided the following information regarding your Catawba-Wateree Basin intake. Please confirm that this elevation is your current withdrawal limitation based on your as-built pumping capacity, or provide any updated information. If you have a multi-level intake system, please provide context regarding what this elevation refers to.

Safe Yield - Reservoir Intake Level Evaluation (based on as-built pumping capacity)

Lake System	Entity/Source Description	Facility	Lake/River	Description	Elevation (FT MSL)[1]

FISHING CREEK RESERVOIR					
Rock Hill	Emergency Intake	River	Intake	490.00	
Celanese Acetate	Celriver Plant	River	Intake	455.00	Retired p
Union County/Lancaster County	Catawba River Plant	River	Intake	447.00	
Bowater	Pulp and Paper Mill	River	Intake	445.00	
Full Pond Elevation			**Full Pond**	**417.20**	
Chester Metro	Chester Metro WTP	Lake	Intake	412.20	

Please provide your response and any questions to me and Reya Jamison (copied).
We request feedback by July 3rd.

Thank you,
Sara

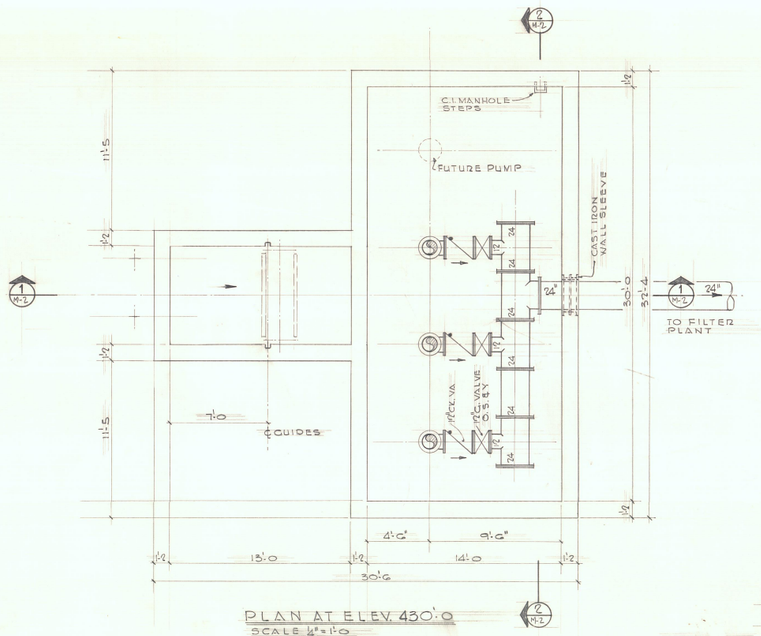
Sara Yeh
Project Manager - Water Resources

HDR
555 Fayetteville Street, Suite 900
Raleigh, North Carolina 27601
D 919.900.1618 **M** 919.274.4361

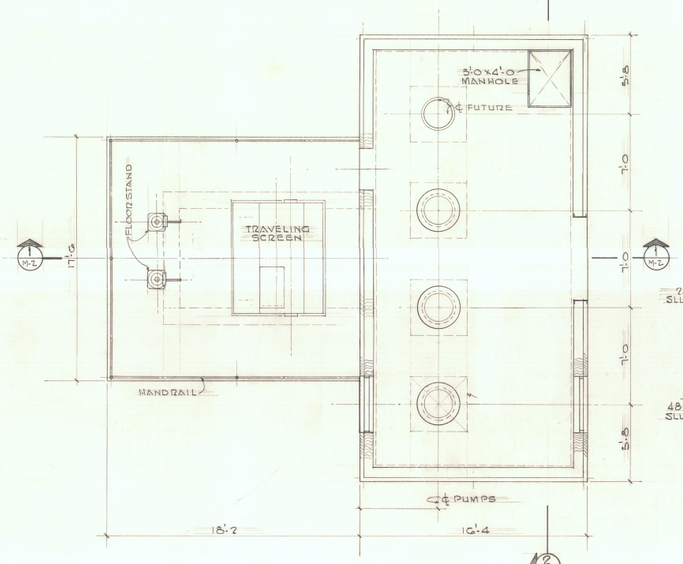
sara.yeh@hdrinc.com

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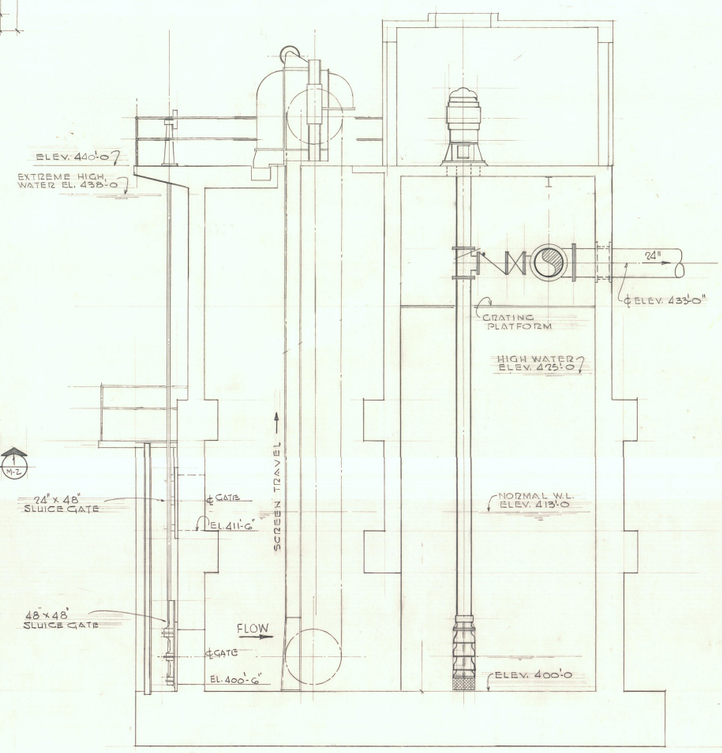
Please note upcoming out-of-office dates:
June 30 – July 11



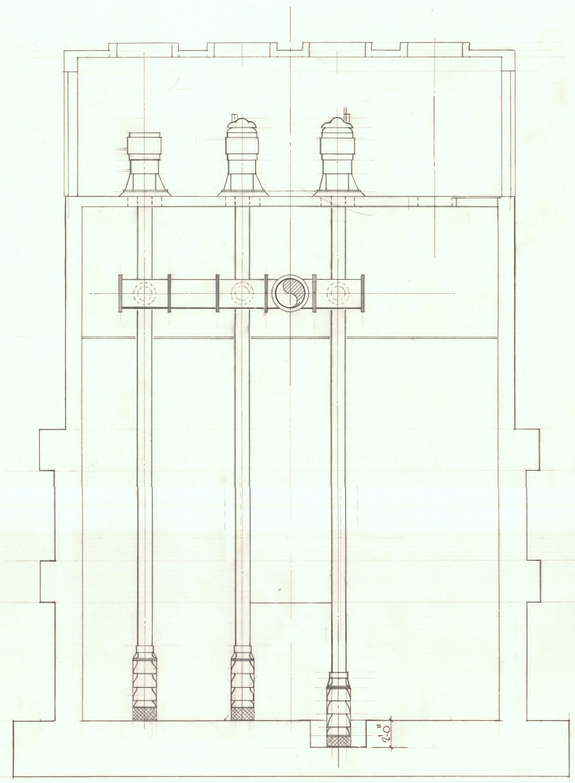
PLAN AT ELEV. 430'-0
SCALE 1/4"=1'-0



PLAN AT ELEV. 440'-0
SCALE 1/4"=1'-0



SECTION 1/M-2
SCALE 1/4"=1'-0



SECTION 2/M-2
SCALE 1/4"=1'-0

PEL-SC-624
APW-SC-52GL

CHESTER METROPOLITAN DISTRICT
CHESTER, S. C.

RAW WATER PUMPING STATION
PLANS & SECTIONS

LOCKWOOD GREENE ENGINEERS, INC.
SPARTANBURG, S. C.

NO.	DATE	REVISION	BY	CHK.	APPR.

MADE BY	CEM	JOB NO.	DATE
CHECKED BY		63022-B	3-2-64
APPROVED	W.H. Stobo	DRAWING NO.	
SCALE	AS NOTED	M-2	

PHOENIX 31464

From: William Hamblin <whamblin@hickorync.gov>
Sent: Sunday, June 29, 2025 5:01 PM
To: Yeh, Sara
Cc: Jamison, Reya; David Cox
Subject: RE: CWWMG: Intake Elev - Hickory

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Sara,

In 2019 there was a revision to the Minimum Lake Elevations on Lake Hickory due to Longview's Intake no longer being in service. The Minimum Lake Elevation was 94.0, but was reduced to 91.0. I assume that means Longview's Intake is around 94.0 (929.0). Longview's intake currently isn't in service, but we have plans to utilize it in the future.

Will Hamblin, PE
Public Utilities Director
City of Hickory
1441 9th Ave NE
Hickory, NC 28601
828-323-7427
www.hickorync.gov

Pursuant to North Carolina General Statutes Chapter 132, Public Records, this electronic mail message and any attachments hereto, as well as any electronic mail message(s) that may be sent in response to it may be considered public record and as such are subject to request and review.

From: Yeh, Sara <Sara.Yeh@hdrinc.com>
Sent: Friday, June 27, 2025 8:00 AM
To: William Hamblin <whamblin@hickorync.gov>
Cc: Jamison, Reya <Reya.Jamison@hdrinc.com>; David Cox <dcox@hickorync.gov>
Subject: RE: CWWMG: Intake Elev - Hickory

CAUTION: This email originated from outside of the organization.

Good morning Will,

I'm sorry to hear about Hurricane Helene's impact on your intake. We will review Duke's notes on how the water level was selected as compared to the height of the pipe in the last plan. Previously, the Hickory elevation was listed at 926 feet, which aligns with your statement of feeling more comfortable with about 1.5 inch above your intake pipe at 925.89.

We will look forward to any additional information you have regarding Longview.

Many thanks,
Sara

Sara Yeh
D 919.900.1618 **M** 919.274.4361

hdrinc.com/follow-us

Please note upcoming out-of-office dates:
June 30 – July 11

From: William Hamblin <whamblin@hickorync.gov>
Sent: Thursday, June 26, 2025 5:48 PM
To: Yeh, Sara <Sara.Yeh@hdrinc.com>
Cc: Jamison, Reya <Reya.Jamison@hdrinc.com>; David Cox <dcox@hickorync.gov>
Subject: RE: CWWMG: Intake Elev - Hickory

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hey Sara,

Attached is a survey from 2002 (the last time our we surveyed the elevations of the intake pipes). The highest portion of the pipe is at El. 925.89.
Our intake pipes suffered some damage during Hurricane Helene and shifted downstream. We're currently undergoing a construction project to re-anchor the pipes to the original orientation. Once the pipes are reoriented/anchored we are going to resurvey them, to make sure they are within the Duke Easement, and document the elevations. That survey won't occur until later this summer. I'm not sure what the process is, but if it's possible we would feel more comfortable with more than 1.5" above our intake pipes.

We'll double check the documentation we have on the Longview Intake. When we purchased the water plant and intake, there wasn't much available as it relates to as-builts.

Thanks,

Will Hamblin, PE
Public Utilities Director
City of Hickory
1441 9th Ave NE
Hickory, NC 28601
828-323-7427
www.hickorync.gov

HICKORY
North Carolina
Life. Well Crafted.

Pursuant to North Carolina General Statutes Chapter 132, Public Records, this electronic mail message and any attachments hereto, as well as any electronic mail message(s) that may be sent in response to it may be considered public record and as such are subject to request and review.

From: Yeh, Sara <Sara.Yeh@hdrinc.com>
Sent: Tuesday, June 24, 2025 3:04 PM
To: William Hamblin <whamblin@hickorync.gov>; David Cox <dcox@hickorync.gov>
Cc: Jamison, Reya <Reya.Jamison@hdrinc.com>
Subject: CWWMG: Intake Elev - Hickory

CAUTION: This email originated from outside of the organization.

Good afternoon,

During the 2014/15 CWWMG Water Supply Master Plan and 2014 Raw Water Intake Contingency Planning efforts, your organization provided the following information regarding your Catawba-Wateree Basin intake. Since this evaluation, via Duke Energy and the CW-DMAG we have received notification that the City of Hickory's intake usage capability has been extended and the Long View intake is operable until approximately 925.00 ft (10-ft draw down). The current critical reservoir elevation listed in the Low Inflow Protocol is an 8-ft draw down from full pond. Please confirm your current withdrawal limitation based on your as-built pumping capacity. If you have a multi-level intake system, please provide context regarding what this elevation refers to.

Safe Yield - Reservoir Intake Level Evaluation (based on as-built pumping capacity)

Lake System	Entity/Source Description	Facility	Lake/River	Description	Elevation (FT MSL)[1]
LAKE HICKORY					
	Full Pond Elevation			**Full Pond**	**935.00**
	City of Hickory[3]	Hickory WTP	Lake	Intake	926.00
	Town of Longview[3]	Longview WTP	Lake	Intake	925.00
	Hydro Operations			**Hydro**	**908.00**

Please provide your response and any questions to me and Reya Jamison (copied).
We request feedback by July 3rd.

Thank you,
Sara

Sara Yeh
Project Manager - Water Resources

HDR
555 Fayetteville Street, Suite 900
Raleigh, North Carolina 27601
D 919.900.1618 **M** 919.274.4361

sara.yeh@hdrinc.com

hdrinc.com/follow-us

Please note upcoming out-of-office dates:
June 30 – July 11

From: Matheson, Kevin <kmatheson@CI.LENOIR.NC.US>
Sent: Tuesday, June 24, 2025 1:12 PM
To: Yeh, Sara
Cc: Jamison, Reya; Jeff Church
Subject: RE: CWWMG: Intake Elev - Lenoir

Follow Up Flag: Follow up
Flag Status: Flagged

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Good afternoon Sara.
The City of Lenoir newer water Intake is multileveled. The deepest intake is 31' deep. So the critical lake elevation should actually be 964' (995' full pond elevation-31' intake level). Our shallower new intake point is the typical level of withdrawal which is 25' deep at full pond. This 970' elevation represents the value reported previously. We also have an operational old raw water pump station that is 6' deep (so 989' critical elevation). The deeper old raw water intake has silted up and is no longer usable.
If you need any more clarification please do hesitate to contact me.
Thanks and blessings,

Kevin Matheson
City of Lenoir Water Treatment Superintendent

From: Yeh, Sara <Sara.Yeh@hdrinc.com>
Sent: Tuesday, June 24, 2025 12:23 PM
To: Jeff Church <jeff.church@lenoirnc.gov>; Matheson, Kevin <kmatheson@CI.LENOIR.NC.US>
Cc: Jamison, Reya <Reya.Jamison@hdrinc.com>
Subject: CWWMG: Intake Elev - Lenoir

Good afternoon,

During the 2014/15 CWWMG Water Supply Master Plan and 2014 Raw Water Intake Contingency Planning efforts, your organization provided the following information regarding your Catawba-Wateree Basin intake. Please confirm that this elevation is your current withdrawal limitation based on your as-built pumping capacity, or provide any updated information. If you have a multi-level intake system, please provide context regarding what this elevation refers to.

Safe Yield - Reservoir Intake Level Evaluation (based on as-built pumping capacity)

Lake System	Entity/Source Description	Facility	Lake/River	Description	Elevation (FT MSL)[1]



Please provide your response and any questions to me and Reya Jamison (copied).
We request feedback by July 3rd.

Thank you,
Sara

Sara Yeh
Project Manager - Water Resources

HDR
555 Fayetteville Street, Suite 900
Raleigh, North Carolina 27601
D 919.900.1618 **M** 919.274.4361

sara.yeh@hdrinc.com

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Please note upcoming out-of-office dates:
June 30 – July 11

From: Kraft, Allison <akraft@mooresvillenc.gov>
Sent: Monday, June 30, 2025 9:22 AM
To: Yeh, Sara; Hammons, Todd
Cc: Jamison, Reya
Subject: RE: CWWMG: Intake Elev - Mooresville

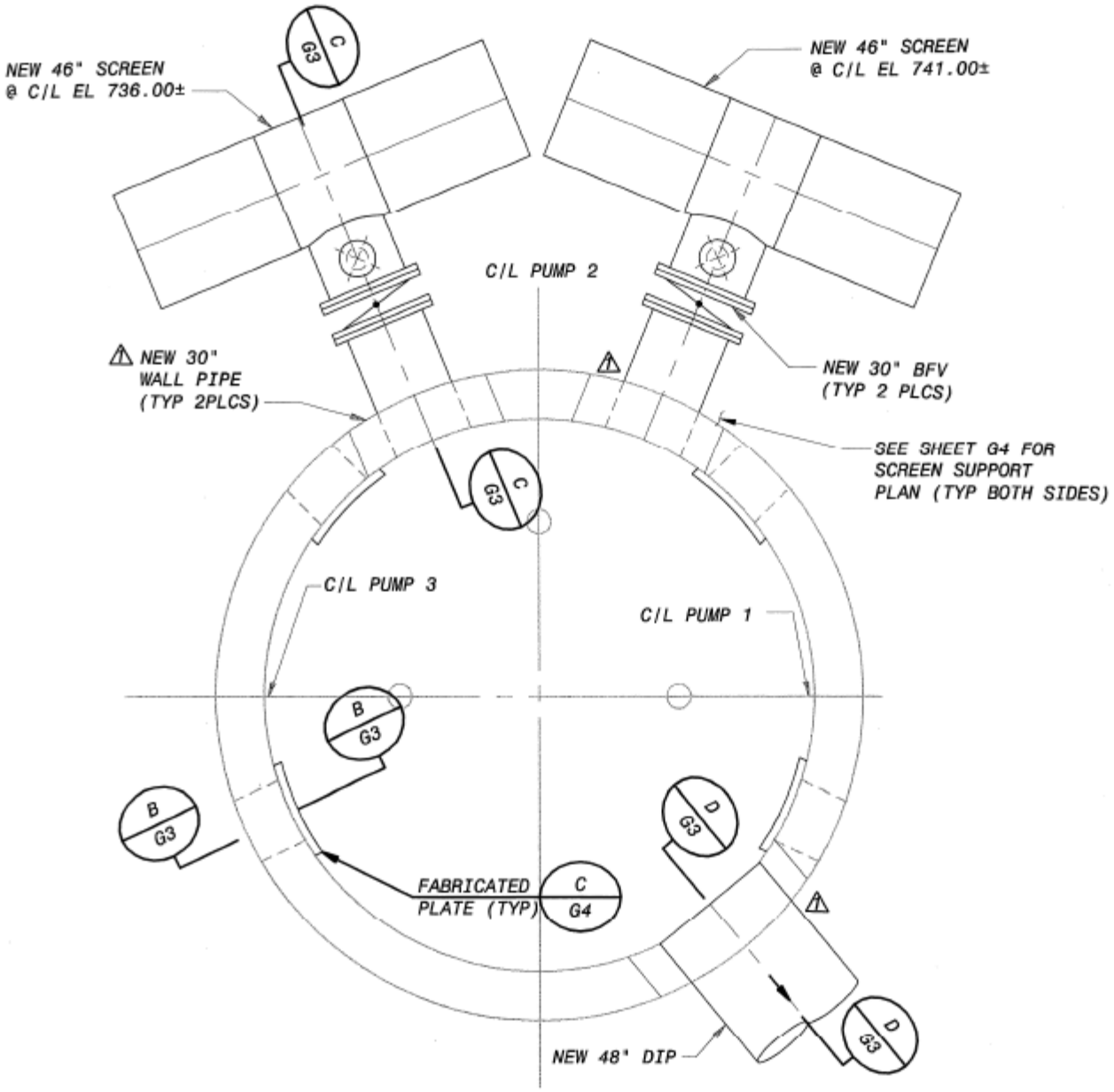
You don't often get email from akraft@mooresvillenc.gov. Learn why this is important

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Sara,

The highest of two screen on our intake structure has a centerline elevation of 741', and the lower is 736'. We've never done a hydraulic study (at least not to my knowledge) to verify capacity of just one screen at a future higher pumping rate to know if we could comfortably go without the top screen. But I'd be ok with using the top of the upper screen as the minimum level for the time being. I think it would be wise to find a place in the IWRP, maybe an appendix, to include these types of qualifiers.

Thanks,
Allison



EXISTING INTAKE STRUCTURE MODIFICATIONS PLAN
@ EL 741.00
1/4" = 1'-0"

Allison Kraft
Water Resources Director | PE
2523 Charlotte Highway Mooresville, NC 28117
Office: 704-799-4066
Department: Public Services Administration
www.mooresvillenc.gov

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From: Yeh, Sara <Sara.Yeh@hdrinc.com>
Sent: Tuesday, June 24, 2025 12:38 PM
To: Kraft, Allison <akraft@mooresvillenc.gov>; Hammons, Todd <chammons@mooresvillenc.gov>
Cc: Jamison, Reya <Reya.Jamison@hdrinc.com>
Subject: [EXTERNAL] CWWMG: Intake Elev - Mooresville

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Good afternoon,

During the 2014/15 CWWMG Water Supply Master Plan and 2014 Raw Water Intake Contingency Planning efforts, your organization provided the following information regarding your Catawba-Wateree Basin intake. Please confirm that this elevation is your current withdrawal limitation based on your as-built pumping capacity, or provide any updated information. If you have a multi-level intake system, please provide context regarding what this elevation refers to.

Safe Yield - Reservoir Intake Level Evaluation (based on as-built pumping capacity)

Lake System	Entity/Source Description	Facility	Lake/River	Description	Elevation (FT MSL)[1]

Please provide your response and any questions to me and Reya Jamison (copied).
We request feedback by July 3rd.

Thank you,
Sara

Sara Yeh
Project Manager - Water Resources

HDR
555 Fayetteville Street, Suite 900
Raleigh, North Carolina 27601
D 919.900.1618 **M** 919.274.4361

sara.yeh@hdrinc.com

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Please note upcoming out-of-office dates:
June 30 – July 11

From: Boris, Brad <BBoris@morgantonnc.gov>
Sent: Tuesday, July 1, 2025 7:34 AM
To: Yeh, Sara; Michael Griffin
Cc: Jamison, Reya
Subject: RE: CWWMG: Intake Elev - Morganton

You don't often get email from bboris@morgantonnc.gov. Learn why this is important

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

This information is correct.

From: Yeh, Sara <Sara.Yeh@hdrinc.com>
Sent: Tuesday, June 24, 2025 12:24 PM
To: Boris, Brad <BBoris@morgantonnc.gov>; Griffin, Micheal <MGriffin@morgantonnc.gov>
Cc: Jamison, Reya <Reya.Jamison@hdrinc.com>
Subject: CWWMG: Intake Elev - Morganton

⚠ THIS EMAIL ORIGINATED FROM OUTSIDE THE CITY ⚠
CAUTION: Don't be quick to click! We're counting on you! This email is from an external sender! Don't click on links or open attachments from unknown sources. If you know this is spam delete the message. If you believe this message is a phish attack or you are unsure what to do, contact IRMS @ mis@morgantonnc.gov.

Good afternoon,

During the 2014/15 CWWMG Water Supply Master Plan and 2014 Raw Water Intake Contingency Planning efforts, your organization provided the following information regarding your Catawba-Wateree Basin intake. Please confirm that this elevation is your current withdrawal limitation based on your as-built pumping capacity, or provide any updated information. If you have a multi-level intake system, please provide context regarding what this elevation refers to.

Safe Yield - Reservoir Intake Level Evaluation (based on as-built pumping capacity)

Lake System	Entity/Source Description	Facility	Lake/River	Description	Elevation (FT MSL)[1]	
LAKE RHODHISS						
	City of Morganton	Catawba River WTP	River	Top of Weir	1004.00	Top of w
	Full Pond Elevation			**Full Pond**	**995.10**	

Please provide your response and any questions to me and Reya Jamison (copied).
We request feedback by July 3rd.

Thank you,
Sara

Sara Yeh
Project Manager - Water Resources

HDR

555 Fayetteville Street, Suite 900
Raleigh, North Carolina 27601
D 919.900.1618 **M** 919.274.4361

sara.yeh@hdrinc.com

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Please note upcoming out-of-office dates:
June 30 – July 11

From: Jeff Womack <jeff.womack@mtholly.us>
Sent: Tuesday, June 24, 2025 2:30 PM
To: Yeh, Sara; robert.stewart
Cc: Jamison, Reya
Subject: RE: CWWMG: Intake Elev - Mt. Holly

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Sara –

Nothing has change since 2014/15 so these numbers should be the same.

Thanks & have a great day,

Jeff Womack
• Water Treatment Plant Division Manager/ORC
Office 704-822-2928 Cell 704-661-8330
jeff.womack@mtholly.us
111 Mountain Island rd. Mount Holly
mtholly.us

From: Yeh, Sara <Sara.Yeh@hdrinc.com>
Sent: Tuesday, June 24, 2025 12:27 PM
To: Womack, Jeff <jeff.womack@mtholly.us>; robert.stewart <robert.stewart@mtholly.us>
Cc: Jamison, Reya <Reya.Jamison@hdrinc.com>
Subject: CWWMG: Intake Elev - Mt. Holly

Good afternoon,

During the 2014/15 CWWMG Water Supply Master Plan and 2014 Raw Water Intake Contingency Planning efforts, your organization provided the following information regarding your Catawba-Wateree Basin intake. Please confirm that this elevation is your current withdrawal limitation based on your as-built pumping capacity, or provide any updated information. If you have a multi-level intake system, please provide context regarding what this elevation refers to.

Safe Yield - Reservoir Intake Level Evaluation (based on as-built pumping capacity)

Lake System	Entity/Source Description	Facility	Lake/River	Description	Elevation (FT MSL)[1]

MOUNTAIN ISLAND LAKE					
Full Pond Elevation			**Full Pond**	**647.50**	
Duke Energy Corporation[4]	Riverbend Steam Station	Lake	Intake	641.75	Retired
City of Mount Holly[3]	Mount Holly WTP	Lake	Intake	638.00	Pumpir

Please provide your response and any questions to me and Reya Jamison (copied).
We request feedback by July 3rd.

Thank you,
Sara

Sara Yeh
Project Manager - Water Resources

HDR
555 Fayetteville Street, Suite 900
Raleigh, North Carolina 27601
D 919.900.1618 **M** 919.274.4361

sara.yeh@hdrinc.com

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Please note upcoming out-of-office dates:
June 30 – July 11

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From: Walsh, Maurice <Maurice.Walsh@cityofrockhill.com>
Sent: Tuesday, June 24, 2025 3:31 PM
To: Yeh, Sara; Bagley, Jimmy
Cc: Jamison, Reya
Subject: Re: CWWMG: Intake Elev - Rock Hill

Follow Up Flag: Follow up
Flag Status: Flagged

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Thanks Sarah!

Maurice Walsh, PE, PWAM
Utility Engineering Manager
Utilities - Water & Sewer
City of Rock Hill
P.O. Box 11706
757 South Anderson Road (29730)
Rock Hill, South Carolina 29731-1706
o: 803-325-2676

maurice.walsh@cityofrockhill.com
www.cityofrockhill.com

Sent via the Samsung Galaxy S24

From: Yeh, Sara <Sara.Yeh@hdrinc.com>
Sent: Tuesday, June 24, 2025 12:29:53 PM
To: Bagley, Jimmy <Jimmy.Bagley@cityofrockhill.com>; Walsh, Maurice <Maurice.Walsh@cityofrockhill.com>
Cc: Jamison, Reya <Reya.Jamison@hdrinc.com>
Subject: CWWMG: Intake Elev - Rock Hill

CAUTION: not from City of Rock Hill...from Unknown Source...Beware, proceed with CAUTION

Good afternoon,

During the 2014/15 CWWMG Water Supply Master Plan and 2014 Raw Water Intake Contingency Planning efforts, your organization provided the following information regarding your Catawba-Wateree Basin intakes. Please confirm that these elevations are your current withdrawal limitations based on your as-built pumping capacity, or provide any updated information. If you have a multi-level intake system, please provide context regarding what this elevation refers to.

Safe Yield - Reservoir Intake Level Evaluation (based on as-built pumping capacity)

Lake System	Entity/Source Description	Facility	Lake/River	Description	Elevation (FT MSL)[1]	
LAKE WYLIE						
	Full Pond Elevation			**Full Pond**	**569.40**	
	Clariant Corporation[5]	Mt. Holly Plant	Lake	Intake	562.00	Estimate
	Confidential Industry[5]	Dyeing & Finishing Plant 15	Lake	Intake	561.70	Not used
	City of Belmont[5]	Belmont WTP	Lake	Intake	561.40	
	Duke Energy Corporation	Catatwba Nuclear Station	Lake	Intake	559.40	
	Siemens Westinghouse	Siemens Westinghouse	Lake	Intake	559.00	
	Rock Hill	Rock Hill WTP	Lake	Intake	555.50	Limit at

Please provide your response and any questions to me and Reya Jamison (copied).
We request feedback by July 3rd.

Thank you,
Sara

Sara Yeh
Project Manager - Water Resources

HDR
555 Fayetteville Street, Suite 900
Raleigh, North Carolina 27601
D 919.900.1618 **M** 919.274.4361

sara.yeh@hdrinc.com

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Please note upcoming out-of-office dates:
June 30 – July 11

Email correspondence along with any related attachments to and from this address may be subject to the South Carolina Freedom of Information Act and may be disclosed to third parties in accordance with applicable law.

From: Harry Hull <hhull@statesvillenc.net>
Sent: Wednesday, June 25, 2025 6:24 AM
To: Yeh, Sara; Andy Smith
Cc: Jamison, Reya
Subject: RE: CWWMG: Intake Elev - Statesville

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Looks correct to me.

Thanks

Harry Hull
Water Plant Supervisor
City of Statesville
704-878-3441
hhull@statesvillenc.net

From: Yeh, Sara <Sara.Yeh@hdrinc.com>
Sent: Tuesday, June 24, 2025 12:32 PM
To: Andy Smith <asmith@statesvillenc.net>; Harry Hull <hhull@statesvillenc.net>
Cc: Jamison, Reya <Reya.Jamison@hdrinc.com>
Subject: CWWMG: Intake Elev - Statesville

[**NOTICE:** This message originated outside of the City of Statesville mail system -- **DO NOT CLICK** on **links** or open **attachments** unless you are sure the content is safe.]

Good afternoon,

During the 2014/15 CWWMG Water Supply Master Plan and 2014 Raw Water Intake Contingency Planning efforts, your organization provided the following information regarding your Catawba-Wateree Basin intake. Please confirm that this elevation is your current withdrawal limitation based on your as-built pumping capacity, or provide any updated information. If you have a multi-level intake system, please provide context regarding what this elevation refers to.

Safe Yield - Reservoir Intake Level Evaluation (based on as-built pumping capacity)

Lake System	Entity/Source Description	Facility	Lake/River	Description	Elevation (FT MSL)[1]



Please provide your response and any questions to me and Reya Jamison (copied).
We request feedback by July 3rd.

Thank you,
Sara

Sara Yeh
Project Manager - Water Resources

HDR
555 Fayetteville Street, Suite 900
Raleigh, North Carolina 27601
D 919.900.1618 **M** 919.274.4361

sara.yeh@hdrinc.com

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Please note upcoming out-of-office dates:
June 30 – July 11

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From: Travis Williams <travis.williams@clariant.com>
Sent: Wednesday, July 9, 2025 12:35 PM
To: Yeh, Sara
Cc: Lisa King; Jamison, Reya
Subject: RE: Catawba Basin: Intake Elevation - Clariant

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Sara,

Sorry for the delayed response. As far as I know, there have been no changes since 2014. As Clariant's production plant shut down in the early 2000s, the only intake is for one onsite tenant's cooling water, replenishing the fire water pond when needed, and to help supplement water to the wastewater treatment plant during low flow periods (we essentially pull water from the river, treat it, and discharge it to help keep the wastewater plant going).

I'm heading to the site this Friday, so I can talk with the wastewater operator to see if he is aware of any additional information I can provide.

Thanks!

Travis

Travis Williams
Environmental Manager Americas

ESHA & IGSM
Strategy & Technology

Clariant Corporation | 500 E. Morehead Street, Ste. 400, Charlotte, NC 28202
Phone: +1 704 681 0998 | E-Mail: travis.williams@clariant.com
www.clariant.com

From: Yeh, Sara <Sara.Yeh@hdrinc.com>
Sent: Tuesday, June 24, 2025 4:12 PM
To: Travis Williams <travis.williams@clariant.com>
Cc: Lisa King <lisa.king@clariant.com>; Jamison, Reya <Reya.Jamison@hdrinc.com>
Subject: Catawba Basin: Intake Elevation - Clariant

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Report Suspicious

Good afternoon Travis and Lisa,

For the CW-DMAG and regional basin planning efforts, we have a list of all raw water intake elevations last compiled in 2014. Can you please confirm that this elevation is your current withdrawal limitation

based on your as-built pumping capacity, or provide any updated information? If you have a multi-level intake, please provide context regarding what this elevation refers to.

LAKE WYLIE						
Full Pond Elevation				**Full Pond**	**569.40**	
Clariant Corporation[5]	Mt. Holly Plant	Lake		Intake	562.00	Estimate

Many thanks and please reach out with any questions or feedback to myself and Reya Jamison (cc'd).
Sara

Sara Yeh
D 919.900.1618 **M** 919.274.4361

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Please note upcoming out-of-office dates:
June 30 – July 11

From: John.Bowyer <John.Bowyer@elevatetextiles.com>
Sent: Wednesday, June 25, 2025 11:59 AM
To: Yeh, Sara; Smith, John
Cc: Jamison, Reya
Subject: Re: Catawba Basin: Intake Elev - Elevate

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It is the same elevation.
I am not sure why is says, "Not Used, May Re-Activate". This is not accurate.
It is in use and has been.

John Bowyer

From: Yeh, Sara <Sara.Yeh@hdrinc.com>
Sent: Tuesday, June 24, 2025 4:41 PM
To: John.Bowyer <John.Bowyer@ElevateTextiles.com>; John.Smith <john.smith@elevatetextiles.com>
Cc: Jamison, Reya <Reya.Jamison@hdrinc.com>
Subject: [EXTERNAL] Catawba Basin: Intake Elev - Elevate

Good afternoon,

For the CW-DMAG and regional Catawba-Wateree basin planning efforts, we have a list of all raw water intake elevations last compiled in 2014. Can you please confirm that your elevation (listed as a confidential industry) is your current withdrawal limitation based on your as-built pumping capacity, or provide any updated information? If you have a multi-level intake, please provide context regarding what this elevation refers to.

Safe Yield - Reservoir Intake Level Evaluation (based on as-built pumping capacity)

Lake System	Entity/Source Description	Facility	Lake/River	Description	Elevation (FT MSL)[1]	C
LAKE WYLIE						
	Full Pond Elevation			Full Pond	569.40	
	Clariant Corporation[5]	Mt. Holly Plant	Lake	Intake	562.00	Estimate
	Confidential Industry[5]	Dyeing & Finishing Plant 15	Lake	Intake	561.70	Not used, may

Please provide your response and any questions to me and Reya Jamison (copied).
We request feedback by July 3rd.

Thank you,
Sara

Sara Yeh
Project Manager - Water Resources

HDR
555 Fayetteville Street, Suite 900
Raleigh, North Carolina 27601