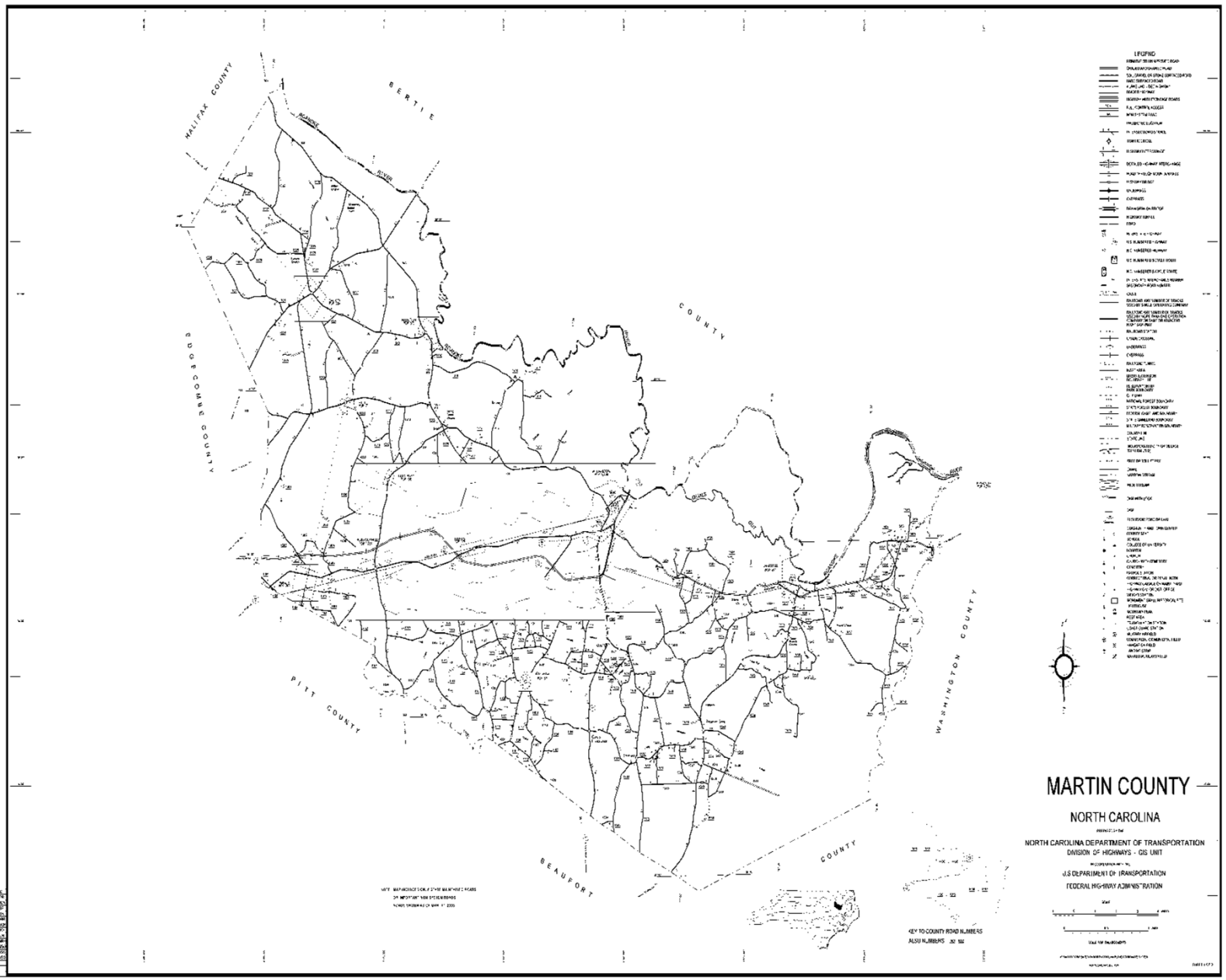
MARTIN COUNTY WATER

Ed Warren, Martin County Water Manager
305 E. Main St., PO Box 706
Williamston, NC 27892
(252) 789-4347
ewarren@martincountyncgov.com


HALIFAX COUNTY
BERTIE
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PITT COUNTY
WASHINGTON COUNTY
BEAUFORT
COUNTY
LEGEND
KEY TO COUNTY ROAD NUMBERS
ALSO NUMBERS
MARTIN COUNTY
NORTH CAROLINA
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - GIS UNIT
U.S DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

History

- Ed Warren, Water Manager since April 26, 2010
- Martin County Water and Sewer District 1 and District 2
- District 1-area north of Williamston; includes Towns of Oak City, Hassell and Gold Point, but not Hamilton.

  -Operation in 2001

  -Current Active Connections ~935
- District 2-area south of Williamston; includes Town of Bear Grass and Farm Life Community.

  -'Phase 1' Operation in 2006 with ~500 connections

  -'Phase 2' Expansion in 2010 added ~500 connections

  -'Phase 2' Add'l Expansion in 2011 will add ~80 connections

  -Current Active Connections ~885
- Other Public Water Systems within County-Town of Williamston, Town of Robersonville (Everetts & Parmele) and Town of Jamesville.

CCPCUA Permit Data for Martin Co. Water and Sewer Dist. No. 1 - Microsoft Internet Explorer

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Division of Water Resources

Central Coastal Plain Capacity Use Area Permit Data for Martin Co. Water and Sewer Dist. No. 1

Permit holder	Martin Co. Water and Sewer Dist. No. 1	Application Received	03/02/2009
Permit number	CU3079	Application Complete	
Permit status	Active	Application Public Notice	03/27/2009
County	Martin	Draft Permit Public Notice	04/17/2009
Type of Use	Public Supply	Issue Date	05/13/2009
Cretaceous Water Bank	Yes	Expiration Date	02/28/2014
Bank Start Date	08/01/2005	Date First Issued	07/27/2004

Withdrawals Subject to .0503 Reductions Approved Base Rate (in GPY):	260,610,000	Aquifer:	Kucf	No. of Wells:	4

Future Permitted Annual Withdrawal Rates (in GPY)	
August 1, 2008 through July 31, 2013	234,549,000
August 1, 2013 through July 31, 2018	208,488,000
August 1, 2018	182,427,000

Abbreviation	Aquifer
S	Surficial
Tu	Upper Tertiary
Ty	Yorktown
Tch	Castle Hayne
Tb	Beaufort
Kpd	Peedee
Kbc	Black Creek
Kucf	Upper Cape Fear
Klcf	Lower Cape Fear
Br	Basement Rock

North Carolina Aquifer Information
Ground Water Management Section web site

This permittee has filed a Local Water Supply Plan. Click here to review their plan. Access this permit holder's withdrawal data formatted for Local Water Supply Planning for all wells and individual wells.
Access any Local Water Supply Plan here.

Water Withdrawal Statistics for Martin Co. Water and Sewer Dist. No. 1 (CU3079)
Wells Subject to .0503 Reductions
August 1 through July 31 Years

Year	Year Total (gallons)	Average Day (gallons/day)	Maximum Day (gallons/day)	# of Days

CCPCUA Permit Data for Martin Co. Water and Sewer Dist. No. 1 - Microsoft Internet Explorer

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Address http://www.ncwater.org/Permits_and_Registration/Capacity_Use/Central_Coastal_Plain/ccpcuadetail.php?permit=CU3079 Go

Access any Local Water Supply Plan here.

Water Withdrawal Statistics for Martin Co. Water and Sewer Dist. No. 1 (CU3079)
Wells Subject to .0503 Reductions
August 1 through July 31 Years

Year	Year Total (gallons)	Average Day (gallons/day)	Maximum Day (gallons/day)	# of Days
8-1-2001 thru 7-31-2002	15,145,988	73,883	271,000	205
8-1-2002 thru 7-31-2003	38,949,000	109,407	374,000	356
8-1-2003 thru 7-31-2004	41,378,000	138,852	574,000	298
8-1-2004 thru 7-31-2005	49,499,000	135,986	317,000	364
8-1-2005 thru 7-31-2006	48,581,000	133,099	362,000	365
8-1-2006 thru 7-31-2007	49,964,000	137,264	274,000	364
8-1-2007 thru 7-31-2008	49,638,000	135,623	383,000	366
8-1-2008 thru 7-31-2009	55,213,000	151,268	390,000	365
8-1-2009 thru 7-31-2010	53,853,000	147,542	358,000	365
8-1-2010 thru 7-31-2011	39,221,000	143,667	363,000	273

Martin Co. Water and Sewer Dist. No. 1 (CU3079) Well Information

#	Source	Land Surface Elevation (feet)	Diameter (inches)	Pump Capacity (gallons per minute)	Pump Depth (feet)	Top Screen Depth (feet)	Bottom Screen Depth (feet)	Well Depth (feet)	Aquifer(s)	Type	.0503 Reduction Well?	Status	.0503 Zone	Production (P) or Monitoring (M) Well
1	1	63.00	12	500	234	256	296	308	Kucf	Well	yes	Existing	10	P
2	2	79.00	8	125	0	220	335	340	Kucf	Well	yes	Existing	10	P
3	Penco 1	73.00	8	340	0	220	315	320	Kucf	Well	yes	Existing	10	P
4	Penco 2	73.00	6	233	0	230	315	320	Kucf	Well	yes	Existing	10	P

pump below top of screen; pump below top of screen and top of aquifer; pump below top of aquifer

Return to the Central Coastal Plain Capacity Use Area Web Page

CCPCUA Permit Data for Martin Co. Water and Sewer Dist. No. 2 - Microsoft Internet Explorer

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Address http://www.ncwater.org/Permits_and_Registration/Capacity_Use/Central_Coastal_Plain/ccpcuadetail.php?permit=CU1129 Go

Central Coastal Plain Capacity Use Area Permit Data for Martin Co. Water and Sewer Dist. No. 2

Permit holder	Martin Co. Water and Sewer Dist. No. 2		Application Received	06/30/2011
Permit number	CU1129		Application Complete	
Permit status	Application Incomplete		Application Public Notice	
County	Martin		Draft Permit Public Notice	
Type of Use	Public Supply		Issue Date	
Cretaceous Water Bank	Yes		Expiration Date	06/30/2011
Bank Start Date	08/01/2005		Date First Issued	07/17/2001

Withdrawals Subject to .0503 Reductions Approved Base Rate (in GPY):	183,960,000	Aquifer:	Kbc, Kucf	No. of Wells:	2

Future Permitted Annual Withdrawal Rates (in GPY)	
August 1, 2008 through July 31, 2013	137,970,000
August 1, 2013 through July 31, 2018	91,980,000
August 1, 2018	45,990,000

Abbreviation	Aquifer
S	Surficial
Tu	Upper Tertiary
Ty	Yorktown
Tch	Castle Hayne
Tb	Beaufort
Kpd	Peedee
Kbc	Black Creek
Kucf	Upper Cape Fear
Klcf	Lower Cape Fear
Br	Basement Rock

North Carolina Aquifer Information
Ground Water Management Section web site

This permittee has filed a Local Water Supply Plan. Click here to review their plan. Access this permit holder's withdrawal data formatted for Local Water Supply Planning for all wells and individual wells.
Access any Local Water Supply Plan here.

Water Withdrawal Statistics for Martin Co. Water and Sewer Dist. No. 2 (CU1129)
Wells Subject to .0503 Reductions
August 1 through July 31 Years

Year	Year Total (gallons)	Average Day (gallons/day)	Maximum Day (gallons/day)	# of Days

CCPCUA Permit Data for Martin Co. Water and Sewer Dist. No. 2 - Microsoft Internet Explorer
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Water Withdrawal Statistics for Martin Co. Water and Sewer Dist. No. 2 (CU1129)
Wells Subject to .0503 Reductions
August 1 through July 31 Years

Year	Year Total (gallons)	Average Day (gallons/day)	Maximum Day (gallons/day)	# of Days
8-1-1996 thru 7-31-1997	1,050,702	58,372	69,200	18
8-1-1997 thru 7-31-1998	1,853,189	54,506	70,975	34
8-1-1999 thru 7-31-2000	2,035,880	39,152	47,337	52
8-1-2005 thru 7-31-2006	12,362,000	71,457	317,000	173
8-1-2006 thru 7-31-2007	26,075,000	71,635	340,000	364
8-1-2007 thru 7-31-2008	23,548,000	65,230	233,000	361
8-1-2008 thru 7-31-2009	33,003,000	90,917	486,000	363
8-1-2009 thru 7-31-2010	37,889,000	103,805	469,000	365
8-1-2010 thru 7-31-2011	40,518,000	148,418	625,000	273

ABR Calculation

Year	Rule .0503	Year Total (gallons)	Average Day (gallons/day)	Maximum Day (gallons/day)	# of Days
8-1-1999 thru 7-31-2000	yes	2,035,880	39,152	47,337	52
1997	yes	2,113,191	52,830	69,200	40

Martin Co. Water and Sewer Dist. No. 2 (CU1129) Well Information

#	Source	Land Surface Elevation (feet)	Diameter (inches)	Pump Capacity (gallons per minute)	Pump Depth (feet)	Top Screen Depth (feet)	Bottom Screen Depth (feet)	Well Depth (feet)	Aquifer(s)	Type	.0503 Reduction Well?	Status	.0503 Zone	Production (P) or Monitoring (M) Well
1	1	65.00	12	600	0	400	439	453	Kucf	Well	yes	Existing	25	P
2	2	59.00	6	100	0	248	302	307	Kbc	Well	yes	Existing	25	P

pump below top of screen; pump below top of screen and top of aquifer; pump below top of aquifer

Return to the Central Coastal Plain Capacity Use Area Web Page

2010 District 1 Flow Data From LWSP On DWR Website

Local Water Supply Planning - North Carolina Division of Water Resources - Microsoft Internet Explorer

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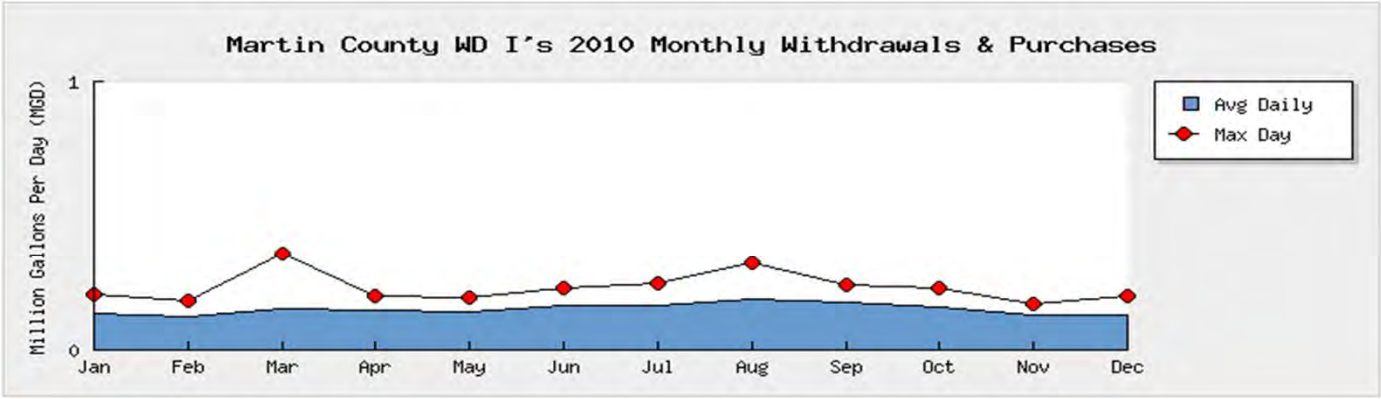
Address http://www.ncwater.org/Water_Supply_Planning/Local_Water_Supply_Plan/report.php?pwsid=60-59-003 Go Links

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	0.133	0.203	May	0.143	0.194	Sep	0.174	0.242
Feb	0.125	0.182	Jun	0.165	0.228	Oct	0.156	0.230
Mar	0.152	0.358	Jul	0.165	0.249	Nov	0.132	0.173
Apr	0.149	0.201	Aug	0.190	0.323	Dec	0.132	0.200



Ground Water Sources

Name or Number	Average Daily Withdrawal (MGD)		Max Day Withdrawal (MGD)	12-Hour Supply (MGD)	CUA Reduction	Year Offline	Use Type
	MGD	Days Used					
Hassell	0.151	365	0.358	0.432	CUA25		Regular

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2010 District 2 Flow Data From LWSP On DWR Website

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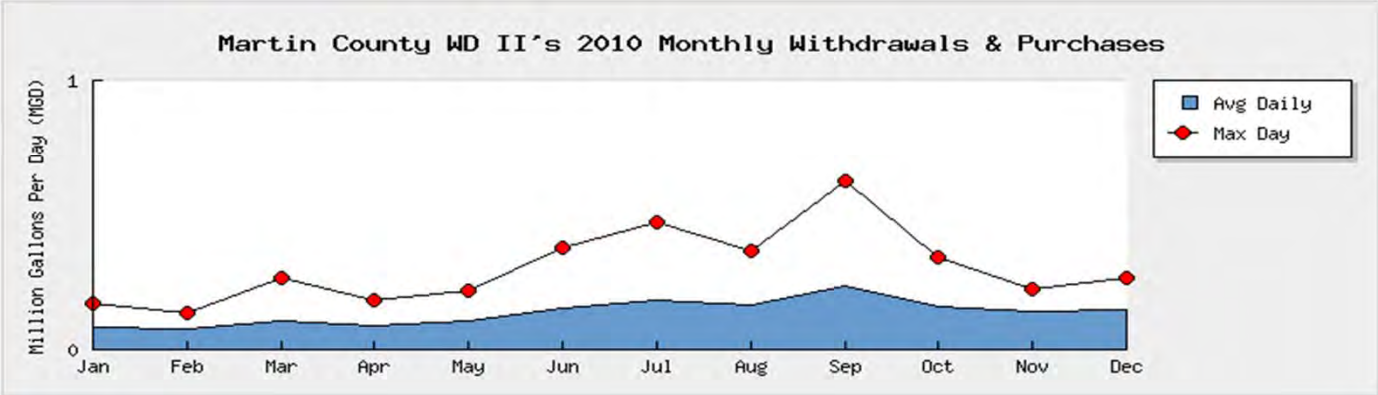
Address http://www.ncwater.org/Water_Supply_Planning/Local_Water_Supply_Plan/report.php?pwsid=60-59-009&year=2010 Go Links

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	0.080	0.173	May	0.107	0.216	Sep	0.234	0.625
Feb	0.075	0.136	Jun	0.155	0.377	Oct	0.161	0.344
Mar	0.103	0.266	Jul	0.183	0.469	Nov	0.143	0.224
Apr	0.089	0.185	Aug	0.167	0.367	Dec	0.148	0.266

NOTE January through May usage reflects Phase I customer usage and limited construction usage. June through August usage reflects Phase I customer usage and significant construction usage and flushing. September through October usage reflects significant construction usage and flushing, pre-startup flushing, increasing connections numbers and operational flushing. November through December usage reflects expected normal operations with the number of connections increased to the 750 to 825 range.



Ground Water Sources

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Meeting the CCPCUA Reductions

- The Wooten Company completed the 'Martin County Water Resources Plan' in March 2005
- December 2007, 'Martin County Rural Water and Sewer Authority'(MCRWASA) officially chartered-Martin County and Town of Williamston are current members
- Current Activities of MCRWASA

  -Plan and construct interconnection from Town of Robersonville-planned completion 2012;

  -Plan and construct new water supply well (Penco 1&2) in Martin County District 1-planned completion 2012;

  -Plan and construct 2.0 MGD Surface Water Treatment Plant-planned completion 2015;

Martin County Drought Issues

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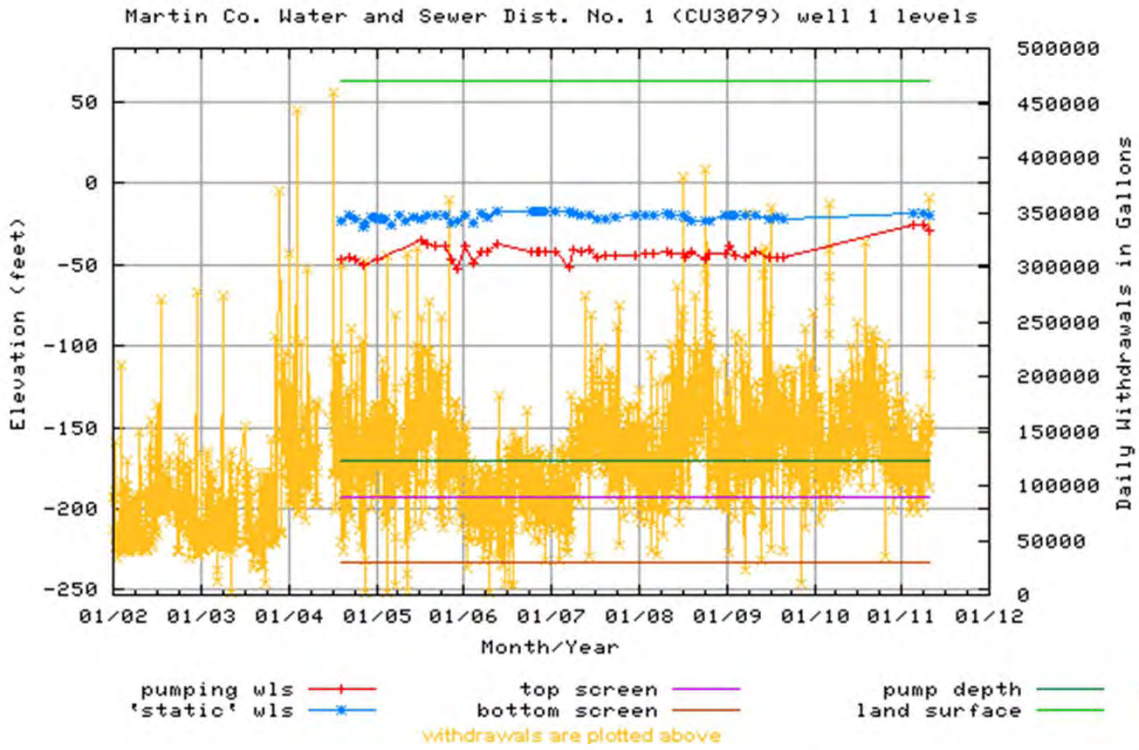
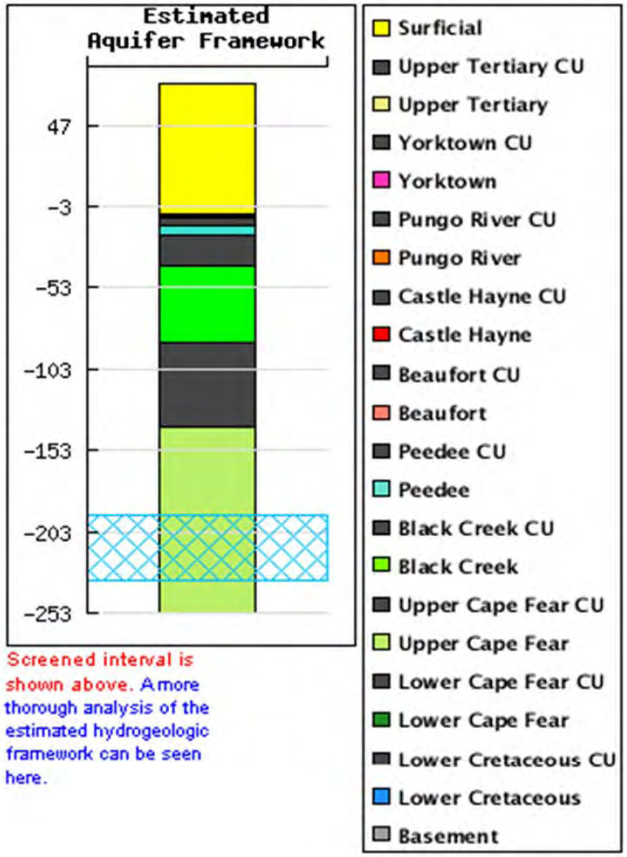
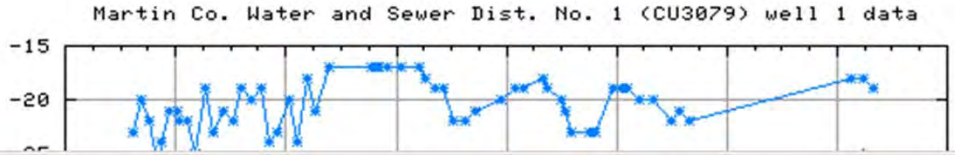




Screened interval is shown above. A more thorough analysis of the estimated hydrogeologic framework can be seen here.

View Static Data View Pumping Data View Usage Data



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CCPCUA Permit Holder Water Level Plot - Microsoft Internet Explorer

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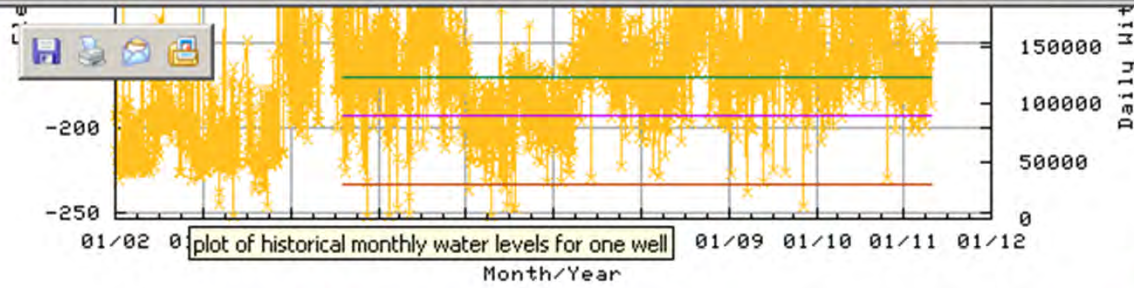

plot of historical monthly water levels for one well

pumping wls
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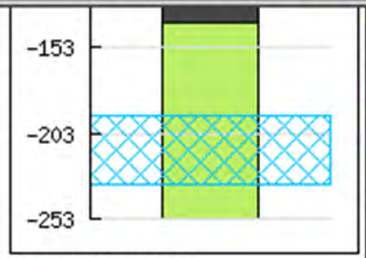
top screen
bottom screen
pump depth
land surface

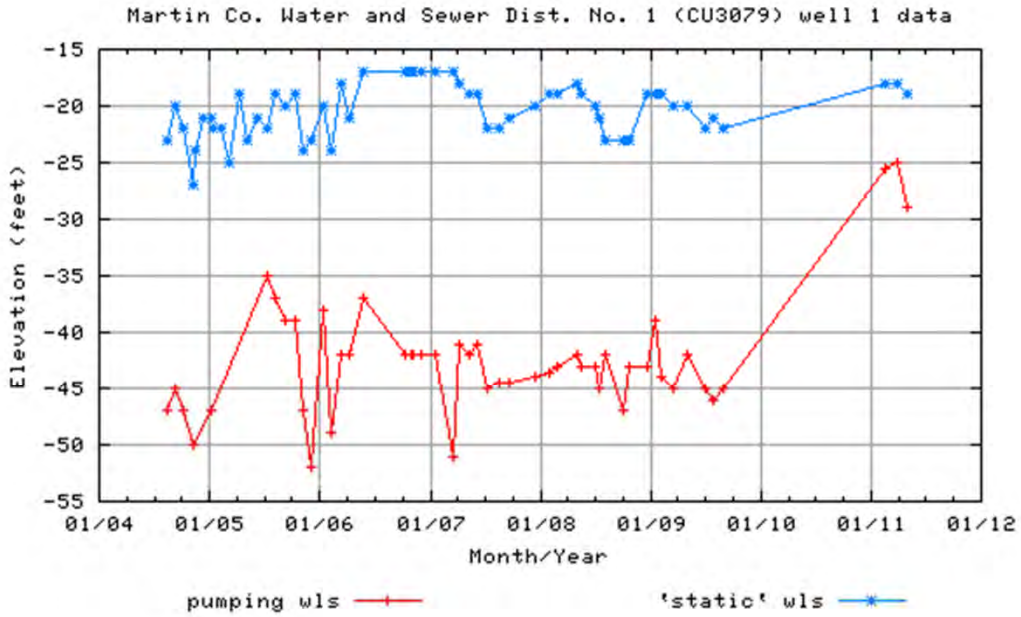
withdrawals are plotted above



Screened interval is shown above. A more thorough analysis of the estimated hydrogeologic framework can be seen here.

- Peedee CU
- Peedee
- Black Creek CU
- Black Creek
- Upper Cape Fear CU
- Upper Cape Fear
- Lower Cape Fear CU
- Lower Cape Fear
- Lower Cretaceous CU
- Lower Cretaceous
- Basement

View Static Data View Pumping Data View Usage Data



CCPCUA Permit Holder Water Level Plot - Microsoft Internet Explorer

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Division of Water Resources

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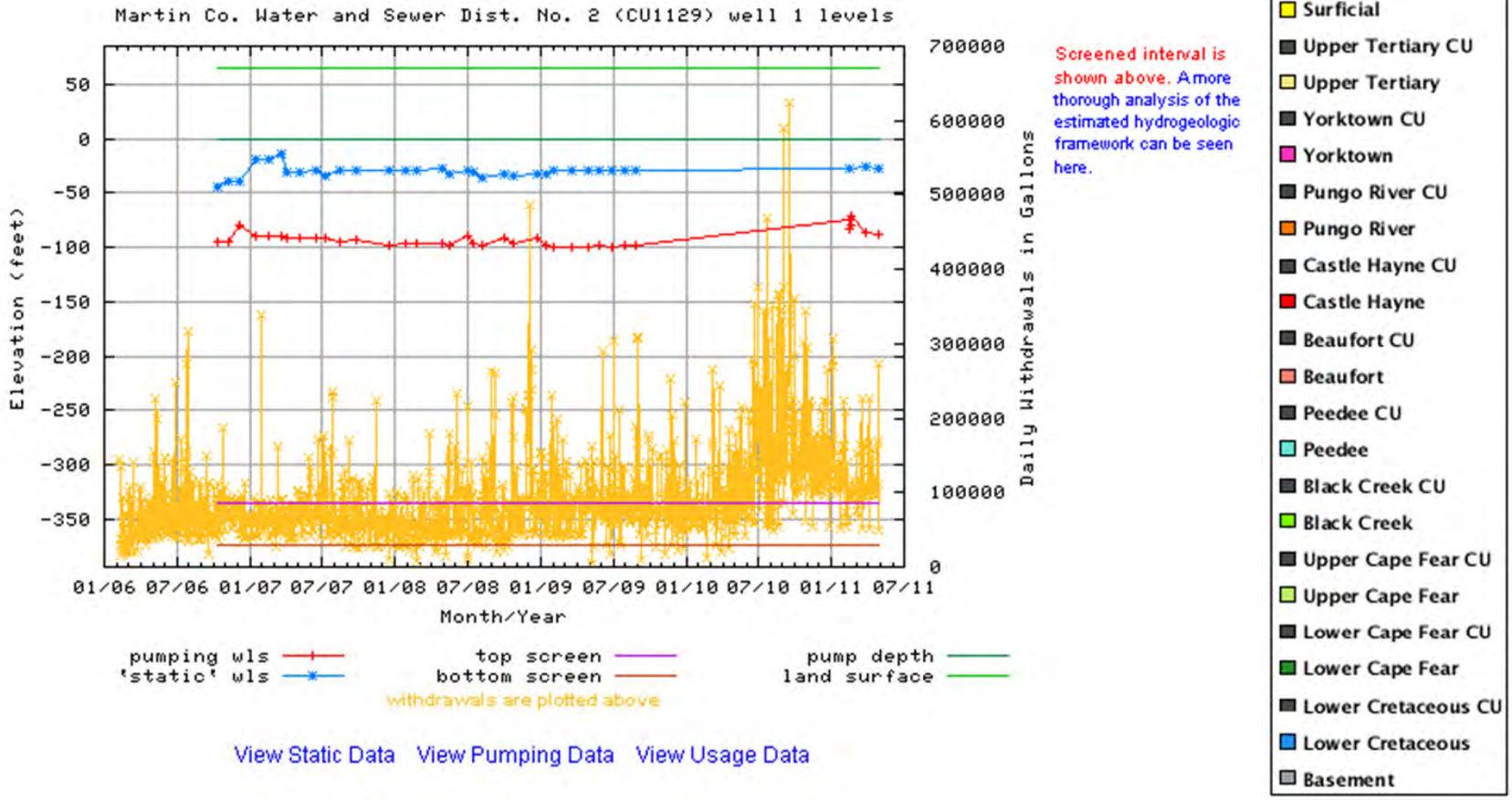
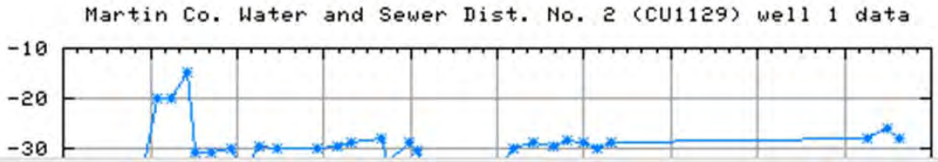


Screened interval is shown above. A more thorough analysis of the estimated hydrogeologic framework can be seen here.

- Surficial
- Upper Tertiary CU
- Upper Tertiary
- Yorktown CU
- Yorktown
- Pungo River CU
- Pungo River
- Castle Hayne CU
- Castle Hayne
- Beaufort CU
- Beaufort
- Peedee CU
- Peedee
- Black Creek CU
- Black Creek
- Upper Cape Fear CU
- Upper Cape Fear
- Lower Cape Fear CU
- Lower Cape Fear
- Lower Cretaceous CU
- Lower Cretaceous
- Basement

View Static Data View Pumping Data View Usage Data



CCPCUA Permit Holder Water Level Plot - Microsoft Internet Explorer

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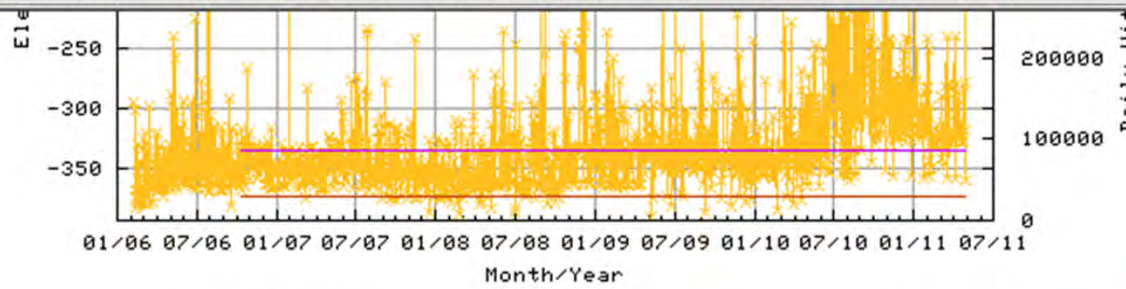
Address http://ncwater.org/Permits_and_Registration/Capacity_Use/Central_Coastal_Plain/detailcualevel.php?permit=CU1129&name=Martin*Co.*Water*and*Sewer*Dist.*No.*28 Go



pumping wls
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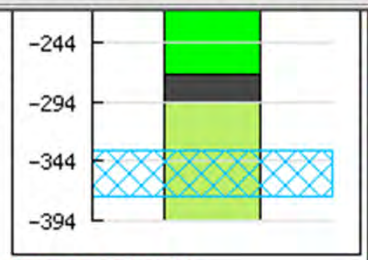
top screen
bottom screen
pump depth
land surface

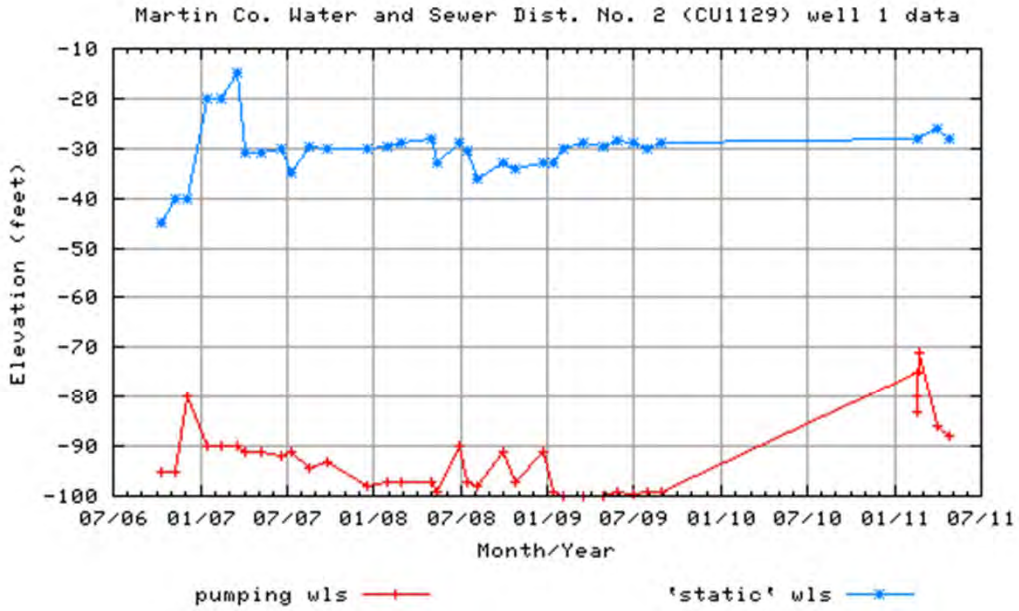
withdrawals are plotted above



Screened interval is shown above. A more thorough analysis of the estimated hydrogeologic framework can be seen here.

- Beaufort
- Peedee CU
- Peedee
- Black Creek CU
- Black Creek
- Upper Cape Fear CU
- Upper Cape Fear
- Lower Cape Fear CU
- Lower Cape Fear
- Lower Cretaceous CU
- Lower Cretaceous
- Basement

View Static Data View Pumping Data View Usage Data



NC Division of Water Resources, DENR - 1611 Mail Service Center - Raleigh, NC 27699-1611
Phone: (919)733-4064 - Fax: (919)733-3558

Last Modified: 05.17.2

Water Shortage Response Plan

Martin County Water and Sewer Districts 1 & 2 Board of Commissioners approved and adopted on May 11, 2011

IV. Triggers

Martin County WD I water source is groundwater. The following measurements of well pumping times and well levels in relationship to pump intake levels trigger entry into corresponding water restriction stages.

Stage	Well Operating Conditions
1	Pumping Time >10 hrs 20% reduction in seasonal normal distance from static water level and pump intake 20% increase pumping time for same output
2	Pumping Time >12 hrs 40% reduction in distance from static water level and pump intake 40% increase pumping time for same output
3	Pumping Time >14 hrs 60% reduction in distance from static water level and pump intake 60% increase pumping time for same output
4	Pumping Time >20 hrs 80% reduction in distance from static water level and pump intake
5	Water level at pump intake elevation

III. Levels of Response

Five levels of water shortage response are outlined in the table below. The five levels of water shortage response are: **voluntary** reductions, **mandatory** reductions **I** and **II**, **emergency** reductions and **water rationing**. A detailed description of each response level and corresponding water reduction measures follow below.

Stage	Response	Description
1	Voluntary Reductions	Water users are encouraged to reduce their water use and improve water use efficiency; however, no penalties apply for noncompliance. Water supply conditions indicate a potential for shortage.
2	Mandatory Reductions I	Water users must abide by required water use reduction and efficiency measures; penalties apply for noncompliance. Water supply conditions are significantly lower than the seasonal norm and water shortage conditions are expected to persist.
3	Mandatory Reductions II	Same as in Stage 2
4	Emergency Reductions	Water supply conditions are substantially diminished and pose an imminent threat to human health or environmental integrity.
5	Water Rationing	Water supply conditions are substantially diminished and remaining supplies must be allocated to preserve human health and environmental integrity.

- In Stage 1**, Voluntary Reductions**, all water users will be **asked to reduce** their normal water use by **5%** below their 12 month average for the preceding calendar year. Customer education and outreach programs will encourage water conservation and efficiency measures including: irrigating landscapes a maximum of one inch per week; preventing water waste, runoff and watering impervious surfaces; watering plants deeply to encourage root growth; washing only full loads in clothes and dishwashers; using spring-loaded nozzles on garden hoses; and identifying and repairing all water leaks.

- In Stage 2, **Mandatory Reductions I**, all customers are **expected to reduce** their water use by **10%** below their 12 month average for the preceding calendar year. In addition to **continuing to encourage all voluntary reduction actions**, the **following restrictions apply**: irrigation is limited to a half inch per week between 8PM and 8AM; outdoor use of drinking water for washing impervious surfaces is prohibited; and all testing and training purposes requiring drinking water (e.g. fire protection) will be limited.

- In Stage 3, **Mandatory Reductions II**, customers must continue actions from all previous stages and **further reduce water use by 20%** below their 12 month average for the preceding calendar year. All non-essential uses of drinking water are banned and garden and landscape irrigation must be reduced to the minimum amount necessary for survival.

- In Stage 4, **Emergency Reductions**, customers must continue all actions from previous stages and **reduce their water use by 25%** below their 12 month average for the preceding calendar year. A ban on all use of drinking water except to protect public health and safety is implemented and a **drought surcharge of 1.5 times** the normal water rate applies.

- The goal of Stage 5, **Water Rationing**, is to provide drinking water to protect public health (e.g. residences, residential health care facilities and correctional facilities). In Stage 5, all customers are **only permitted to use water at the minimum required for public health protection. Firefighting is the only allowable outdoor water use. Drought surcharges increase to 2 times the normal water rate.**

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