

HILTON HEAD PUBLIC SERVICE DISTRICT
21 OAK PARK DRIVE– POST OFFICE BOX 21264
HILTON HEAD ISLAND, SOUTH CAROLINA 29925
TELEPHONE 843-681-5525 – FAX 843-681-5052

SEPTEMBER 2024 AGENDA PACKET CONTENTS

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15. Charts, Graphs and Water Quality Report



Agenda

HILTON HEAD PUBLIC SERVICE DISTRICT

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www.hhpsd.com

AGENDA

Hilton Head Public Service District Commission

8 a.m.

September 18, 2024

PSD Community Room

21 Oak Park Drive, Hilton Head Island, SC 29926

- I. Call to Order & Freedom of Information Act Announcement
- II. Pledge of Allegiance
- III. Roll Call of Commissioners
- IV. Public Comment on Non-Agenda Items
- V. Adoption of Draft Minutes of the August 28, 2024, Regular Meeting
- VI. General Obligation Debt Private Placement Bids (Action)
- VII. Draft Drought Management Plan and Drought Response Regulation Update
- VIII. U.S. 278 Corridor Project Update
- IX. General Manager's Monthly Report
- X. Executive Session
 - A. Under S.C. Code 30-4-70(2) ("Discussion of negotiations...") – Purchased Water Agreements
 - B. Under S.C. Code 30-4-70("...receipt of legal advice...") – Purchased Water Pipeline
- XI. Possible Action by Commission Concerning Matters Discussed in Executive Session
- XII. Adjournment

***Public Comment will be taken before Commission vote on any action item.**



Draft Minutes

HILTON HEAD NO.1 PUBLIC SERVICE DISTRICT

21 OAK PARK DRIVE – POST OFFICE BOX 21264
HILTON HEAD ISLAND, SOUTH CAROLINA 29925
TELEPHONE 843-681-5525 – FAX 843-681-5052

MINUTES COMMISSION MEETING AUGUST 28, 2024

I. The meeting was called to order by Chairman Frank Turano at 9:00 a.m.

II. Those in attendance were:

Mr. Frank Turano	Chair
Mr. Jerry Cutrer	Vice Chair
Mr. Stuart Bell	Treasurer
Mrs. Patti Soltys	Secretary
Mr. Andy Paterno	Commissioner
Mr. Ibrahim Abdul-Malik	Commissioner
Mr. Michael Marks	Commissioner

Present by request:

Mr. Pete Nardi	General Manager
Mr. Bill Davis	Operations Manager
Ms. Amy Graybill	Finance Manager
Mr. Lawrence Flynn	Pope Flynn
Ms. Amy Victor (via Zoom)	First Tryon Advisors
Ms. Connie Whitehead	Commission Recording Secretary

Visitors

None

III. Pledge of Allegiance

The Pledge of Allegiance was led by Mr. Frank Turano

IV. Public Comment on Non-Agenda Items

None

V. Adoption of Draft Minutes of the July 24, 2024, Commission Meeting

Action

- Mr. Paterno moved to adopt the minutes of the July 24, 2024, meeting as presented. Mr. Cutrer seconded. The motion passed unanimously.

VI. Long-Term Financial Planning

Key Discussion Points

- Ms. Graybill presented a memo on the PSD's long-term financial planning for review and discussion. A copy is included in the agenda packet.

VII. S.C. Infrastructure Investment and American Rescue Plan Act Projects

A. S.C. Drinking Water State Revolving Fund Loan Approval

Key Discussion Points

- During the February board meeting, the board approved applying for a loan from the State Revolving Fund to defray the engineering costs related to the (i) design and expansion of the District's existing reverse osmosis system and aquifer storage and recovery facilities (ASR) number 2, (ii) design and construction of the Leg O Mutton Booster Pump project and (iii) other necessary appurtenances to the projects listed above in an amount not exceeding \$2,589,929.
- Bond counsel and staff have completed all of the application processes and are currently working to close the SRF loan, in the form of the Series 2024A GO Bond, in an amount not exceeding \$2,589,929. The term of the loan is 20 years with an interest rate of 2.10%. Closing is scheduled for Aug. 30, 2024.
- Staff presented for board consideration a draft resolution authorizing the issuance, execution and delivery of the 2024A GO Bond in the amount of \$2,589,929 to fund the projects.

Action

- Mr. Cutrer moved to adopt the resolution approving the financing of the water system improvements by Hilton Head PSD through the borrowing of not exceeding \$2,589,929 from the State Revolving Fund as presented. Mr. Bell seconded. The motion passed unanimously.

B. Wells and Mains Bid Acceptance

Key Discussion Points

- The PSD is the recipient of a \$10 million grant for two long-term water supply projects: 1) RO plant expansion; and 2) construction of a second ASR well.

- These projects have been separated into two construction contracts for bidding purposes: 1) RO Plant Expansion; and 2) Wells & Mains (which consist of RO Well #4, ASR Well #2, and Transmission Mains).
- There was one low responsible bid for the Wells & Mains Project, which came in from BRW at \$14,953,770.
- Staff recommends acceptance of the low responsible bid pending final S.C. Rural Infrastructure Authority approval of the construction contract documents.

Action

- Mrs. Soltys moved to accept the low responsible of \$14,953,770 from BRW Construction Group, LLC. Mr. Paterno seconded. The motion passed unanimously.

C. General Obligation Debt Issuance Approval

Key Discussion Points

- Ms. Amy Vitner of First Tryon Advisors presented a GO bond funding analysis. A copy is included in the agenda packet.

Action

- Mr. Cutrer moved that the Board request the GM and finance manager work with the PSD's financial advisors to issue a request for proposals for sale of GO bonds with banks and report back to the Board. Ms. Soltys seconded. The motion passed unanimously.

VIII. Financial Report

Key Discussion Points

- Ms. Graybill presented the year-to-date financials. A copy is included in the agenda packet.

IX. General Manager's Monthly Report

Key Discussion Points

- Mr. Nardi presented the GM monthly report. A copy is included in the agenda packet.
- The PSD's Water Quality Laboratory was once again recognized as a Laboratory of Excellence as part of its annual certification by the S.C. Department of Environmental Services.

X. Review of GM Evaluation Process

Key Discussion Points

- Mr. Cutrer presented for board review and discussion a memo on the GM evaluation process, as well as the memo presented in July, the Draft GM

Evaluation Template, and the Draft FY'25 GM Performance Evaluation Comments template.

- Mrs. Soltys suggested the board add “Good” as a Conclusion option on the comments template.
- The Board discussed November as the target date for the Strategic Goals and Directives review.

Action

- Mr. Cutrer moved that the board affirm the GM performance evaluation process outlined in the July 19th memo, that the Strategic Goals and Directives be reviewed at the November board meeting, and that “Good” be inserted as a Conclusion option on the evaluation comments template. Mr. Abdul-Malik seconded. The motion passed unanimously.

XI. New Business

Key Discussion Points

- Due to commissioner scheduling conflicts, the September board meeting was rescheduled to begin at 8 a.m. on September 18th, rather than 9 a.m.

XII. Adjournment

Action

- Mr. Paterno moved to adjourn the meeting. Mr. Cutrer seconded. The meeting adjourned at 11:07 a.m.



**GO Debt Private
Placement Bids**



21 Oak Park Drive
 PO Box 21264
 Hilton Head Island, SC 29925
www.hhpsd.com

To: Commissioners
 Pete Nardi, General Manager

From: Amy Graybill, Finance Manager

Subject: GO Debt Bank Loan Bid RFP

Date: September 18, 2024

Introduction

At the August 28, 2024, Commission meeting, the Commission directed staff and the District’s financial advisors to prepare a bank loan RFP to solicit bids for a private bank loan sale of the \$20,400,000 General Obligation Bond, Series 2024B. An official notice of sale was prepared and sent directly to 43 different banks that participate in the South Carolina market on August 30, 2024. Additionally, a summary notice of sale was published in The Post and Courier on Monday, September 9, 2024. To elicit maximum response, the NOS requested rates for 15 years and/or 20 years, with no prepayment penalty and/or any prepayment structure that would result in the lowest interest rate. All options will be presented to the Commission for review and consideration.

Discussion

As discussed at the August meeting, the NOS response date was set for noon on September 17, 2024 so the analysis of the bids and identification of the most advantageous bidder will not be available to provide to the Commission until the day of the meeting. To help with the analysis, please find below some additional comparison information based on a range of potential interest rates that may be received from the bank RFP compared to the public sale estimates provided at the August meeting:

	Difference between Public and Private at the following Private Sale Interest Rates:			
	3.75%	4.00%	4.25%	4.50%
Interest Rate on 20 Year Private Bank Loan				
Anticipated Diff. between Public and Private	\$ 741,232	\$ 1,388,373	\$ 2,036,647	\$ 2,684,354
Less: Lower Issuance Cost for Private Sale	(150,000)	(150,000)	(150,000)	(150,000)
Net Difference between Public and Private	\$ 591,232	\$ 1,238,373	\$ 1,886,647	\$ 2,534,354
Present Value of Diff. at 4% Discount Rate	\$ 207,817	\$ 685,547	\$ 1,163,277	\$ 1,641,006
Avg Annual Higher Debt Service for Private over Public	\$ 37,062	\$ 69,419	\$ 101,832	\$ 134,218
Addtl Annual Millage Needed for Private over Public	0.08	0.16	0.23	0.31
Annual Addtl Tax on a \$1,000,000 Primary Home	\$ 3.39	\$ 6.35	\$ 9.32	\$ 12.29
Total Addtl Tax over 20 yrs on a \$1,000,000 Primary Home	\$ 67.85	\$ 127.08	\$ 186.42	\$ 245.71

Staff considers greater prepayment flexibility the largest benefit of a private sale over a public sale. With a prepayable private sale, if interest rates drop within the first 10 years, the debt could be refinanced to a lower rate which would ultimately cost taxpayers less money on this borrowing and free up additional debt service for other GO projects. A public sale is not callable for 10 years so the District would not be able to take advantage of lower interest rates and/or restructure for better cash flow for at least 10 years. However, if rates do not drop enough to make a refinancing financially viable, the public sale option is expected to cost less over the life of the Bond; this potentially lower cost is the main benefit of the public sale over the private sale.

Another important aspect to consider is timing. If one of the bank bids is selected, the District can close on this loan at the upcoming October Commission meeting. If a public sale option is selected, it will take an additional 90-100 days to close on this debt. The District will not know what rate they will get in the public market until closer to the end of that 90 days. The market is constantly changing, and the November presidential election will occur before pricing. There is no way to know if rates will improve or worsen by the time a public closing occurs.

Other ancillary benefits of a private sale include:

- Lower anticipated annual debt service needed in FY 2026 and 2027 before the District's current debt service is repaid.
- Lower issuance costs, which would allow an additional \$150,000 to go towards the needed capital projects right now.
- Less ongoing regulatory risk due to no (or limited) continuing reporting requirements. The public sale requires registration and annual reporting of prescribed metrics (which are found in the District's annual financial report) through the Electronic Municipal Market Access system platform of the Municipal Securities Rulemaking Board. Notification of certain prescribed events such as the issuance of additional debt is also required within certain time frames. Generally, private sales only require emailing a copy of the annual audited financial report to the bank.
- A public sale will require creating an official statement containing required information necessary for an investor to make an informed investment decision. The public market option also requires the District to obtain a new credit rating on the proposed series of Bonds. The rating agencies generally conduct annual monitoring check-in procedures on these debt specific ratings. The District currently has an issuer level credit rating, which is a generic overall rating of the District's credit worthiness; the ratings agencies perform less frequent monitoring of these ratings and several years may pass between less formal check ins.

The results of the NOS will give the Commission firm pricing on a prepayable bank loan to enable a decision to be made on whether to move forward with a bank placement or begin the public sale process.

Recommendation

Based on the results of the NOS, staff recommends that the Commission either:

- Approve the award of the bond to the bank bidder with the most advantageous combination of rate and prepayment terms, with an anticipated closing date of the October 23, 2024 Commission meeting.
- Direct staff and the District's professional advisors to move forward with a public sale.

Attachments – Highlights from First Tryon August Presentation (An updated comparison analysis will be provided with the most advantageous private bank bid on the date of the meeting)

Executive Summary of Results

Based on a 20-Year Scenario

	Public Sale	Bank Sale	Difference
Average Interest Rate	3.50%	4.00%	(0.50%)
Costs of Issuance/Underwriter's Discount	\$352,000	\$100,000	\$252,000
Total Debt Service	\$29,377,214	\$30,765,587	\$1,388,373
Net Project Proceeds	\$20,150,000	\$20,300,000	\$150,000
Current GO Millage	4.1 Mills	4.1 Mills	-
Estimated Mills to Support New GO Debt	1.3 Mills	1.1 Mills	0.2 Mills
Estimated Mills to Support All GO Debt	5.4 Mills	5.2 Mills	0.2 Mills
8% Capacity in 2028	\$17,752,664	\$15,343,664	(\$2,409,000)
Pre-Payment Provision	Prepayable in 10 Years	Varies; Higher Rate for more flexibility	-

Estimated Debt Service and Millage Impact

Bank Loan Approach - Estimated at 4.00%

A	B	C	D	E	F	G	H	I
Calendar Year	Existing Debt Service	SRF Debt Service	2024 GO Debt Service ¹	Total Debt Service	Value of 4.1 Mills ²	Difference (F - E)	Ending Balance	Additional Mills Required
2024	1,504,875	-	-	1,504,875	1,793,252	288,377	613,882	-
2025	1,293,094	119,193	818,267	2,230,553	1,811,184	(419,369)	194,513	0.95
2026	1,332,188	158,923	816,000	2,307,111	1,829,296	(477,815)	(283,302)	1.07
2027	1,370,594	158,923	816,000	2,345,517	1,847,589	(497,928)	(781,230)	1.10
2028	573,563	158,923	1,125,680	1,858,166	1,866,065	7,899	(773,331)	-
2029	-	158,923	1,699,080	1,858,003	1,884,725	26,722	(746,609)	-
2030	-	158,923	1,698,780	1,857,703	1,903,573	45,869	(700,740)	-
2031	-	158,923	1,698,960	1,857,883	1,922,608	64,725	(636,015)	-
2032	-	158,923	1,699,540	1,858,463	1,941,835	83,371	(552,644)	-
2033	-	158,923	1,699,460	1,858,383	1,961,253	102,869	(449,775)	-
2034	-	158,923	1,699,660	1,858,583	1,980,865	122,282	(327,493)	-
2035	-	158,923	1,699,080	1,858,003	2,000,674	142,671	(184,822)	-
2036	-	158,923	1,699,640	1,858,563	2,020,681	162,117	(22,705)	-
2037	-	158,923	1,699,260	1,858,183	2,040,888	182,704	160,000	-
2038	-	158,923	1,698,880	1,857,803	2,061,296	203,493	363,493	-
2039	-	158,923	1,699,400	1,858,323	2,081,909	223,586	587,079	-
2040	-	158,923	1,699,720	1,858,643	2,102,729	244,085	831,164	-
2041	-	158,923	1,699,760	1,858,683	2,123,756	265,072	1,096,236	-
2042	-	158,923	1,699,440	1,858,363	2,144,993	286,630	1,382,866	-
2043	-	158,923	1,699,660	1,858,583	2,166,443	307,860	1,690,726	-
2044	-	158,923	1,699,320	1,858,243	2,188,108	329,864	2,020,590	-
2045	-	39,731	-	39,731	2,209,989	2,170,258	4,190,848	-
Total:	6,074,313	3,178,469	30,765,587	40,018,368				

¹ Based on estimated current market conditions as of August 12, 2024. Assumes 3 years of principal deferral to wrap around existing GO Bond.

² Based on FY 2024 GO collections (equates to \$437,000 per mill, with 4.1 mills levied). Assumes a 1% annual growth rate for future years.

Note: Preliminary, subject to change

Estimated Debt Service and Millage Impact Public Sale Approach - Estimated at 3.50%

A	B	C	D	E	F	G	H	I
Calendar Year	Existing Debt Service	SRF Debt Service	2024 GO Debt Service ¹	Total Debt Service	Value of 4.1 Mills ²	Difference (F - E)	Ending Balance	Additional Mills Required
2024	1,504,875	-	-	1,504,875	1,793,252	288,377	613,882	-
2025	1,293,094	119,193	889,214	2,301,500	1,811,184	(490,316)	123,565	1.11
2026	1,332,188	158,923	891,000	2,382,111	1,829,296	(552,815)	(429,250)	1.24
2027	1,370,594	158,923	891,000	2,420,517	1,847,589	(572,928)	(1,002,178)	1.27
2028	573,563	158,923	1,032,375	1,764,861	1,866,065	101,204	(900,974)	-
2029	-	158,923	1,605,250	1,764,173	1,884,725	120,552	(780,422)	-
2030	-	158,923	1,602,375	1,761,298	1,903,573	142,274	(638,148)	-
2031	-	158,923	1,602,625	1,761,548	1,922,608	161,060	(477,088)	-
2032	-	158,923	1,605,750	1,764,673	1,941,835	177,161	(299,926)	-
2033	-	158,923	1,606,625	1,765,548	1,961,253	195,704	(104,222)	-
2034	-	158,923	1,605,250	1,764,173	1,980,865	216,692	112,470	-
2035	-	158,923	1,606,500	1,765,423	2,000,674	235,251	347,721	-
2036	-	158,923	1,605,250	1,764,173	2,020,681	256,507	604,228	-
2037	-	158,923	1,606,375	1,765,298	2,040,888	275,589	879,817	-
2038	-	158,923	1,604,750	1,763,673	2,061,296	297,623	1,177,440	-
2039	-	158,923	1,605,250	1,764,173	2,081,909	317,736	1,495,176	-
2040	-	158,923	1,602,750	1,761,673	2,102,729	341,055	1,836,231	-
2041	-	158,923	1,602,125	1,761,048	2,123,756	362,707	2,198,939	-
2042	-	158,923	1,603,125	1,762,048	2,144,993	382,945	2,581,884	-
2043	-	158,923	1,605,500	1,764,423	2,166,443	402,020	2,983,904	-
2044	-	158,923	1,604,125	1,763,048	2,188,108	425,059	3,408,963	-
2045	-	39,731	-	39,731	2,209,989	2,170,258	5,579,221	-
Total:	6,074,313	3,178,469	29,377,214	38,629,995				

¹ Based on estimated current market conditions as of August 12, 2024. Assumes 3 years of principal deferral to wrap around existing GO Bond.

² Based on FY 2024 GO collections (equates to \$437,000 per mill, with 4.1 mills levied). Assumes a 1% annual growth rate for future years.

Note: Preliminary, subject to change

First Tryon Advisors

SIMPLIFYING PUBLIC FINANCE

WWW.FIRSTTRYON.COM

MSRB Registrant

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The seal of the South Carolina Public Service District is a circular emblem. It features a central map of South Carolina with a river winding through it. The text "PUBLIC SERVICE DISTRICT" is arched across the top, and "SOUTH CAROLINA" is arched across the bottom. The date "EST. NOV. 1969" is positioned at the bottom center of the seal. The entire seal is rendered in a light, dotted gray color.

**Drought Mgmt Plan &
Drought Response Plan
Regulation**



(843) 681-5525
Hhpsd.com

To: All Commissioners
From: Pete Nardi, General Manager
Re: Drought Management Plan and Drought Response Regulation Update

September 9, 2024

Dear Commissioners:

The PSD is required to have a Drought Management Plan and Drought Response Regulation under the South Carolina Drought Response Act (enacted in 1985, amended in 2000). The S.C. Climatology Office is the primary state agency tasked with coordinating drought response. The office has asked all public water utilities in our state to update our drought plan and regulation. The PSD last updated its plan and regulation in 2003.

Attached for your consideration is a draft updated Drought Management Plan and Drought Response Regulation. Also attached is the PSD's 2003 plan and regulation (titled the "Drought and Water Shortage Regulations").

The Commission adopts the plan and regulation. There is no deadline to do so, nor is there a requirement to do so. However, the update is a best practice that staff believes is necessary and appropriate to consider at this time.

As always, please do not hesitate to contact me with any questions.

Best regards,

A handwritten signature in black ink, appearing to read "P. Nardi", with a small flourish at the end.

Pete Nardi
General Manager
Hilton Head PSD
(843) 305-0638
pnardi@hhpsd.com

DRAFT

**HILTON HEAD No. 1 PUBLIC SERVICE DISTRICT
DROUGHT MANAGEMENT PLAN AND
DROUGHT RESPONSE REGULATION**

Whereas, Hilton Head No. 1 Public Service District (the “District”) was created as a body politic and corporate pursuant to the provisions of Act No. 596 of the Acts and Joint Resolutions of the General Assembly of the State of South Carolina for the year 1969 (“Act No. 596”), as amended by Act No. 686 of the Acts and Joint Resolutions of the General Assembly of the State of South Carolina for the year 1971 (“Act No. 686”) and by Act No. 1738 of the Acts and Joint Resolutions of the General Assembly of the State of South Carolina for the year 1972 (“Act No. 1738”), all of which are collectively referred to herein as the Enabling Legislation;

Whereas, the District provides water and sewer service within that portion of Hilton Head Island within the boundaries of the District;

Whereas, drought and water shortages may occur at any time; and,

Whereas, it is prudent and desirable for Hilton Head Public Service District to have a logical set of policies and regulations to address such situations; and,

Therefore, Be It Resolved, that the Commission hereby adopts the following Drought Management Plan and Drought Response Regulation, which shall apply to all residents, private, corporate, residential, or commercial, located within the District and using or having access to its services.

Adopted this _____ day of XXXX, 2024 by the Commissioners of Hilton Head Public Service District.

Frank Turano, Chair

Patti Soltys, Secretary

TABLE OF CONTENTS

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Hilton Head Public Service District
Drought Management Plan
XXXXX, XX, 2024

I. Declaration of Purpose and Intent

The Hilton Head Public Service District (the “District”) understands the fundamental need to make efficient use of the limited and valuable water resource under its stewardship to protect the public’s health and safety and environmental integrity.

The purpose of this document is to establish a plan and procedures for managing water demand and evaluating supply options before and during a drought-related water shortage. The intent is to satisfy the requirements of the Drought Response Act of 2000 (Code of Laws of South Carolina, 1976, Section 49-23-10, et seq., as amended) with the goal of achieving the greatest public benefit from domestic water use, sanitation, and fire protection and to provide water for other purposes in an equitable manner. Therefore, the District has adopted this Drought Management Plan and Drought Response Regulation that provide the policies and the authority to fulfill this obligation.

The Drought Management Plan outlines the framework by which the District will internally prepare for water shortages.

The Drought Response Regulation provides the regulations by which the District will manage and control its customer water usage during various levels of a drought.

II. Definitions

For the purpose of these regulations, the following definitions will apply:

1. Aesthetic Water Use: Water use for ornamental or decorative purposes such as fountains, reflecting pools and waterfalls.
2. District: The Hilton Head Public Service District (d/b/a “Hilton Head PSD” or “The PSD”).
3. Commercial and Industrial Water Use: Water use integral to the production of goods and/or services by any establishment having financial profit as their primary aim.
4. Conservation: Reduction in water use to prevent depletion or waste of the resource.
5. Customer: Any person, company or organization using water directly or indirectly supplied by the District.
6. Domestic Water Use: Water use for personal needs; or for household purposes such as drinking, bathing, heating, cooking and sanitation, or for cleaning a residence, business, industry or institution.
7. Department: Means the S.C. Department of Natural Resources.
8. Drought Response Committee: A committee composed of state and local representatives created for the purpose of coordinating responses to water supply shortages within Drought Management Areas and making recommendations for action to the Department and/or the Governor. The Committee is composed of state agency representatives from the South Carolina Emergency Management Division of the

Office of the Adjutant General, South Carolina Department of Environmental Services, South Carolina Department of Agriculture, South Carolina Forestry Commission, and South Carolina Department of Natural Resources, as well as local committees representing counties, municipalities, public service districts, private water suppliers, agriculture, industry, domestic users, regional councils of government, commissions of public works, power generation facilities, special purpose districts and Soil and Water Conservation Districts.

9. Drought Indices: Topical and quantitative indicators of drought including, but not limited to, sustained decline in water levels of natural flowing streams and other natural bodies of water, decline in water tables above and below ground, forest fire indices, sustained decline in potable drinking water supplies, agricultural stress, low soil moisture, and low precipitation. The Department, through regulation, establishes specific numerical values for the indices that define each level of drought. The table below shows the drought indicators quantified for the four drought severity levels as specified in the S.C. Drought Response Act supporting regulations. *Please note: the top six indices listed below have self-referencing numerical values that correspond to drought phase. The stream flow and groundwater level indices are based on site-specific statistics that would be evaluated by the Drought Response Committee when conditions warrant.

INDICATOR	DROUGHT PHASE			
	INCIPIENT	MODERATE	SEVERE	EXTREME
PALMER DROUGHT SEVERITY INDEX (PDSI)	-0.50 to -1.49	-1.50 to -2.99	-3.00 to -3.99	≤ -4.00
CROP MOISTURE INDEX (CMI)	0.00 to -1.49	-1.50 to 2.99	-3.00 to -3.99	≤ -4.00
STANDARD PRECIPITATION INDEX (SPI)	0.00 to -0.99	-1.00 to -1.49	-3.00 to -3.99	≤ -2.00
KEETCH-BYRUM DROUGHT INDEX (KBDI)	300 to 399	400 to 499	500 to 699	≥ 700
U.S. DROUGHT MONITOR (USDM)	D0	D1	D2	≥ D3
AVERAGE DAILY STREAMFLOW	111%-120% of the minimum flow for 2 consecutive weeks (CW)	101%-110% of the minimum flow for 2 CW	Between the minimum flow and 90% of the minimum flow for 2 CW	≤ 90% of the minimum flow for 2 CW
GROUNDWATER STATIC LEVEL IN AQUIFER	between 11-20ft above trigger level for 2 consecutive months (CM)	between 1-10ft above trigger level for 2 CM	between trigger level and 10ft below for 2 CM	≤ 10ft below the trigger level for 2 CM

10. Drought Alert Phases: There are four drought alert phases to be determined by the Drought Response Committee for the State of South Carolina. The four phases are:

- 1) **Incipient Drought** means that there is a threat of a drought as demonstrated by drought indices. The incipient drought phase shall initiate in-house mobilization by department personnel and the Drought Response Committee. The Department shall routinely monitor the climatic variables, streamflow, and water levels in potable drinking water supplies and water levels in the above and below ground water tables and lakes, and shall notify the Drought Response Committee and relevant federal, state, and local agencies that a portion of the State is experiencing an incipient drought condition. The Department must increase monitoring activities to identify a change in existing conditions.
- 2) **Moderate Drought** means that there is an increasing threat of a drought as demonstrated by drought indices. Statements must be released to the news media by the Department, and appropriate agencies must accelerate monitoring activities.
- 3) **Severe Drought** means that the drought has increased to severe levels as demonstrated by drought indices. This phase must be verified utilizing data, forecasts, and outlooks from various agencies. A drought of this severity normally requires an official declaration by the Department and water withdrawals and use restrictions.
- 4) **Extreme Drought** means that the drought has increased to extreme levels as demonstrated by drought indices. The Department shall continue to evaluate information from various sources. Upon confirmation of an Extreme Drought Alert Phase, the Drought Response Committee may recommend that the Governor issue a public statement that an extreme drought situation exists, and that appropriate water-use and withdrawal restrictions be imposed.

11. Drought Response Management Areas: There are four drought management areas (“DMAs”) corresponding to the major river basins in South Carolina. The four areas are:

- 1) West or Savannah
- 2) Central or Santee
- 3) Northeast or Pee Dee
- 4) Southern or Ashepoo, Combahee, and Edisto.

The District is located in the West or Savannah DMA. In order to prevent overly broad response to drought conditions, drought response measures shall be considered within individual drought management areas or within individual counties, as applicable.

12. River Basin Council: The S.C. Department of Natural Resources has designated eight river basin planning areas and associated River Basin Councils under the S.C. State Water Planning Framework. **The District is located in the Lower Savannah-Salkehatchie River Basin.**

13. Essential Water Use: water used specifically for fire fighting and to satisfy federal, state, or local public health and safety requirements.

14. Finished Water: water distributed for use after treatment. The terms “water use,” “water user,” and “water customer” refer to finished water use unless otherwise defined.

15. Institutional Water Use: water used by government, public and private educational institutions, churches and places of worship, and other lands, building and organizations within the public domain.
16. Irrigation Water Use: water used to maintain gardens, trees, lawns, shrubs, flowers, athletic fields, rights-of-way and medians.
17. Non-essential Water Use: categories of water use other than Essential Water Use. Examples of non-essential water use include but are not limited to landscape irrigation, decorative fountains, filling swimming pools, washing vehicles, washing buildings and parking lots.
18. Residential Equivalent Unit (REU): An equivalency unit defined to be equal to one single-family residence. The District's allocated water capacity equals **450 gallons per day per REU**.
19. S.C. Department of Natural Resources: The state agency with primacy to implement the provisions of the Drought Response Act.
20. Water Supply Shortage: Lack of adequate available water to meet normal demands.

III. Drought Management Plan

A. Introduction

To ensure that the District adequately manages its water system during drought-related conditions, an organized plan is necessary for system operation and reliability, proper communications, effective coordination and ultimate allocation of water use. Prior planning will complement the District's ability to respond to drought conditions and to enforce the related Regulation.

B. Designation of Water System Drought Response Representative

Administering a Drought Management Plan requires the skills needed to undertake a comprehensive public information program and the judgement required to deal with equity issues arising from enforcement of a mandatory program. Someone who has these skills will be selected by the water system to manage the water system's program and serve as the principal contact for the news media as the water system's Drought Response Representative. The Drought Response Representative for the District is:

Pete Nardi
General Manager
Hilton Head Public Service District
P.O. Box 21264
Hilton Head Island, SC 29925
(843) 681-5525
info@hhpsd.com

C. Description of Water System Layout, Water Sources, Capacities and Yields

The District is located in the West or Savannah Drought Response Management Area of South Carolina. **The District serves approximately 25,500** people in the north- and mid-island areas of Hilton Head Island, S.C. Its service area comprises Windmill Harbour in unincorporated Beaufort County, all of the Historic Gullah

Neighborhoods of Baygall, Big Hill, Stoney, Chaplin, Gardner, Grassland, Jarvis, Jonesville, Little Stoney, Marshland, Mitchelville, Spanish Wells, and Squire Pope, the large-scale subdivisions of Hilton Head Plantation including The Cypress of Hilton Head, Port Royal, Indigo Run, Palmetto Hall, Spanish Wells Plantation, the **Hilton Head Island public schools campus, Hilton Head Hospital and its Emergency Room, Hilton Head Island Airport (HHH)**, and commercial developments such as Festival Centre at Indigo Park, Northridge Plaza, and Port Royal Plaza, and major resorts such as Hilton Head Beach & Tennis, Westin Resort, and Marriott Surfwatch.

The District's water supply and distribution system has the capability to provide a maximum day demand of approximately 12.5 million gallons a day (mgd). It consists of: a 4-mgd Reverse Osmosis Drinking Water Treatment Facility treating raw water fed by three Middle Floridan Aquifer (600-ft. deep) brackish groundwater production wells; the right to purchase 4-mgd (Savannah River) on a wholesale basis from the Beaufort-Jasper Water & Sewer Authority ("BJWSA") via a 24" subaqueous drinking water transmission pipeline jointly owned by the District and Broad Creek Public Service District ("Broad Creek"); four Upper Floridan Aquifer (150-ft. deep) freshwater production wells with chloramine treatment capable of producing approximately 2.5 mgd of drinking water; an Aquifer Storage & Recovery ("ASR") Facility capable of storing approximately 260 million gallons (mg) of treated drinking water and yielding approximately 2-mgd of drinking water during recovery; five elevated storage towers and three ground storage tanks collectively capable of storing approximately 8 million gallons; multiple water distribution booster pump stations, more than 220 miles of distribution mains, more than 1,500 hydrants, and thousands of distribution main isolation valves. At the time of the adoption of this plan, the District is in the process of expanding the Reverse Osmosis plant capacity to 6-mgd via additional filtration, pumping, and construction of a fourth brackish water production well, as well as constructing a second ASR Facility that also will be capable of storing approximately 260 million gallons of treated drinking water and yielding 2-mgd of drinking water during recovery.

Broad Creek has a right to 2-mgd purchased water from BJWSA, which is delivered to Broad Creek via jointly owned infrastructure with the District that is primarily located in the District's service area. Broad Creek PSD draws its purchased water using its own pumps from the Ashmore Ground Storage Tank that is capable of holding 2 mg. The District maintains the jointly owned infrastructure in its service area. At the time of the adoption of this plan, Broad Creek was undertaking a study of interconnection with South Island Public Service District ("South Island"), including studying Broad Creek's ability to send the District water in an emergency. At the time of the adoption of this plan, Broad Creek was constructing an ASR Facility understood to be capable of storing approximately 260 mg.

D. Identification of District-Specific Drought or Water Shortage Indicators

The District has developed triggers for use during drought or demand water shortages that describe when specific phases of the Drought Response Regulation are implemented, based on demand the District is experiencing. These triggers may be used in conjunction with or independent of triggers based upon actions and/or information from the Drought Response Committee, and/or from the Lower-Savannah Salkehatchie River Basin Council. The District-Specific triggers are as follows:

Incipient Drought Phase Trigger:

1. Drought Response Committee declaration (considering droughts can be localized.)

Moderate Drought Phase Triggers:

1. Drought Response Committee declaration (considering droughts can be localized.)

2. Average daily production and purchased water exceeds 85% of total capacity for 15 consecutive days.
3. Inability of BJWSA to meet 4 mgd supply.
4. Elevated and ground storage tank levels fall below 50% of total tank capacity and unable to recover above that level within 24 hours.
5. Aquifer pumping levels at wells exceed 28 feet below the top of the well casing elevation.

Extreme Drought Phase Triggers:

1. Drought Response Committee declaration (considering droughts can be localized.)
2. Average daily water production and purchased water exceeds 95% of total capacity for 7 consecutive days.
3. Inability of BJWSA to meet 3 mgd supply.
4. Elevated and ground storage tank levels fall below 35% of total tank capacity and unable to recover above that level within 24 hours.
5. Aquifer pumping levels at wells exceed 36 feet below the top of the well casing elevation.
6. A water supply shortage deemed by the District to threaten public health and safety.

Severe Drought Phase Triggers:

1. Drought Response Committee declaration (considering droughts can be localized.)
2. Average daily water production and purchased water exceeds 100% of total capacity for 3 consecutive days.
3. Inability of BJWSA to meet 2 mgd supply.
4. Elevated and ground storage tank levels fall below 25% of total tank capacity and unable to recover above that level within 24 hours.
5. Aquifer pumping levels at wells exceed 44 feet below the top of the well casing elevation.
6. A water supply shortage deemed by the District to threaten public health and safety.

E. Cooperative Agreements and Alternative Water Supply Sources

The District recognizes that agreements with other water purveyors may be necessary for alternative water supply sources. Other agreements that strengthen conservation efforts by large users may be necessary. The District identifies the following agreements that are in place to facilitate the implementation of this Plan:

1. Purchased Water Agreement (2015) between the District and Beaufort-Jasper Water & Sewer Authority.

F. Description of Pre-Drought Planning Efforts

Before the occurrence of a water supply shortage and the need to implement the emergency provisions of the Regulation, it is important that certain pre-response measures be taken with the aim of conserving the District's source water, as well as the water distributed to customers. In regard to pre-drought planning and communications, the District has taken the following actions:

1. Identification of and updated contact information for all major water users of the system (top 10 by billed consumption). *For example:* Hilton Head Beach & Tennis; Cypress of Hilton Head; Westin Resort; Hilton Head Resort/Four Seasons; Marriott Surfwatch; Marriott Vacation Club; Fiddler's Cove; Spa at Port Royal; Marshside Owner's Association; and Island Links Resort.

2. A vigorous public education program and water-efficiency best-practice water consumption rate structure are in place. The District has extensive customer communications programs, including its website, extensive social media including water efficiency posts as part of a monthly calendarized social media program, monthly e-newsletter and e-blast contact list, quarterly bill insert newsletter, numerous news media contacts, customer workshops featuring Clemson Extension Service's "Carolina Yards" sustainable landscape program, and extensive key stakeholder contacts. The District is an original U.S. EPA WaterSense Partner Utility and has received multiple national awards from WaterSense for its social media promotions of water efficiency. Additionally, **the District utilizes an inclining-block tiered water-consumption rate structure**, which sends price signals to customers as they use more water. **The District utilizes its Advanced Metering Infrastructure ("AMI") to provide customers with a free online water consumption portal** that allows customers to see their water consumption in real-time and set alerts based upon their consumption. **The District utilizes monthly billing** as a best-practice to alert customers to their consumption and timely identify potential leaks.

Hilton Head Island can experience a range of 40 to 60% of its annual demand for public water supply related to landscape irrigation. **Town of Hilton Head Island municipal code 17-10 – Restrictions on Water Usage – establishes restrictions and penalties on the use of water for exterior landscape maintenance.** Sec. 17-10-211 restricts exterior landscape irrigation to no more than two days a week at all times, regardless of drought conditions. Sec. 17-10-313 requires a rain sensor on irrigation systems. The District's customer communications related to the efficient use of water are primarily directed toward the efficient use of water for landscape irrigation, due to that particular usage's potentially intense effect on water demand in the District. The District's initial strategy for all drought-related communications is to reduce the use of water for landscape irrigation, with the greatest potential for immediate impact coming from outreach to the identified top 10 users of water in the system as described in Sec. F. 1. of this plan.

3. The District complies with the Risk Assessment and Emergency Response Plan (ERP) requirements of the America's Water Infrastructure Act of 2018 and maintains a routinely updated ERP that may be used in the implementation of tactics outlined in the District's Drought Response Regulation.
4. The District is a member of the S.C. Water Agency Resource Network (SCWARN), through which it can request and receive emergency response assistance from other member utilities. Additionally, the four public water utilities of southern Beaufort County (the District, Broad Creek, South Island PSD, and BJWSA) all function as mutual-aid utilities for emergency response.

G. Description of Capital Planning and Investment for System Reliability and Demand Forecasting

The District updates its Master Water Plan at routine intervals, focusing on consumption trends to determine future Average Day Demand (ADD) and Maximum Day Demand (MDD). The District utilizes both consumption data and future REU potential based on permitted development and zoning in its future water supply planning/demand forecasting. District water supply planning has led to its current diverse sources of supply, including brackish groundwater treated with Reverse Osmosis (which constitutes the District's primary source of water), purchased wholesale surface water, freshwater wells, and ASR. The District's current capital program includes expansion of Reverse Osmosis capacity, additional ASR, exploration of the use of Reverse Osmosis on freshwater wells previously lost to saltwater intrusion, exploration of the use of recycled water as a saltwater intrusion barrier/indirect potable reuse ("IPR") source, and renegotiation of purchased water agreements. The District was among the first utilities in North America to implement satellite-based leak detection to optimize its water distribution system. It is a member of the prestigious Partnership for Safe Water, a peer-reviewed water distribution system optimization program.

Drought Response Regulation

XXXX, XX, 2024

A. Declaration of Policy and Authority

The objective of this Drought Response Regulation is to establish authority, policy and procedure by which the District will take the proper actions to manage water demand during a drought-related shortage. The Regulation satisfies the requirements of the Drought Response Act of 2000 and has the goal of achieving the greatest public benefit from limited supplies of water needed for domestic water use, sanitation, and fire protection and of allocating water for other purposes in an equitable manner. This Regulation outlines the actions to be taken for the conservation of water supplied by the District. These actions are directed both towards an overall reduction in water usage and the optimization of supply. To satisfy these goals, the District hereby adopts the following regulations and restrictions on the delivery and consumption of water.

This Regulation is hereby declared necessary for the protection of public health, safety and welfare and shall take effect upon its adoption by the District. If it becomes necessary to conserve water in its service area due to drought, the District is authorized to issue a proclamation (a “Proclamation”) that existing conditions prevent fulfillment of the usual water-use demands. The Proclamation is an attempt to prevent depleting the water supply to the extent that water-use for human consumption, sanitation, fire protection, and other essential needs becomes endangered. Immediately upon issuance of such a Proclamation, regulations and restrictions set forth under this Regulation shall become effective and remain in effect until the water supply shortage has ended and the Proclamation rescinded.

Water uses that are regulated or prohibited under this Regulation are considered to be non-essential and continuation of such uses during times of water supply shortages is deemed to constitute a waste of water, subjecting the offender(s) to penalties. The Drought Management Plan as outlined in Section I - III is hereby approved.

The District will utilize its extensive social media, stakeholder contacts, and local news media to disseminate information on responses to drought phases. The District’s dedicated page on www.hhpsd.com that communicates water efficiency information is <https://hhpsd.com/about-our-water/water-conservation/>

A. Incipient Drought Phase

Trigger:

1. Drought Response Committee declaration.

Goal:

1. Raise awareness of customers.

Actions:

1. Communication of Incipient Drought status on PSD website as well as social media channels. Remind customers to practice water efficiency at all times, particularly in irrigation and adherence to Town of Hilton Head Island’s irrigation ordinance.

B. Moderate Drought Phase

Triggers:

1. Drought Response Committee declaration (considering droughts can be localized.)
2. Average daily production and purchased water exceeds 85% of total capacity for 15 consecutive days.
3. Inability of BJWSA to meet 4 mgd supply.
4. Elevated and ground storage tank levels fall below 50% of total tank capacity and unable to recover above that level within 24 hours.
5. Aquifer pumping levels at wells exceed 28 feet below the top of the well casing elevation.
6. A water supply shortage deemed by the District to threaten public health and safety.

Goals:

1. **20% Reduction** of all water use.
2. Voluntary reductions from customers in the use of water for all purposes.
3. Voluntary reductions on using water during certain peak water demand periods.

Actions:

1. Issue a Proclamation to the District's customers and to the South Carolina Department of Natural Resources Drought Information Center (drought@dnr.sc.gov) that Moderate drought conditions are present.
2. Provide written notification to the South Carolina Department of Natural Resources Drought Information Center (drought@dnr.sc.gov) and routinely communicate within the service area the voluntary conservation measures that customers are requested to follow during Moderate drought conditions, including:
 - a. Reduce watering of lawns, plants, trees, gardens, shrubbery and flora on private or public property to the minimum necessary. Encourage outdoor watering to be done during off-peak hours.
 - b. Eliminate the washing down of sidewalks, walkways, driveways, parking lots, tennis courts and other hard surfaced areas;
 - c. Eliminate the washing down of buildings for purposes other than immediate fire protection;
 - d. Eliminate the flushing of gutters;
 - e. Eliminate the domestic washing of motorbikes, boats, cars, etc.;
 - f. Eliminate the use of water to maintain fountains, reflection ponds and decorative water bodies for aesthetic or scenic purposes, except where necessary to support aquatic life;
 - g. Reduce the amount of water obtained from fire hydrants for construction purposes, fire drills or for any purpose other than fire-fighting or flushing necessary to maintain water quality; and
 - h. Limit normal water use by commercial and individual customers including, but not limited to, the following:
 1. Stop serving water in addition to another beverage routinely in restaurants;
 2. Stop maintaining water levels in scenic and recreational ponds and lakes, except for the minimum amount required to support aquatic life;
 3. Intensify maintenance efforts to identify and correct water leaks in the distribution system.
 4. Cease to install new irrigation taps on the water system.

5. Continue to encourage and educate customers to comply with voluntary water conservation.
6. Stop providing any potable water for golf irrigation.

C. Severe Drought Phase

Triggers:

1. Drought Response Committee declaration (considering droughts can be localized.)
2. Average daily water production and purchased water exceeds 95% of total capacity for 7 consecutive days.
3. Inability of BJWSA to meet 3 mgd supply.
4. Elevated and ground storage tank levels fall below 35% of total tank capacity and unable to recover above that level within 24 hours.
5. Aquifer pumping levels at wells exceed 36 feet below the top of the well casing elevation.
6. A water supply shortage deemed by the District to threaten public health and safety.

Goals:

1. **40% Reduction** of all water use.
2. Voluntary reductions from customers in the use of water for all purposes.
3. Mandatory restrictions on non-essential usage and restrictions on times when certain water usage is allowed.

Actions:

1. Issue a Proclamation to the District's customers and to the South Carolina Department of Natural Resources Drought Information Center (drought@dnr.sc.gov) that Severe drought conditions are present.
2. Provide written notification to the South Carolina Department of Natural Resources Drought Information Center (drought@dnr.sc.gov) and routinely communicate within the service area the voluntary conservation measures and mandatory restrictions to be placed on the use of water supplied by the utility, including:
 - a. Control landscape irrigation by the utility's customers by staggering watering times.
 - b. Mandatory restrictions on the use of water supplied by the utility for activities including all activities described in this Regulation in Section B. 2. b-h., as well as:
 - i. Eliminate filling or maintaining public or private swimming pools.
 - c. Limit use of water by commercial and individual customers including, but not limited to, the activities listed in this Regulation in Section B 2. i., as well as:
 1. Publicize widely the penalties to be imposed for violations of mandatory restrictions and the procedures to be followed if a variance in the restrictions is requested.
 2. Expand the use of education and public relations efforts and emphasize the penalties associated with violating the mandatory restrictions.
 3. Provide written notification monthly to the South Carolina Department of Natural Resources Drought Information Center (drought@dnr.sc.gov) regarding the success of the voluntary and mandatory restrictions.
- a. Encourage all residential water customers to voluntarily reduce overall consumption to 350 gallons per REU per day. If voluntary reduction of usage is not successful, the District may, at its option, implement the following excessive use rate schedule for water, utilizing its existing inclining block rate tiers:

- Tier I (0 – 10,000 gallons) Normal Rate
- Tier II (10,001 – 20,000 gal.) 1.5 x Normal Rate
- Tier III (20,001 – 30,000 gal.) 2 x Normal Rate
- Tier IV (Above 30,000 gal.) 3 x Normal Rate

D. Extreme Drought Phase

Triggers:

1. Drought Response Committee declaration (considering droughts can be localized.)
2. Average daily water production and purchased water exceeds 100% of total capacity for 3 consecutive days.
3. Inability of BJWSA to meet 2 mgd supply.
4. Elevated and ground storage tank levels fall below 25% of total tank capacity and unable to recover above that level within 24 hours.
5. Aquifer pumping levels at wells exceed 44 feet below the top of the well casing elevation.
6. A water supply shortage deemed by the District to threaten public health and safety.

Goals:

1. **60% Reduction** of all water use.
2. Mandatory restrictions in the use of water for all purposes and on the times when certain water usage is allowed.

Actions:

1. Issue a Proclamation to the District’s customers and to the South Carolina Department of Natural Resources Drought Information Center (drought@dnr.sc.gov) that Extreme drought conditions are present.
2. Provide written notification to the South Carolina Department of Natural Resources Drought Information Center (drought@dnr.sc.gov) and routinely communicate within the service area the mandatory restrictions to be placed on the use of water supplied by the utility, including:
 - b. Eliminate landscape irrigation by the utility’s customers.
 - c. Mandatory restrictions on the use of water supplied by the utility for activities including activities described in this Regulation in Section B. 2. b-h., and Section. C. 2. c. i., as well as:
 1. Consider other conservation measures, examples of which are:
 - a. Place a moratorium on the issuance of all new water service connections and contracts for all new water main extensions. As part of the public information process, provide notice to developers of the moratorium;
 - b. Encourage all residential water customers to voluntarily reduce overall water consumption to 300 gallons per REU per day. If voluntary reduction of usage is not successful, the District may, at its option, implement the following excessive use rate schedule for water, utilizing its existing inclining block rate tiers:

- Tier I (0 - 10,000 gallons) Normal Rate
- Tier II (10,001 - 20,000 gal.) 1.5 x Normal Rate
- Tier III (20,001 – 30,000 gal.) 2 x Normal Rate
- Tier IV (Above 30,000 gal.) 3 x Normal Rate

- c. Impose a drought surcharge per 1,000 gallons of water that increases with higher usage. The general principle behind the drought surcharge is that the fee is imposed on water use in excess of normal use. The drought surcharge is a temporary fee imposed during the current water supply shortage and is not a cost-of-service based rate. The drought surcharge is temporary and will be terminated at such time as the District determines the water supply is above the trigger levels.
- d. If the conservation measures of the Regulation or Plan prove inadequate to mitigate the effects of the drought conditions or water supply availability, the District may take additional actions including, but not limited to:
 - i. Decreasing the gallon/REU limits in the different tiers; and
 - ii. Reduction of water system pressure as needed.
 - iii. Publicize widely the penalties to be imposed for violations of mandatory restrictions and the procedures to be followed if a variance in the restrictions is requested.
 - iv. Expand the use of education and public relations efforts as conducted under the Moderate and Severe drought phase and emphasize the penalties associated with violating the mandatory restrictions.
 - v. Provide written notification monthly to the South Carolina Department of Natural Resources Drought Information Center (drought@dnr.sc.gov) regarding the success of the mandatory restrictions.

E. Rationing

If a drought threatens the protection of public health and safety, the District is hereby authorized to ration water.

E. Enforcement of Restrictions

If any customer of the District fails to comply with the mandatory water use restrictions of this Regulation, the customer shall be given a written notice of such failure to comply, which cites the date of said violation, and shall be assessed surcharges in accordance with the following schedule:

- | | | |
|------------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| First violation | - | a \$100 surcharge shall be added to the customer's water bill; |
| Second violation | - | an additional \$250 surcharge shall be added to the customer's water bill; |
| Third violation | - | the customer's water service shall be shut off and restored only after payment of a surcharge of \$500 in addition to all previously assessed surcharges. |

F. Variances

Customers, who in their belief are unable to comply with the mandatory water use restrictions of this Drought Response Regulation, may petition for a variance from restrictions by filing a petition with the District within ten (10) working days after the issuance of the Proclamation requiring water use restrictions. All petitions for variance shall contain the following information:

- A. Name and address of the petitioner;
- B. Purpose of water usage;
- C. Special provision from which the petitioner is requesting relief;
- D. Detailed statement as to how the curtailment declaration adversely affects the petitioner;

- E. Description of the relief desired;
- F. Period of time for which the variance is sought;
- G. Economic value of the water use;
- H. Damage or harm to the petitioner or others if petitioner complies with the Regulation;
- I. Restrictions with which the petitioner is expected to comply and the compliance date;
- J. Steps the petitioner is taking to meet the restrictions from which the variance is sought and the expected date of compliance; and
- K. Other information as needed.

For the variance to be granted, the petitioner must demonstrate clearly that compliance with the Regulation cannot be technically accomplished during the duration of the water supply shortage without having an adverse impact upon the best interests of the community. The District is authorized to grant the request for variance. In addition, the District is authorized to grant temporary variances for existing water uses otherwise prohibited under the Regulation if it is determined that failure to grant such variances could cause an emergency condition adversely affecting health, sanitation, and fire protection for the public. No such variance shall be retroactive or otherwise justify any violation of this Regulation occurring prior to the issuance of the variance. Variances granted by the District shall include a timetable for compliance and shall expire when the water supply shortage no longer exists unless the petitioner has failed to meet specified requirements.

G. Status of the Regulation

If any portion of this Regulation is held to be unconstitutional for any reason, the remaining portions of the Drought Response Regulation shall not be affected.

The provisions of this Regulation shall prevail and control in the event of any inconsistency between this Regulation and other rules and regulations of the District.

Nothing in this Regulation shall be deemed to invalidate or be interpreted in a manner inconsistent with any covenants now in effect and given as security to holders of bonds secured by revenues of the system.

2003

Hilton Head #1 Public Service District Drought and Water Shortage Regulations

I. DECLARATION OF POLICY, PURPOSE, AND INTENT

Purpose: To achieve the greatest public benefit from domestic water use, sanitation and fire protection in times of drought or water shortage and to provide water for other purposes in an equitable manner, the Hilton Head #1 Public Service District (the District) adopts the following regulations governing the delivery and consumption of water.

These regulations are hereby declared necessary for the preservation of public health, safety and welfare and shall take effect upon their adoption by the District.

Whenever, in the judgment of the District, it becomes necessary to conserve water in the service area, due to drought or to other conditions, the Manager of the District is authorized to issue a Proclamation that existing drought conditions or other conditions prevent fulfillment of the usual water demands. Immediately upon the issuance of such a Proclamation, regulations and restrictions set forth under these Regulations shall become effective and remain in effect until the water shortage is terminated and the Proclamation rescinded.

The provisions of these regulations shall apply to all customers of the Hilton Head #1 Public Service District.

II. DEFINITIONS

For the purpose of these regulations, the following definitions shall apply:

1. Aesthetic water use: water use for ornamental or decorative purposes such as fountains, reflecting pools and waterfalls.
2. District: Hilton Head #1 Public Service District.
3. Commercial and Industrial water use: water use integral to the production of goods and/or services by any establishment having financial profit as their primary aim.
4. Conservation: reduction in water use to prevent depletion or waste of the resource.
5. Customer: any person, company or organization using water directly or indirectly supplied by Hilton Head #1 Public Service District.

6. Domestic water use: water use for personal needs; or for household purposes such as drinking, bathing, heating, cooking and sanitation, or for cleaning a residence, business, industry or institution.
7. Drought Alert Phases:
 - a. Moderate Drought: when the Palmer Index reaches the -1.50 to -2.99 range and moderate drought conditions have been verified by the best available information, and conditions indicate this situation is expected to persist.
 - b. Severe Drought: when the Palmer Index reaches the -3.00 to -3.99 range and severe drought conditions have been verified by the best available information.
 - c. Extreme Drought: when the Palmer Index reaches or falls below -4.00 and extreme drought conditions are verified by best available information.
8. Essential water use: water used specifically for fire fighting and to satisfy federal, state, or local public health and safety requirements.
9. Even numbered address: street addresses, box numbers or rural route numbers ending in 0,2,4,6,8 or letters A-M and locations without addresses.
10. Institutional water use: water used by government, public and private educational institutions, churches and places of worship, and other lands, building and organizations within the public domain.
11. Landscape water use: water used to maintain gardens, trees, lawns, shrubs, flowers, athletic fields, rights-of-way and medians.
12. Large water user: any customer using over 25,000 gal on average day.
13. Non-essential water user: all water users not defined as essential. These include but are not limited to those in Section III.
14. Odd numbered address: street addresses, box numbers, or rural route numbers ending in 1,3,5,7,9 or letters N-Z.
15. Palmer Index: a measure of the severity of a drought or a wet spell in any area. Dry conditions are associated with negative values and normal conditions have a value of zero.
16. Water shortage: lack of adequate available water to meet normal demands due to lower than normal precipitation, reduced stream flows, lowering of the

potentiometric surface in wells, mechanical failure or malfunction of water production facilities, contamination or risk of contamination of some or all of the available water supplies, or any other factor that creates a shortage of available water supply.

III. NON-ESSENTIAL WATER USE

Non-essential water use shall be curtailed during severe or extreme drought. The following are considered non-essential water use:

A. Non-Essential Residential and Institutional Water Uses:

1. Washing down sidewalks, walkways, driveways, parking lots, tennis courts or other hard surfaced areas.
2. Washing down buildings or structures for purposes other than immediate fire protection.
3. Flushing gutters or permitting water to run or accumulate in any gutter or street.
4. Washing any motorbike, motor vehicle, boat, trailer, airplane or other vehicle in public or private garages, carwashes or elsewhere.
5. Maintaining fountains, reflection ponds, and decorative water bodies for aesthetic or scenic purposes, except where necessary to support aquatic life.
6. Filling public or private swimming pools
7. Sprinkling lawns, plants, trees, and other flora on private or public property, except as otherwise provided under this Regulation or except when such sprinkling is done with treated sewage effluent.

B. Non-Essential Commercial Water Uses:

1. Serving water routinely in restaurants.
2. Increasing water levels in scenic and recreational ponds and lakes, except for the minimum amount required to support fish and wildlife.
3. Irrigating golf courses and any portion of their grounds, except as otherwise provided under this Regulation or except when such irrigation is done with treated sewage effluent.

4. Obtaining water from hydrants for construction purposes, fire drills or for any other purpose other than firefighting.
5. Serving customers who have been given a 10-day notice to repair one or more leaks and have failed to comply.
6. Expanding commercial nursery facilities, placing new irrigated agricultural land in production or planting or landscaping with new plants except when such sites are irrigated with treated sewage effluent.
7. In accordance with the water rationing provisions of Section VII, the District may declare other uses of water as non-essential.

IV: RESPONSES TO MODERATE, SEVERE AND EXTREME DROUGHT ALERT PHASES AND OTHER WATER SHORTAGES CONDITIONS

Proclamations setting forth responses to the various drought alert phases or water shortage conditions shall be made by the Commission and will be based upon drought monitoring data supplied by the South Carolina Water Resources Commission or local conditions known by the Manager of the District.

- A. Moderate Drought or Water Shortage: If conditions indicate that a persistent moderate drought condition or water shortage is present, the District shall immediately notify the Town of Hilton Head Island and major water users in the affected area by telephone and/or by letter. The District will also issue press releases concerning the drought conditions or water shortages to the news media if that is deemed necessary.
 1. Goal: The goal of the program implemented in response to a moderate drought or water shortage is to reduce average water demand by 20%.
 2. General Responses: The District will:
 - a. Institute an increased water supply system maintenance effort to identify and correct water leaks.
 - b. Encourage its customers to comply with the listed voluntary water use restrictions in all categories.
 - c. Individually contact its large commercial and institutional water users and request active conservation.
 3. Recommended Water Conservations Actions for Individual Users:

- a. Commercial and Institutional Users: Commercial and Institutional users served by the District shall implement conservation practices in order to reduce as much as possible aesthetic, domestic and landscaping water use and shall restrict or eliminate water use for water using recreational activities such as swimming pools and water slides.
- B. Severe Drought or Water Shortage: A drought or water shortage of this severity will lead to the implementation of mandatory water use restrictions. The District will contact each of its large water use customers by phone and letter in the event a severe drought or water shortage seems imminent.
1. Goal: The goal of the program implemented in response to a severe drought or water shortage is to reduce average daily water demand by 20% and peak hour demand by 30%.
 2. General Responses: The District will:
 - a. Issue a public notice of drought conditions in a newspaper of general circulation within the affected community and implement a program of radio and television public service announcements. The notice and the announcements will include a list of water use curtailment measures.
 - b. Confer regularly with all large water use customers concerning the effectiveness of the conservation program.
 - c. Require its retail customers to comply with the listed water use restrictions in all categories while severe drought conditions exist.
 - d. Individually contact its large commercial and institutional water users and require the implementation of water conservation measures.
 - e. Conduct regular and intense monitoring of water usage in its service area both by evaluating customer use records and by field inspections.
 - f. Undertake enforcement action as necessary.
 3. Water Use Restrictions
 - a. Commercial and Institutional users served by the District

shall:

- (1) Cease all non-essential water uses.
- (2) Eliminate aesthetic water use.
- (3) Reduce domestic water use to minimum levels necessary for maintaining health and safety.
- (4) Cease the use of water for filling or maintaining recreational facilities such as swimming pools and water slides.
- (5) Use only low volume hand held applicators for landscape watering, cease the use of sprinklers and other remote broadcast devices, and prevent water run-off in landscape maintenance.
- (6) Restrict landscape watering to Wednesday and Sunday for odd-numbered addresses and Tuesday and Saturday for even-numbered addresses.

b. Residential water users served water by the District shall:

- (1) Cease all non-essential water uses.
- (2) Implement conservation measures to restrict interior water use to seventy-five gallons per person per day or a maximum of 300 gallons per household per day.
- (3) Cease the filling of new swimming pools and eliminate the use of water intensive recreational devices such as water slides. Water levels may be maintained in pools, which were filled as of the date of the drought alert.
- (4) Use only low volume hand held applicators for landscape watering. Cease the use of sprinklers and other remote broadcast devices and prevent water runoff in landscape maintenance.
- (5) Restrict landscape watering to Wednesday and Sunday for odd-numbered addresses and Tuesday and Saturday for even-numbered addresses.

C. Extreme Drought or Water Shortage: The District will notify the Town of Hilton Head Island and major water users in the affected areas by

telephone and by letter and issue press releases concerning the drought conditions to the news media. **Water use restrictions imposed during extreme drought conditions are mandatory.**

1. Goal: The goal of the program implemented in response to an extreme drought or water shortage is to reduce demand for water to the lowest level consistent with public health and safety and the availability of supply.
2. General Responses: The District will:
 - a. Issue a public notice of drought conditions in a newspaper of general circulation within the affected community and implement a program of radio and television public service announcements and paid announcements. The notice and the announcements shall include a list of water use curtailment measures.
 - b. Confer frequently with all large users concerning the effectiveness of the conservation program.
 - c. Require customers to comply with the listed water use restrictions in all categories while extreme drought conditions exist.
 - d. Individually contact its large commercial and institutional and water users and require the implementation of water conservation measures. In some instances this could entail the temporary cessation of all water use.
 - e. Conduct regular and intensive monitoring of water usage in its service area both by evaluating customer use records and by field inspections.
 - f. If required, assess mandatory surcharges on water bills and set extra monies aside in the District escrow account.
 - g. Undertake enforcement action as necessary.
3. Water Use Restrictions
 - a. Commercial and Institutional water users served by the District shall:
 - (1) Cease all non-essential water uses.
 - (2) Prohibit aesthetic water uses.

- (3) Reduce domestic water use to minimum levels necessary to maintain health and safety.
 - (4) Cease filling, maintaining and operating recreational facilities such as swimming pools and water slides.
 - (5) Use only low volume hand held applicators for landscape watering. Cease the use of sprinklers and other remote broadcast devices and prevent water runoff in landscape design and maintenance.
 - (6) Restrict landscape watering to Wednesday and Saturday for odd-numbered addresses and Thursday and Sunday for even-numbered addresses.
- b. Residential water users served by the District shall:
- (1) Restrict interior water use to fifty-five gallons per person per day or a maximum of 220 gallons per household per day.
 - (2) Reduce domestic water use to minimum levels necessary to maintain health and safety.
 - (3) Cease filling or maintaining or operating recreational facilities such as swimming pools or water slides.
 - (4) Use only low volume hand held applicators for landscape watering. Cease the use of sprinklers and other remote broadcast devices, and prevent water runoff in landscape design and maintenance.
 - (5) Restrict landscape watering to Wednesday and Sunday for odd-numbered addresses and Tuesday and Saturday for even-numbered addresses.

V: NEW WATER SERVICE CONNECTIONS

In the event of severe or extreme drought or water shortage, the District will not make new taps to the system nor will it expand existing taps.

All service agreements for water service signed after the effective date of this Regulation shall contain the following statement:

“The customer understands that a water shortage or drought may occur and that in the event of such an occurrence, as declared by the appropriate officials, water use may be restricted and some users of water may be prohibited.”

VI: WATER RATES

In the event of an extreme drought or water shortage and if the Commissioners of the District find that the regulatory measures described in Section IV are not sufficient to meet the goal, the District will impose a surcharge of fifty (50) cents per 1000 gallons on its retail water rates. Funds collected as a result of such surcharges shall be placed in the Bucks For A Better Island account established by the District and shall be used to pay tap-in fees and capital contributions fees for persons who are certified by the Beaufort County Department of Social Services as unable to afford such fees.

VII: WATER RATIONING

In the event that a drought or water shortage threatens the preservation of public health and safety, the District is hereby authorized to ration water. Such rationing may require the District to cease providing water to certain large users with non-essential water uses or require that certain categorical users of water such as landscape watering be prohibited.

VIII. ENFORCEMENT

Officially designated employees of the District have the duty, and are hereby authorized to enforce the provisions of these Regulations and shall have the power and authority to issue written notices to cease and desist when violations of these Regulations occur during any declared moderate, severe or extreme drought or water shortage.

IX. PENALTIES

In the event that any retail customer of the District fails to comply with the mandatory water use restrictions of these regulations, the customer shall be notified either in person or by certified mail of the violation and shall be assessed penalties in accordance with the following schedule:

1. First violation - \$30.00 penalty shall be assessed against the customer's water bill.
2. Second violation – an additional \$50.00 penalty shall be assessed against the customer's water bill.
3. Third violation – the customer's water service shall be terminated and restored only after payment of a penalty of \$100.00 in addition to all previously assessed penalties.

The aforementioned fines and penalties may be in lieu of, or in addition to any other penalty provided by law, and upon collection, the District will place them in the escrow account mentioned in Section VI.

X. VARIANCES

Persons not capable of immediate water use reduction, or curtailment, because of equipment damage or other extreme circumstances, shall commence gradual reduction of water use within twenty-four hours of the declaration of water use curtailment/reduction and shall apply for a variance from curtailment.

Petitions shall contain the following:

- A. Name and address of the petitioner(s).
- B. Purpose of water use.
- C. Specific provision from which the petitioner is requesting relief.
- D. Detailed statement as to how the curtailment declaration adversely affects the petitioner.
- E. Description of relief desired.
- F. Period of time for which the variance is sought.
- G. Economic value of water use.
- H. Damage or harm to the petitioner or others if petitioner complies with these Regulations.
- I. Restrictions with which the petitioner is expected to comply and the compliance date.
- J. Steps the petitioner is taking to meet the restrictions from which variance is sought and the expected date of compliance.
- K. Other pertinent information.

The District shall respond to petitions for variance within five days of receipt of the petition or within twenty days of declaration of the curtailment, whichever comes first.

In order for a variance to be granted, petitioner must show one or more of the following conditions:

- A. Compliance with these Regulations cannot be technically accomplished during the water shortage.
- B. Alternative methods can be implemented which will achieve the same level of reduction in water use.

The manager of the District or his designee may, in writing, grant temporary variances for existing water uses otherwise prohibited under these regulations if it is determined that failure to grant such variances would cause an emergency condition adversely affecting health, sanitation, or fire protection for the public or the petitioner and if one or more of the aforementioned conditions is met. The Commissioners of the District shall ratify or revoke any such variance at their next scheduled meeting. Any such variance so ratified may be revoked by later action of the Commissioners of the District. No such variance shall be retroactive or otherwise justify any violation of these Regulations occurring prior to the issuance of the variance.

Variances granted by the Manager of the District or his designee shall be subject to the following conditions, unless waived or modified by the Commission:

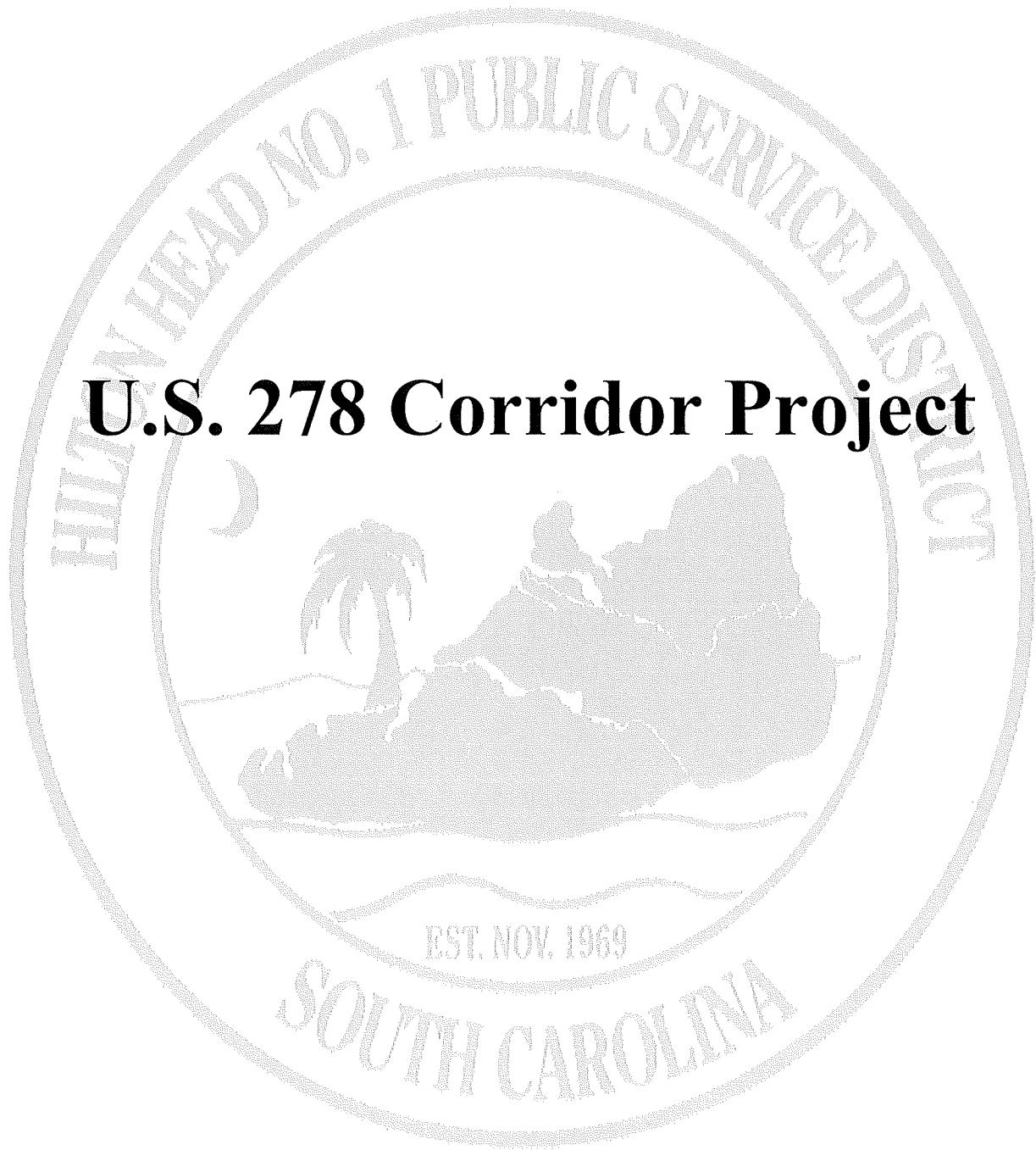
- A. Variances granted shall include a timetable for compliance.
- B. Variances granted shall expire when the water shortage no longer exists, unless the petitioner has failed to meet specified requirements.

XI. STATUS OF THE REGULATIONS

In the event that any portion of these Regulations is held to be unconstitutional for any reason, the remaining portions of the Regulations shall not be affected.

The provisions of these Regulations shall prevail and control in the event of any inconsistency between these Regulations and other rules and regulations of the District.

U.S. 278 Corridor Project





(843) 681-5525
Hhpsd.com

To: All Commissioners
From: Pete Nardi, General Manager
Re: U.S. 278 Corridor Project Update

September 9, 2024

Dear Commissioners:

Attached to this memo are plans by the S.C. DOT to conduct boring for soils sampling in the vicinity of the PSDs' drinking water transmission pipeline. The boring is proposed as part of the DOT's design planning for the U.S. 278 Corridor Project. A risk to the pipeline is indicated by the boring locations. As such, please see the **draft** letter requesting cessation of the boring.

As always, please do not hesitate to contact me with any questions.

Best regards,

A handwritten signature in blue ink, appearing to read "P. Nardi".

Pete Nardi
General Manager
Hilton Head PSD
(843) 305-0638
pnardi@hhpsd.com

US278 - Corridor Improvements

Geotechnical Borings with Existing Utilities

Goat Island



Mackay Creek

Google Earth

700 ft

US278 - Corridor Improvements

Geotechnical Borings with Existing Utilities



Mackay Creek

Pinckney Island

600 ft

US278 - Corridor Improvements

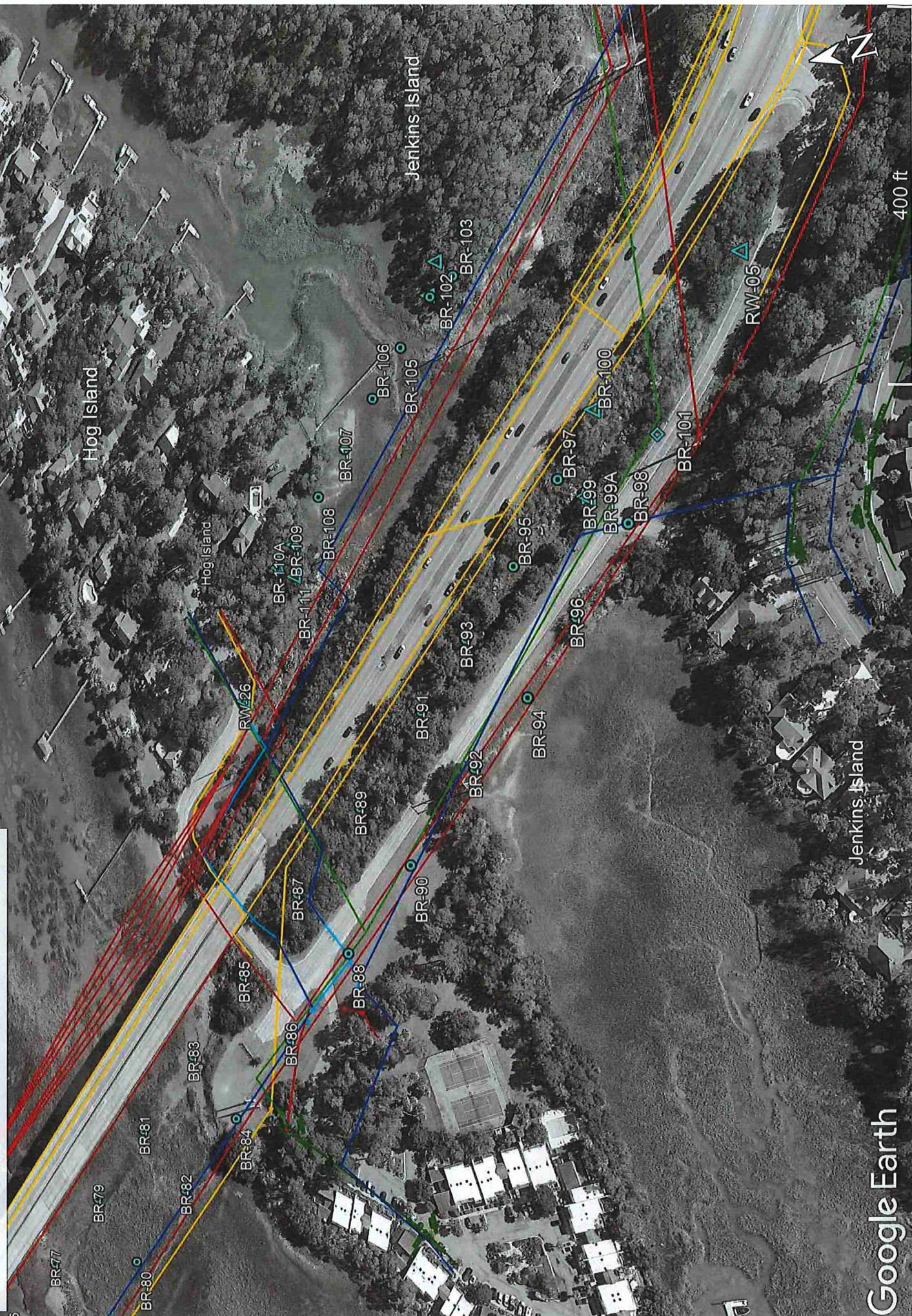
Geotechnical Borings with Existing Utilities



Skull Creek

US278 - Corridor Improvements

Geotechnical Borings with Existing Utilities





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ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

3014 Southcross Boulevard • Rock Hill, SC 29730 • Phone 803-980-6025 • Fax 803-980-6055



Subaqueous Water Main vs. Geotech Bores Meeting

US 278 Corridor Improvements
 SCDOT Project P03450
 September 6, 2024 | 1:00 PM

Attendees

<input checked="" type="checkbox"/>	Craig Winn - SCDOT	<input checked="" type="checkbox"/>	Carlos Gittens - KCI	<input checked="" type="checkbox"/>	Alan Townsend – Hussey Gay Bell (HHPD Engr.)
<input checked="" type="checkbox"/>	Eric Burgess - KCI	<input checked="" type="checkbox"/>	Emmalee Honeycutt S&ME	<input checked="" type="checkbox"/>	Jennifer Ray – BJWSA
<input checked="" type="checkbox"/>	Jared Medlin – KCI	<input checked="" type="checkbox"/>	Pete Nardi – HHPD	<input checked="" type="checkbox"/>	Andy Mattie – BJWSA
<input checked="" type="checkbox"/>	Phil Leazer – KCI	<input checked="" type="checkbox"/>	Bill Davis – HHPD	<input checked="" type="checkbox"/>	Michael Ingram - BJWSA
<input checked="" type="checkbox"/>	Eric Dickey - KCI	<input checked="" type="checkbox"/>	Shawn Colin – Town of Hilton Head	<input type="checkbox"/>	

Overview

- Gittens welcomed everyone and shared screen showing proposed borings vs. existing utility lines
- Gittens shared that preliminary borings were performed in 2019 after advance coordination with HHPD. As they were preliminary, they were shifted substantially from original locations to avoid any proximity to approximate location of subaqueous water line
- HHPD previously provided existing utility information and plan/ profile for 1990’s subaqueous water bores; HHPD has been unable to locate the subaqueous water line due to depth
- Level B SUE was previously performed by KCI locating the water line on land side near each water crossing
- Water lines shown in provided aerials combines existing information provided by HHPD back in 2019 with Level B SUE. Connecting lines between SUE located land side designations was simple straight line connection and “best-guess” as to subaqueous location at each creek crossing
- Final borings are more numerous and occur two per end bent/ bridge structure across causeways and waterways and have much less shifting flexibility due to need for reliable geotechnical data from each bore
- Honeycutt provided overview of geotechnical boring operation and explained the bores labeled “PB” would be performed using an amphibious vehicle and approximately 60-feet deep – associated with pedestrian bridge. “BR” labeled bores would be performed by barge and could be up to 140-ft deep. Timing to perform these is mid to late Sept.
- **HILTON HEAD PSD STATEMENT: THERE IS NO WAY IDENTIFIED IN THIS MEETING THAT THE**

UNDERWATER BORINGS CAN SAFELY PROCEED WITHOUT UNREASONABLY ENDANGERING THE WATER SUPPLY TO HILTON HEAD ISLAND. A SOLUTION MUST BE FOUND THAT DOES NOT IMPACT PUBLIC HEALTH AND SAFETY FOR TENS OF THOUSANDS OF LIVES, AND OUR VITAL FACILITIES SUCH AS OUR HOSPITAL AND ITS EMERGENCY ROOM, OUR PUBLIC SCHOOLS, OUR AIRPORT, AND MORE.

Discussion

- Gittens said that the location of the water line on the pdf circulated, which shows boring locations directly on top of the pipeline, was a “best interpretation” and “not accurate.”
- Nardi said any damage to the water line presents a long-lasting public safety crisis for the island, including severe risks to public health and fire safety. (The PSD service area includes the Hilton Head Medical Center and its Emergency Room, the Hilton Head Island Airport, and the Beaufort County School District public schools’ campus.)
- Nardi expressed concerns over bore proximity to the water line and bore depth, as many if not most of the bore locations are directly on top of the water line and will be at depths exceeding the depth of the water line, which is understood to be 72 feet at its deepest location under the riverbed. Shared line was installed in late 1990’s (by BJWSA) and any damage would put 2/3 of the island on drinking restrictions/rationing.
- Nardi said that given the proposed bore locations, even if the pipeline was precisely located, how could DOT proceed with the borings since the bore locations shown are right on top of the line, given this extreme risk to the island? No answer was given.
- Nardi asked why the DOT does not declare the project and thus enable the pipeline to be relocated prior to conducting this boring. Winn stated that project funding was not in place for that and that doing so would delay the project 18-24 months minimum.
- Nardi asked what margin of error is on borings? Honeycutt said that was unknown/ hard to define exact percent/ amount with water-based borings. She said a lot would depend on the barge operator.
- Nardi confirmed there is still no way to precisely locate the subaqueous portions of their line to his knowledge.
- Townsend stated that as-builts should be accurate on land. **Will send what he/ HHPSD have in PDF and CADD to Gittens by 9/10**
- Nardi asked if a temporary line (possibly 12-in diameter) could be attached to the existing bridge as an emergency water supply in case something happened during boring work and line was damaged. Gittens said structural integrity of bridge would need to be checked to see if that was possible.
- Townsend stated a 50-foot offset from assumed WM location in water could be acceptable. Winn stated variance could not be that high and more like 10-15-ft max. Honeycutt agreed.
- Winn also stated boring specifically chosen so two per bridge foundation to confirm specific soil conditions and aide in design. Too much offset/ deviation from locations increases risk to DOT and the bridge design.
- Gittens expressed concern about the location of an abandoned bore in the vicinity of the water line.
- **Gittens recommended he and Townsend get together next week to further discuss and share all information on the water line to create a revised “best estimate” of location in the water to share with everyone.**

- Leazer stressed the importance to HHPSD that obtaining the best available information concerning their facilities was primary goal to maximize success with this boring operation.

Action Items

DESCRIPTION	RESPONSIBILITY	DUE DATE	COMMENTS/ STATUS
Send Gittens all HHPSD files (PDF and CADD) concerning subaqueous lines	Townsend	9/10/24	
Send Townsend all HHPSD and Level B SUE info (PDF and CADD) concerning subaqueous lines	Gittens	9/10/24	
Have meeting to discuss water lines and determine best-fit alignment over water (and land as needed)	Gittens	9/11/24	
Review Townsend/ Gittens findings and determine allowable/ agreeable offset of borings from best-fit water line alignment	Gittens, HHPSD, DOT, KCI, S&ME	9/20/24	

Adjourn

Attachments (1): Aerial with existing utilities and proposed boring locations

cc: Meeting Attendees

These are my notes from the September 6, 2024 meeting. Please let me (carlos.gittens@kci.com) know of any changes within five (5) business days of distribution. Otherwise, these notes will be considered acceptable as written and become part of the permanent project records.



Justin Powell
Secretary of Transportation
S.C. Department of Transportation

RE: Immediate Cessation of Proposed Boring Operation, U.S. 278 Corridor Project

September 9, 2024

Dear Secretary Powell:

We are writing to demand that the S.C. Department of Transportation (SCDOT) immediately suspend its plans to conduct geotech bores for design purposes related to the U.S. 278 Corridor Project on top of the buried drinking water transmission pipeline from the mainland to Hilton Head Island. The boring operation represents an extreme risk to this critical infrastructure and any damage to the pipeline would place the island under a public safety crisis that would be long lasting.

The SCDOT has proposed to conduct geotech borings this month at locations that are directly on top of the water transmission pipeline and at depths that would exceed the depths of the pipeline, thereby creating extreme risk to the pipeline.

The pipeline is a vital component of the public infrastructure for the island. It is necessary for public health and safety, including fire protection safety. Damage to the pipeline could result in shutting down the Hilton Head Medical Center including its Emergency Room, the Hilton Head Island Airport, and all of the Beaufort County School District public schools on the island.

The SCDOT has not formally declared the U.S. 278 Corridor Project and as such has not provided the basis, including the financial basis, to allow for the relocation of the pipeline. We are requesting that the SCDOT declare the project and allow the pipeline to be relocated before any boring is conducted in the pipeline vicinity.

The extreme risk to public health and safety on the island posed by this boring operation is far too great to allow the operation to continue prior to the pipeline being relocated.

Sincerely,

Chair Frank Turano
Hilton Head PSD Commission

Mayor Alan Perry
Town of Hilton Head Island

Chair John Joseph
Broad Creek PSD Commission

Cc: S.C. State Senator Tom Davis



GM Monthly Report



To: Hilton Head PSD Commission
From: Pete Nardi, General Manager
Re: PSD Updates

September 9, 2024

Dear Commissioners, please see below the following updates:

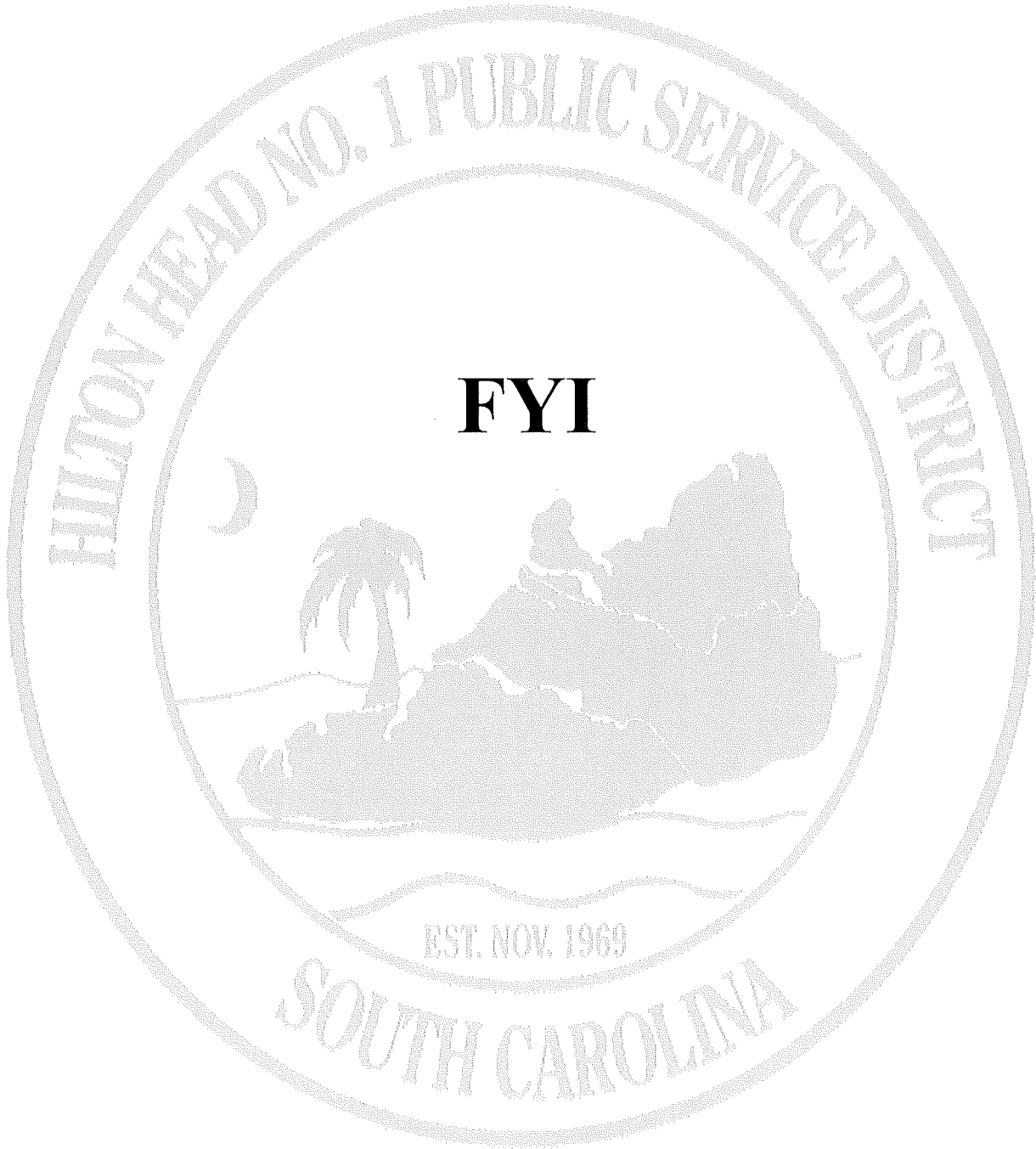
- We are experiencing demand of approx. 7-8 million gallons a day (mgd), which is normal for this time of year and prevailing weather conditions.
- The PSD has completed its Lead Service Line Inventory and submitted it to the S.C. Department of Environmental Services (DES) ahead of the October 2024 deadline imposed by the U.S. Environmental Protection Agency. **No lead service lines were found on either the PSD or customers' sides of our connections!** We utilized a combination of field investigations and building records research in verifying pipe materials on both sides of the connections. The inventory completion represented extensive work by PSD Water Quality Supervisor Sarah Hickman and the PSD Field Services Team led by Pete Schuelke and Jim Hewitt. Great job, team!
- S.C. Infrastructure Investment Program (SCIIP) Projects Update:
 - **RO Plant Expansion**
 - Contractor notice to proceed is pending.
 - **RO Well #4, ASR Well #2, and Transmission Mains**
 - Awaiting DES construction permits for ASR-2.
 - **Leg O'Mutton Water Booster Station**
 - Project is underway.
- WateReuseSC has provided DES with draft legislation that would direct the department to create recycled water regulations for our state. DES is reviewing the legislation.
- PSD hosted a group of students from Heritage Academy on Sept. 17 to learn about water resources on the island.
- I am planning to attend the 2024 AWWA WaterSmart Innovations Conference Sept. 23-27, where I have been asked to moderate multiple technical sessions as an AWWA Trustee.
- Beaufort County Councilman Larry McEllyn informed us that he read into the minutes of the County Council's Sept. 9 meeting a commendation of the PSD for once again achieving Laboratory of Excellence certification, including recognition of Sarah Hickman and PSD leadership under Commission Chair Frank Turano and General Manager Pete Nardi.

As always, please do not hesitate to contact me if you have any questions.

All my best,

J. P. Nardi

Pete Nardi
General Manager



Volunteering on the National Level

By Pete Nardi, General Manager, Hilton Head PSD
Trustee, AWWA Water Conservation Division



Serving on national committees of the American Water Works Association (AWWA) and Water Environment Federation (WEF) is a wonderful way to bring nationwide expertise and perspective back to your utility or company, promote our work on a national scale, and most importantly, give back to our industry through volunteerism. I am currently serving as a Trustee of the AWWA's Water Conservation Division and wanted to let you know that our national committees need you!

STARTING OUT

My first experience serving on a national committee was with the joint AWWA-WEF Workforce Strategies Committee more than 15 years ago. It was led by Dr. Stuart Karasik, who was the training programs manager for the City of San Diego. Our group included Dr. Manuel "Manny" Teodoro, at the time an associate professor at Texas A&M, whose work and publications have shaped national viewpoints on the water industry. The committee gave me the opportunity to gain experience from industry leaders who worked – and thought – on grand scales!

That first experience led me to stay involved on national committees. It was an honor to serve on the AWWA M5 Water Utility Management Manual Committee and be included as a contributing author of an edition of the manual. Collaborative efforts yield results that are impossible to achieve individually. The manual writing was an example of that. Contributors tailored their involvement according to their talents, interests, and abilities.

AWWA'S VOLUNTEER STRUCTURE

AWWA volunteering is organized into six different Councils, eight different Divisions, and 250 different committees. The Water Conservation Division serves under the Technical & Educational Council. The Division's mission is to increase understanding and practical implementation of water use efficiency within the water sector and all groups of water users. It develops technical programs for conferences, creates and revises manuals and handbooks, and develops policy and position statements. The three committees of the Water Conservation Division are: Communication, Education & Legislation (the "CEL"); Planning, Evaluation, & Research (the "PER"); and Water Efficiency Programs & Technology.

GUIDEBOOKS, ABSTRACTS, & RECRUITING

I was a member of the PER committee when it developed an AWWA guidebook, *Increasing Consumer Benefits & Engagement in AMI-Based Conservation Programs*. The guidebook was created as a Technical & Education Council project, where the PER committee applied for funding by the AWWA in a competitive program. It was an energizing experience to volunteer alongside national water conservation "rock stars" like Michelle Maddaus of Maddaus Water Management and Karen Guz of San Antonio Water System. We were fortunate to have Nicole Bates and Mt. Pleasant Water Works participate as a case study for the

ARDURRA FEATURE PROJECT

ALBANY ANNUAL PIPE REHAB PROGRAM

City of Albany, GA

Part of overall program to separate combined sewer and stormwater system in Albany

ARPA and SPLOST funding assistance

Five phase project to install a liner that increases structural integrity and extends the lifespan of pipes for another 50 years

Phase 1 includes 4,440 LF of 24", 16,360 LF of 30" sewer mains, and fifty-seven 60" diameter manholes

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Volunteering on the National Level

guidebook, which brought a South Carolina success story to the national project!

Veronica Blette of the US EPA's WaterSense program is the inspiring Chair of the Water Conservation Division. She encouraged me to apply to serve as a Division Trustee, particularly to represent our southeastern utilities. As a Trustee, I have helped review the abstracts and select the presentations that will be given at this year's WaterSmart Innovations, which will be on September 24-26 in Las Vegas. I also serve on the CEL, liaison with our Division's committees, and recruit utilities for Division case studies and water professionals for committee memberships.

HELP WANTED

We are seeking new members for both the CEL and Water Efficiency Programs & Technology committees. The CEL committee is working with the Alliance for Water Efficiency on water conservation related legislation, developing resources to train utility staff who are new to water conservation programs, and helping to market our AWWA manuals, standards, and educational materials, among other activities. The Water Efficiency Programs & Technology committee is finding opportunities to coordinate the needs of utilities with those of academic research programs, specifically focusing on outdoor water use and land grant universities. It also engages

in development, implementation, and evaluation of water efficiency products, standards, and best-management practices, among other efforts.

If I could achieve one thing during my time as Division Trustee, it would be to bring more of our excellent SC water professionals' voices into these national conversations and initiatives. Utilities, companies, and communities in our state have risen to many challenges in the water conservation and efficiency arena and our input is needed and desired nationwide. Please email me at pnardi@hhpsd.com or AWWA staff member Casey Rodriguez at crodriguez@awwa.org to learn more.



Pete Nardi is the General Manager of Hilton Head Public Service District (PSD). He has been with the PSD for more than 20 years and has served as GM since 2015.

LINKS

- AWWA AMI Guidebook: www.awwa.org/portals/0/awwa/ets/resources/technical%20reports/ami_guidebook_feb_2022.pdf
- WaterSmart Innovations: www.awwa.org/events-education/watersmart-innovations ■

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SC Operations Challenge Competitors Represent US in International Competition

By Jenny Craft, Journal Editor

If you follow Operations Challenge – WEF’s skills competition for wastewater operators – then you know South Carolina is on the map, so to speak. Our Ops Challenge competition at SCEC, known as the “Brawl at the Beach,” is one of the top regional competitions, attracting teams from across the country. Mount Pleasant Waterworks’ *Controlled Chaos* is a three-time Division 1 national champion, and several WEASC members are involved on the national level as volunteer judges and event coordinators.

So it should come as no surprise that WEASC competitors made a big showing at the World Water Skills event in Munich, Germany, in May. Four teams from the US competed in the international event, and each team included at least one member from South Carolina.

World Water Skills is similar to Operations Challenge, but with different events and two-person teams instead of four. It’s held during IFAT, an international trade fair for environmental technologies held every other year in Germany.

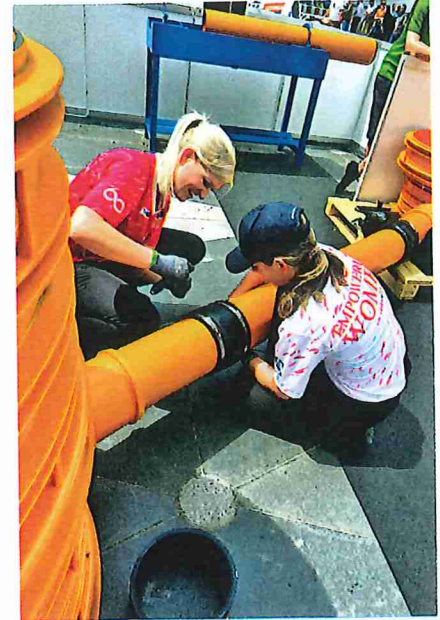
WEF sends two teams to represent the US at each World Water Skills event, and this year, both teams included a WEASC member – Sarah Hickman of Hilton Head PSD and Rory Byrne with Mount Pleasant Waterworks.

In addition to the WEF teams, members of Mount Pleasant’s *Controlled Chaos* also competed, but as two separate teams to fit the two-person team format of the competition. Troy Newton and Patrick Ross competed as team *CCI*, and Kevin Ganley and Tyler Waterhouse were team *CC2*.

“It’s a great honor to represent WEF,” said Sarah Hickman, who is a long-time Ops Challenge competitor, state judge, and now Division 1 national judge. “It’s a once-in-a-lifetime experience. It was great to be around so many talented people who want to excel in the industry and take pride in their work and helping others.”



Sarah Hickman and Lindie Aragon competing in the Process Control event. They finished first place in the event.



Sarah Hickman and Lindie Aragon in the sewer maintenance event.



Sarah Hickman (right) and teammate Lindie Aragon (left) of Colorado received the first place award in the Process Control event and second place overall in the Wastewater Professionals Division.

Sarah and her teammate Lindie Aragon of Westminster, CO, who she met for the first time just five days before they competed, finished first place in the Process Control event and won second place overall in the Wastewater Professionals Division.

“The Process Control event is completely different than what we do. There are magnets for each part of the wastewater treatment process. They give you a scenario, and you have to put the magnets in the right place. It was designed as a training tool for operators,” Sarah said.

Rory Byrne of Mount Pleasant Waterworks and his teammate Jeremy Thompson from North Texas Municipal District made up the second WEF-sponsored US team. They finished second place in the pump event.

“I learned that speed is not everything in international competition, which is the opposite of Operations Challenge,” said Rory Byrne via email. “It is more about being precise and accurate with everything.”

For the *Controlled Chaos* teams, this was their second time at World Water Skills.

“We went with WEF in 2022, and we wanted to go back and compete,” said team member Tyler Waterhouse. But they had to figure out how to pay their own way. “We decided to crowdsource funds. We created a budget and then set up a GoFundMe account, and we ended up reaching our goal.”

They won three trophies between the two *Controlled Chaos* teams: second place in the Laboratory event, third place in Safety, and third place overall in the Wastewater Treatment Professional category. “We want to thank our sponsors... representing SC and the US at this scale is something that we don’t take lightly. If it weren’t for our sponsors, it wouldn’t have been possible,” said CCI team member Patrick Ross.

International Cross Training

Before arriving at the World Water Skills event, the competitors spent two days at a wastewater plant in Nuremberg learning about the events and equipment and practicing. They also toured the plant and had the opportunity to see new ways of doing things, or “international cross-training,” as Tyler puts it.



L-R: Lindie Aragon (CO), Sarah Hickman (SC), Rory Byrne (SC), and Jeremy Thompson (TX) represented WEF at the World Water Skills event.



Rory Byrne (right) and Jeremy Thompson of Texas placed second in the pump event.



Rory Byrne, Kevin Ganley, Tyler Waterhouse, Troy Newton, and Patrick Ross with their German friends.



Mount Pleasant Waterworks' *Controlled Chaos* teams 1 and 2 hold a banner thanking their sponsors. Troy Newton, Patrick Ross, Kevin Ganley, and Tyler Waterhouse.



Team Controlled Chaos 1 competes in the pump maintenance event.



US competitors at the wastewater plant in Nuremberg, Germany, for training before the World Water Skills. The propeller behind them is from a World War II plane that was discovered during a construction project in the 1980s and displayed at the plant as a reminder of the war.

PHOTO CREDIT: BRIAN SCOTT, UPSTATE AERIAL

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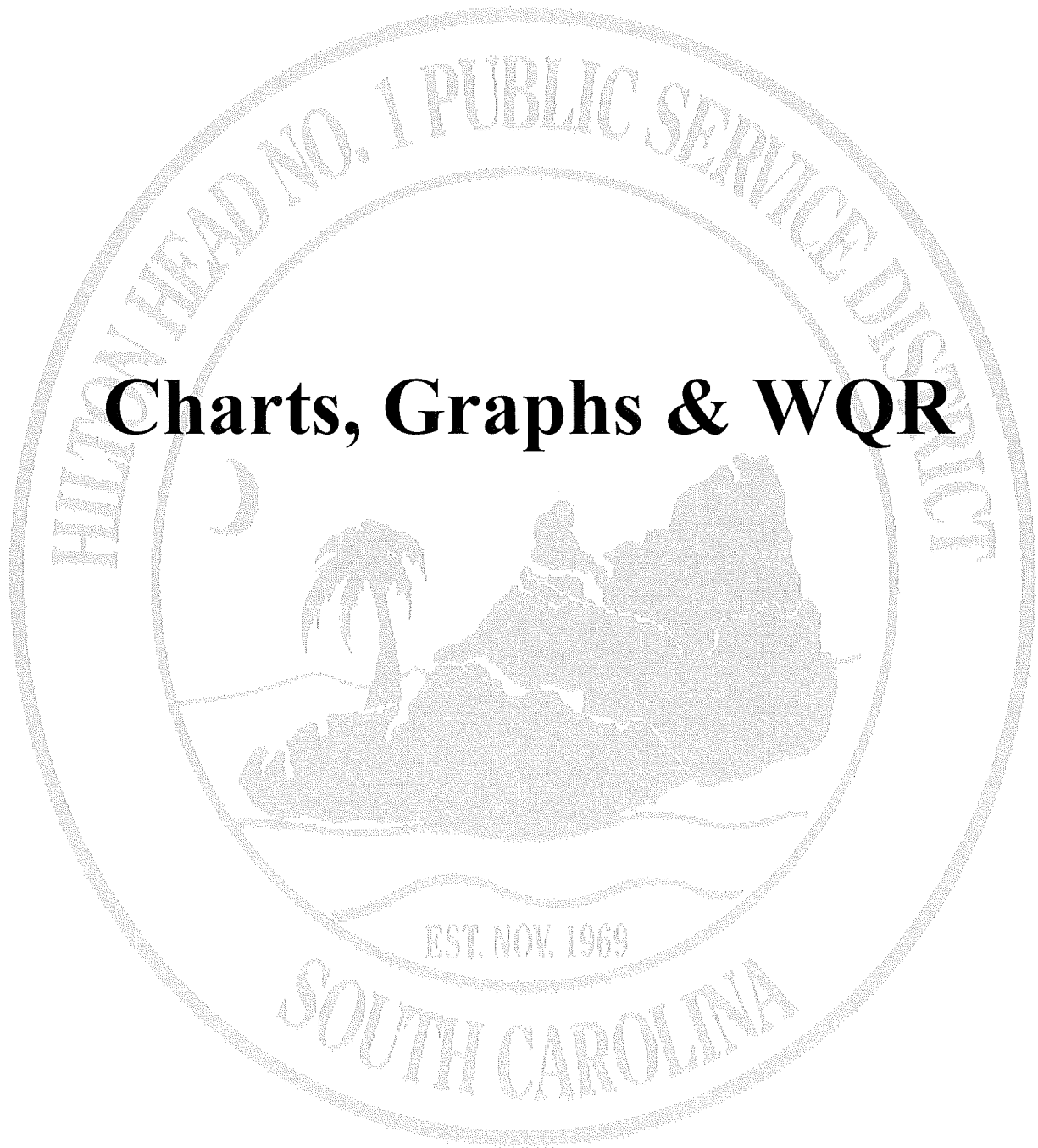
Both Tyler and Sarah were impressed with Germany's approach to training new wastewater operators, a topic of much discussion in SC given the shortage of operators. "They have kids coming out of high school that want to be operators, and they go through a two-to-three-year apprenticeship. They're not running the plant... they're spending a lot of time learning, kind of like going to college," Tyler explained.

Sarah Hickman agreed, and said she's thinking about incorporating the hands-on magnet board approach from the process control event at Hilton Head PSD. "It's just a different way of testing people's knowledge. It's hands-on instead of question-based."

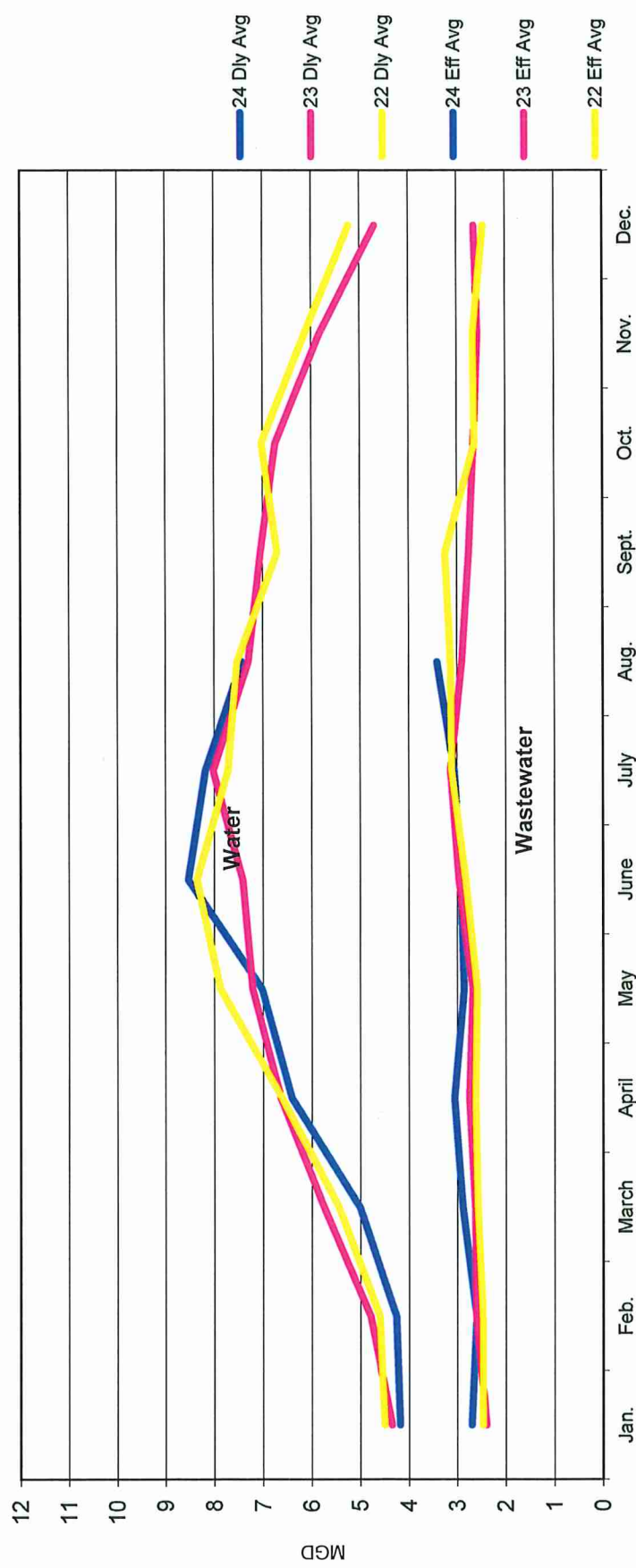
Another big takeaway for Tyler was Europe's focus on recycling and reusing resources. Even glass beer bottles are reused, but not in the way you might think. The same bottles are washed and used over and over again!

"Thinking long-term about what we can do to use the resources we have more efficiently, I think there's always room for improvement," said Tyler. "Europe is usually a little bit ahead of us in that regard, so I think that's something we can glean from them." ■

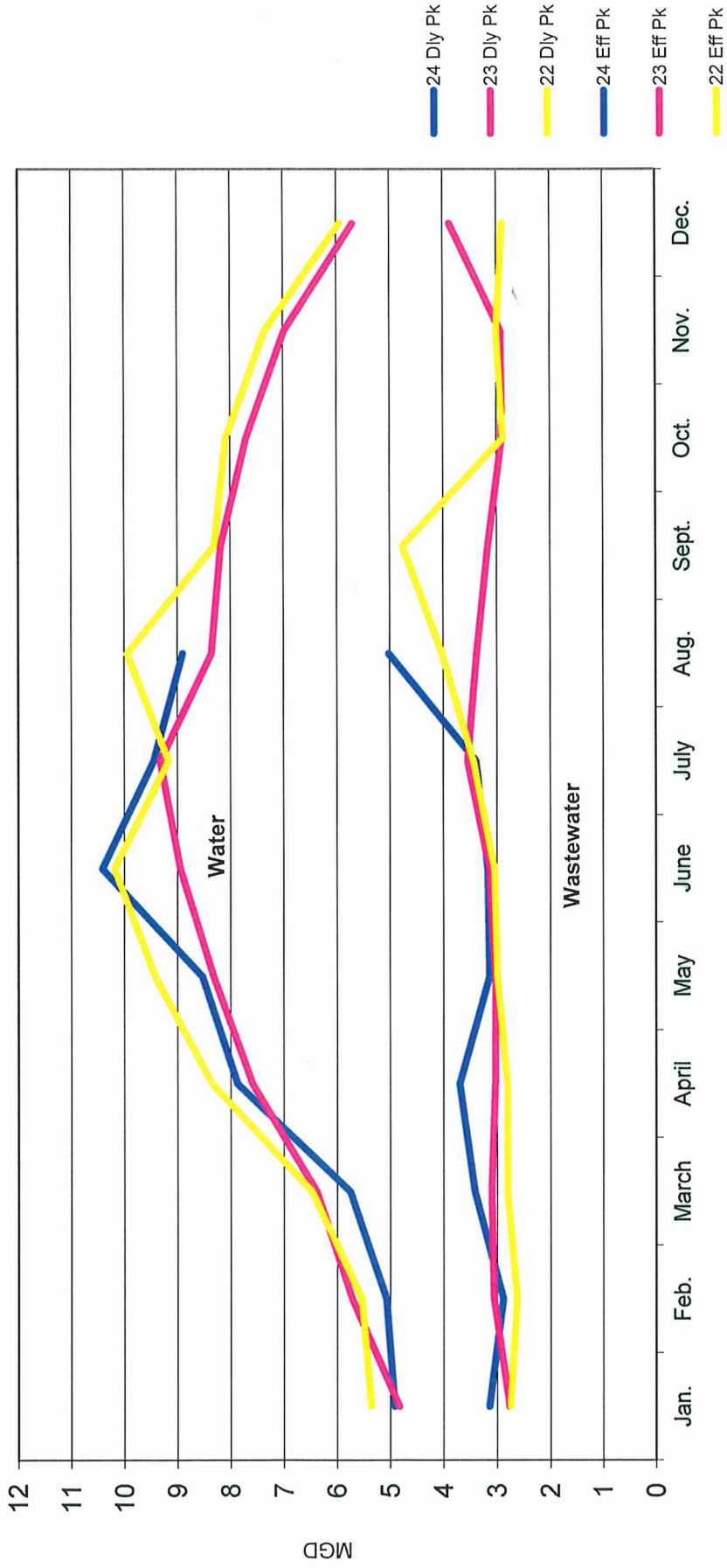
Charts, Graphs & WQR



Water and Wastewater Average Flows



Water and Wastewater Peak Flow





Aug-24
Monthly Water Quality Report

Water Supply Source	MG Per Month												YTD	% of Supply YTD
	Jan.	Feb.	March	April	May	June	July	Aug	Sept	Oct.	Nov.	Dec.		
Purchased	0.00	7.75	22.32	30.48	25.64	51.84	55.81	51.54					245.38	16.0%
RO Plant	107.87	95.01	117.34	115.26	114.23	118.77	112.29	107.17					887.94	57.0%
UFA Wells	20.12	21.59	15.06	24.71	24.65	34.48	37.85	31.12					209.58	13.0%
ASR Recovery	0.00	0.00	0.00	19.62	46.41	54.30	55.81	51.54					227.68	14.0%
Total	127.99	124.35	154.72	190.07	210.93	259.39	261.76	241.37					1570.58	100.0%

System-wide Water Quality Testing

Type of Test	Results by Month											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Bacteriological	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS				
Chlorine (avg)	1.92	1.96	1.86	1.89	2.01	2.06	1.77	1.67				
Ph (avg)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
Disinfection By-products (DBPs) (qtrly.)	In Compliance			In Compliance			In Compliance			In Compliance		
Hardness (range)	11 - 121 (WINTER - NO WELLS)			14 - 260 (SUMMER - WELLS/ASR ON)			(WINTER)					

Supply-specific Water Quality Ranges for This Month				
Supply	Average Chlorine Residual	Within Acceptable Range? (Y/N)	Average Chloride Level (ppm)	Average Hardness (ppm)
BJWSA (supply)	1.63	Y		
RO Raw Water MFA Wells (range)	n/a	Y	152 - 453	100 - 256
Finished RO Water	2.55	Y		
Fire Station UFA	1.53	Y	61	137
Leg O' Mutton UFA	2.11	Y	124	226
Wild Horse UFA	1.37	Y	64	179
Seabrook UFA	1.55	Y	130	260
Union Cemetery UFA	1.83	Y		
ASR (recharge)	2.37	Y	145 - 173	96 - 106

Customer Inquiries

Type of Inquiry	Number of Inquiries	Resolved?	Comments
Low Pressure	17	y	
Customer break/leak	30	y	
PSD break/leak	21	y	
Water Outage	9	y	
Odor/Taste/Color	0	y	
Miscellaneous	95	y	
Sewer issues & Inspections	59	y	
Total	231		

Other Water Quality Notes for This Month

08/06/2024 - Changed cartridge filters

08/28/2024 - Changed cartridge filters