

**Annual Report to the  
North Carolina General Assembly**

---

***Bernard Allen Emergency  
Drinking Water Fund***

**(July 1, 2023 to June 30, 2024)**

**Division of Waste Management**



**NORTH CAROLINA  
DEPARTMENT OF ENVIRONMENTAL QUALITY**

**<https://deq.nc.gov/>**

---

## **Table of Contents**

---

Executive Summary	Page 1
FY 2023-24 Activities	Page 2
Site Review and Research	Page 2
Sampling of Private Wells	Page 2
Alternate Water Provided	Page 4
PFAS Treatment System Reimbursement Program	Page 5
The Bernard Allen Fund	Page 6
Summary	Page 7

### **LIST OF TABLES**

Table 1. Site Locations of Drinking Water Wells Sampled in FY 2023-2024	Page 3
Table 2. Accounting summary of the Bernard Allen Memorial Emergency Drinking Water Fund – FY 2023-24	Page 6

### **LIST OF FIGURES**

Figure 1. Wells Sampled by Fiscal Year	Page 3
Figure 2. Total Number of Residences Provided Alternate Water	Page 5
Figure 3. Number of Residences Provided Alternate Water in FY2023-24	Page 5

## Executive Summary

The Bernard Allen Memorial Emergency Drinking Water Fund, administered by the N.C. Department of Environmental Quality's Division of Waste Management, was created in 2006 by the General Assembly in G.S. 87-98 to improve the state's response to water supply well contamination and provide low-income households with a safe drinking water supply.

The fund has three authorized uses: 1) pay for notice to persons whose wells are at risk from groundwater contamination; 2) pay for the costs of testing private wells; and 3) provide an alternate drinking water supply to well owners affected by the contamination.

The Bernard Allen Program (Program) continues to provide critical services for many qualifying residents of North Carolina through well testing, providing emergency bottled water, and assisting in permanent waterline connections, point-of-entry treatment or point-of-use systems for households. In fiscal year 2023-24, the fund's resources continued to be focused primarily on providing alternate water to affected residents and investigating potentially contaminated wells across the state through sampling.

This fiscal year, the fund has been used to collect 608 drinking water well samples statewide and provide 195 households alternate water through bottled water, waterlines, new well, treatment systems, or treatment system maintenance. Since the Program's inception, 288 households have received alternate water. As part of the Program, DEQ regularly communicates with local health departments on water supply sample results and other activities related to the water supply wells.

In 2021, N.C.G.S. 87-98 was amended to allow use of funds for per- and polyfluoroalkyl substances (PFAS) in private water supplies. To date, 281 wells have been sampled for PFAS and 83 residences have received bottled water. Since the creation of a Treatment System Reimbursement Program in 2023, 38 free point-of-use treatment systems have been installed and 16 treatment system reimbursements have been issued. Program staff continue to work with the Division of Waste Management to identify private water supplies at risk of PFAS and other contamination statewide.

DEQ is required to report no later than October 1 of each year to the Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources and the Fiscal Research Division of the General Assembly on the implementation of N.C.G.S. 87-98, the Bernard Allen Memorial Emergency Drinking Water Fund.

## **FY 2023-24 Activities**

In fiscal year (FY) 2023-24, uses of the Bernard Allen Memorial Emergency Drinking Water Fund (fund) administered by the Division of Waste Management (Division) allowed the continued focus on three major priorities:

- 1) providing permanent alternate water sources,
- 2) reviewing and researching of sources of contamination (sites that may have put nearby water supply wells and residents at risk), and
- 3) testing of private wells known or suspected of being contaminated.

### **Site Review and Research**

The Bernard Allen Program (Program) staff continue to evaluate the status of drinking water wells within areas of known or suspected contamination. Local government and other records are researched to determine if any affected residential wells have been connected to municipal water systems, if other wells in an area of concern may potentially be affected, potential sources of contamination, and ownership of affected residences. Staff test identified wells, and work with owners and local governments to provide alternate water supplies. In FY 2023-24, staff evaluated approximately 79 contaminated sites for water supply well sampling through the Bernard Allen Fund. Most sites encompassed multiple residences and wells. Site reviews include the following activities:

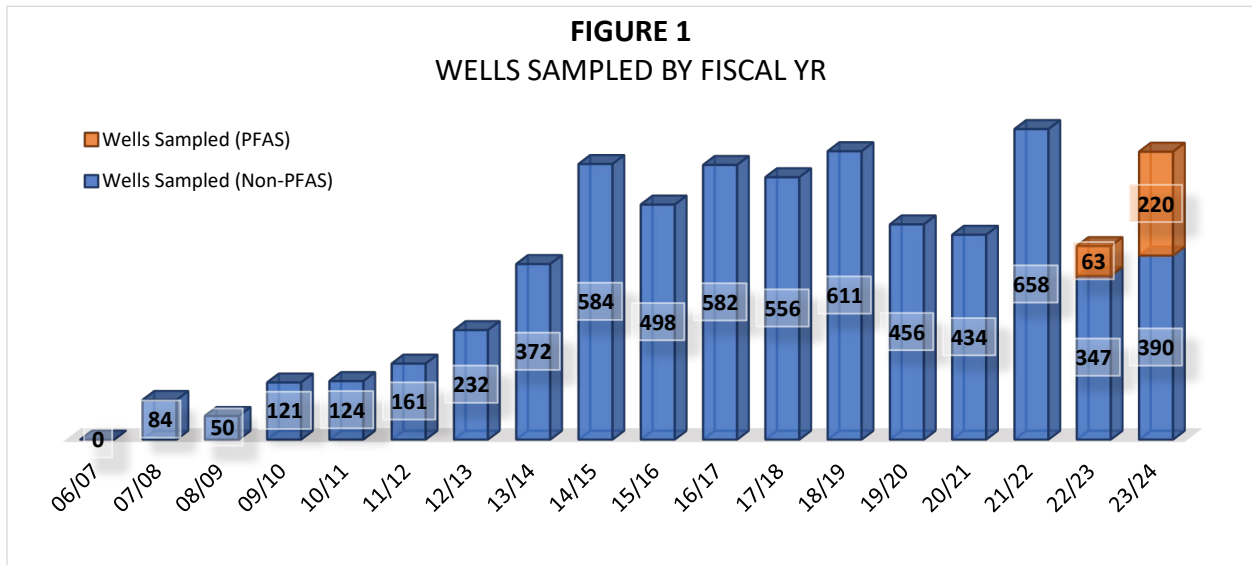
- Review of historical information and previous assessment work performed on the site(s);
- Identification of the affected and potentially affected properties;
- Identification of additional properties with drinking water wells in use within a 1,000-foot radius of affected and potentially affected properties;
- Identification of potential sources of contamination; and
- Location of public waterlines in the area and any properties with prior work by the Program that have since been connected to the public water system.

### **Sampling of Private Wells**

The Program samples wells across the state in the vicinity of orphan sites (no responsible party can be identified) that may be under the purview of various divisions and branches of DEQ where there is no funding available for such tasks. In addition to these orphan sites, the program receives referrals from county health departments where contamination in drinking water wells has been detected by county-led sampling efforts. In many of these cases, the sources of contamination cannot be determined, and it is difficult to predict whether contamination will migrate, or levels will increase or decrease over time.

During FY 2023-24, Program staff sent 1,097 letters to well owners to request permission to sample drinking water wells from which 461 permissions were granted. An additional 149 owners granted their permission by phone for PFAS sampling in southeastern counties. As shown in Figure 1, samples were collected with permission from 610 private wells (36% were sampled for PFAS). If the analytical results indicated that a contaminant was detected in the water sample, a health risk evaluation was prepared by the Division's toxicologist and

sent to the property owner. The remaining 636 wells were not sampled because owners did not give permission for sampling, did not respond to the request, indicated they were connected to an alternate water supply, or the property was vacant.



The number of sites and wells sampled within their respective county is shown in Table 1 below.

**Table 1. Site Locations of Drinking Water Wells Sampled in FY 2023-2024**

County	No. of Sites	No. of Wells	County	No. of Sites	No. of Wells
Brunswick	2	13	New Hanover	1	21
Catawba	1	10	Orange	1	1
Cumberland	4	13	Person	2	19
Duplin	1	1	Randolph	3	7
Durham	2	14	Rockingham	2	16
Gaston	8	49	Rowan	8	30
Guilford	4	20	Sampson	4	172
Henderson	1	6	Scotland	1	1
Hoke	1	10	Stanly	1	3
Iredell	3	25	Surry	1	13
Lincoln	3	5	Vance	1	1
Macon	1	9	Wake	8	109
Mecklenburg	8	24	Warren	1	10
Moore	1	6	Wayne	1	2

## Alternate Water Provided

Alternate water for any type of contamination (PFAS and/or other) was provided across the state as detailed below. Figure 2 shows the alternate water provided throughout the history of the Bernard Allen Emergency Drinking Water Fund, and Figure 3 shows the details for this fiscal year.

This fiscal year, bottled water was provided to 107 residences. Of these, 39 received bottled water while treatment systems were installed or repaired, or water service connections completed. The remaining 68 received bottled water while additional research was performed or will have treatment systems, water service connections, or wells installed in the next fiscal year. A list by county of residences that received bottled water is provided below. Not all residences accepted bottled water while their water services or treatment systems were installed.

▪ Alamance County	6	▪ McDowell County	1
▪ Bladen County	1	▪ Moore County	1
▪ Brunswick County	5	▪ New Hanover County	17
▪ Buncombe County	1	▪ Orange County	1
▪ Catawba County	3	▪ Rockingham County	3
▪ Cumberland County	3	▪ Rowan County	1
▪ Gaston County	2	▪ Sampson County	45
▪ Guilford County	7	▪ Stokes County	1
▪ Haywood County	1	▪ Surry County	1
▪ Henderson County	1	▪ Wake County	5
▪ Hoke County	1		

Two residences were connected to municipal water service, one of which also received bottled water:

▪ Wake County	2
---------------	---

One residence had a new well installed and had received bottled water:

▪ Haywood County	1
------------------	---

Five residences had point-of-entry filtration treatment systems installed, four of which also received bottled water:

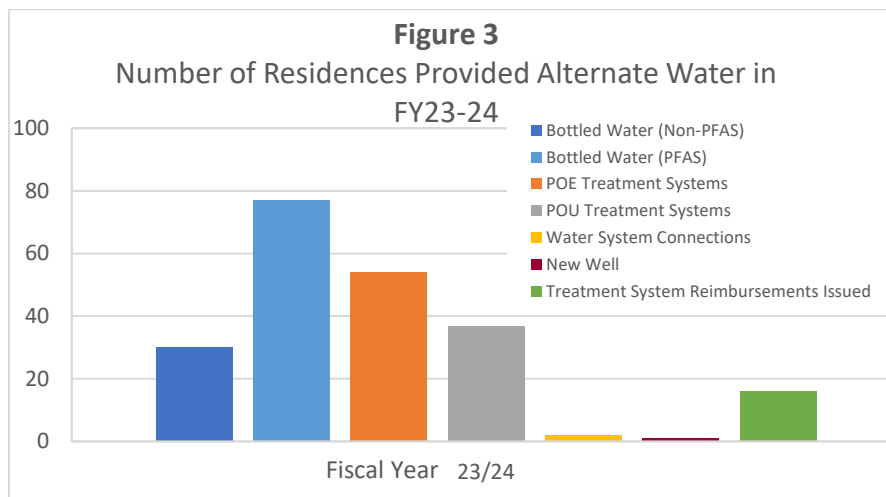
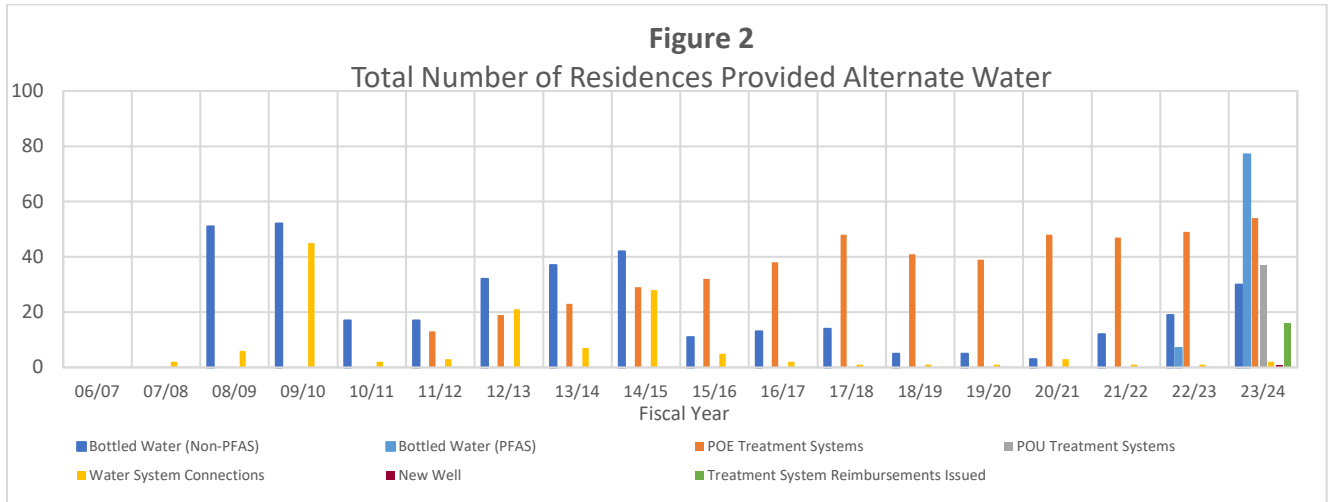
▪ Hoke County	1	▪ Vance County	1
▪ McDowell County	1	▪ Wake County	2

Maintenance was performed on existing point-of-entry filtration treatment systems at 49 residences, nine of which also received bottled water:

▪ Avery County	1	▪ Orange County	2
▪ Buncombe County	3	▪ Randolph County	5
▪ Caswell County	1	▪ Rockingham County	1
▪ Durham County	2	▪ Rowan County	2
▪ Gaston County	5	▪ Stokes County	2
▪ Guilford County	9	▪ Surry County	1
▪ McDowell County	3	▪ Vance County	1
▪ Mecklenburg County	2	▪ Wake County	9

Thirty-seven residences had point-of-use filtration treatment systems installed, 24 of which had also received bottled water:

- Brunswick County 2
- Columbus County 1
- Cumberland County 1
- New Hanover County 10
- Sampson County 23



### PFAS Treatment System Reimbursement Program

Since releasing the DEQ Action Strategy for PFAS on June 7, 2022, DEQ has taken significant action to address PFAS in drinking water. In April 2024, EPA released the final, enforceable maximum drinking water standards of 4 ng/L for PFOA & PFAS, and 10 ng/L for PFNA, PFHxS & HFPO-DA (GenX). In consideration of EPA’s recently released Maximum Contaminant Levels (MCLs), a Treatment System Reimbursement Program was developed and implemented this fiscal year under the Bernard Allen Emergency Drinking Water Fund to assist residents that have PFAS contamination above the federal MCLs in their private drinking water wells. Partial funding for treatment systems or, where feasible, connection to

public water, is provided to eligible residents on a scale based on household income. Qualifying property owners who cannot afford the purchase of a treatment system or public water connection due to income may receive full funding.

This fiscal year, 220 wells were sampled for PFAS, bringing the total to 283. To date, 84 residences with contamination exceeding one of the MCLs have received bottled water due to PFAS contamination. Sixteen households have received reimbursement for PFAS treatment under the alternate water assistance program.

### **Bernard Allen Memorial Drinking Water Fund**

In FY 2023-24, the fund received \$700,000 in appropriations. Of that, \$300,000 is dedicated to work associated with PFAS. Expenditures from the fund continue to be primarily used for connecting residences to municipal water systems, providing bottled water, installing point-of-entry and point-of-use filtration treatment systems, maintaining existing point-of-entry filtration treatment systems, and sampling and analyzing drinking water wells for potential contamination. A summary of fund expenditures is shown below.

**Table 2. Accounting Summary of the Bernard Allen Memorial Emergency Drinking Water Fund - FY 2023-24 (as of June 30, 2024).**

<b>BEGINNING CASH BALANCE:</b>		<b>\$753,654.41</b>
INCOME (Appropriations from General Fund):		+\$700,200.00
EXPENDITURES:		- \$557,048.24
Lab Testing	\$147,684.60	
Bottled Water	\$26,214.99	
Water Service Connections	\$37,576.04	
Point-of-Entry Treatment Systems	\$204,670.77	
Point-of-Use Treatment Systems	\$87,054.99	
Well Installations/Abandonments	\$49,635.25	
PFAS Treatment System Reimbursement Program	\$25,778.57	
Sampling Contractors and Supplies	\$58,537.37	
Fund Administration	\$76,979.70	
Accounting Error (from FY22-23)*	(\$157,084.04)	
<b>BALANCE AS OF JUNE 30, 2023</b>		<b>=\$896,806.17</b>
OBLIGATED TO CONTRACTS		-\$341,893.65
DEDICATED TO EMERGENT CONTAMINANTS Per Senate Bill 105 (Not included in "Obligated to Contracts" above)		-\$553,077.98
<b>EFFECTIVE (Unencumbered) CASH BALANCE</b>		<b>=\$1,834.54</b>

\*Payment for contracted activities was made from the Bernard Allen Drinking water account instead of the Inactive Hazardous Sites Clean Up Fund and the correction did not occur until after the close of FY2023-24 on June 30<sup>th</sup>, 2023. The correction appears on the reports for FY2023-24.



## **Summary**

The Bernard Allen Memorial Emergency Drinking Water Fund continues to be a valuable resource for qualifying residents in North Carolina at risk from contamination in their drinking water wells.

The fund's ability to pay for sampling and analysis of water supply wells and the provision of alternative drinking water supplies has been instrumental in helping the state respond to emergency drinking water situations. Monies are disbursed from the fund based on financial need and on the risk to public health posed by groundwater contamination. The fund's ability to provide bottled water to residents as a temporary water supply has also helped as a short-term solution, providing time for longer-term alternatives to be evaluated and implemented. Without this fund, the state has no resource to provide emergency temporary water supplies in many situations.

This year, the Program also experienced increased demands associated with PFAS that necessitated modifications to laboratory and alternate water provision contracts. The Treatment System Reimbursement Program expenses have risen due to an increase in sampling, bottled water provisions, point-of-use treatment system installations, and reimbursements to home owners for installation of treatment systems. The Program continues to sample a high number of private wells each year for both routine and emerging contaminants.

Future demands on the fund will likely increase as the extent of contamination continues to be assessed and as the reimbursement program grows, increasing the number of private wells tested statewide. In addition, sampling equipment, analytical costs, and costs to purchase and install alternate water systems continue to increase. These increases have depleted excess funds from prior years. An increase in appropriated revenue will be necessary to provide the funds needed to continue to perform necessary sampling and providing alternate water as prescribed in the statute. The Department will continue to manage the fund as demands change.