

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

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

(July 1, 2020 to June 30, 2021)

Division of Waste Management



**NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY**

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

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Executive Summary

The Bernard Allen Memorial Emergency Drinking Water Fund, administered by the N.C. 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 were 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 continues to provide critical services for many residents of North Carolina through well testing, providing emergency bottled water and assisting in permanent waterline connections or point-of-entry treatment systems for wells. In fiscal year 2020-21, 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. The fund was used to collect 434 drinking water well samples statewide. Fifty-two households received alternate water through bottled water, waterlines, treatment systems or treatment system maintenance this fiscal year using the fund. To date, 175 households have received alternate water through this fund. In implementing this program, the N.C. Department of Environmental Quality regularly communicates with local health departments on water supply sample data and other activities related to the water supply wells.

The Department of Environmental Quality 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 (fund).

FY 2020-21 Activities Update

In fiscal year (FY) 2020-21, 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. The activities conducted in FY 2020-21 are summarized below.

Alternate Water Provided

Bottled water was provided to three residences while treatment systems were under construction or additional research performed.

- | | | | |
|-------------------|---|---------------|---|
| • Buncombe County | 1 | • Wake County | 1 |
| • Rowan County | 1 | | |

Three residences were connected to municipal water service:

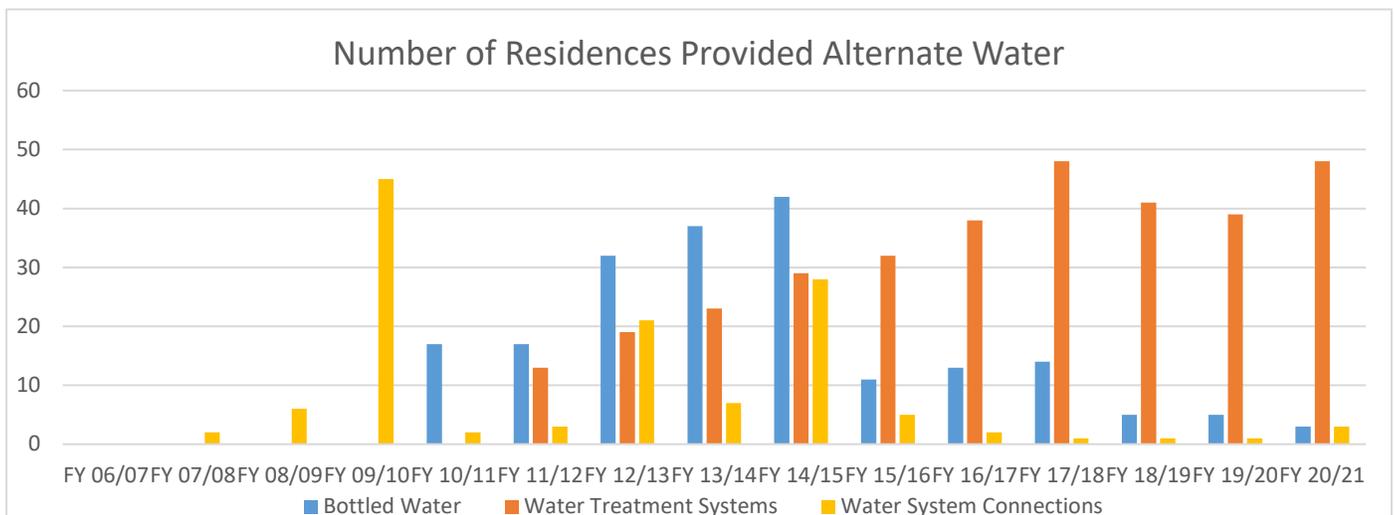
- Person County 3

Two residences have received point-of-entry treatment systems:

- | | | | |
|----------------|---|---------------|---|
| • Rowan County | 1 | • Wake County | 1 |
|----------------|---|---------------|---|

Maintenance was performed on existing point-of-entry treatment systems at 46 additional residences:

- | | | | |
|----------------------|---|---------------------|---|
| • Avery County | 1 | • Randolph County | 5 |
| • Buncombe County | 2 | • Rockingham County | 1 |
| • Caswell County | 1 | • Rowan County | 1 |
| • Durham County | 3 | • Stokes County | 2 |
| • Gaston County | 4 | • Surry County | 1 |
| • Guilford County | 7 | • Union County | 1 |
| • McDowell County | 3 | • Vance County | 1 |
| • Mecklenburg County | 2 | • Wake County | 9 |
| • Orange County | 2 | | |



Site Review and Research

The Bernard Allen Program staff continue to evaluate new and existing discoveries of drinking water wells with known or suspected contamination. Local government and other records are researched to determine if any affected residences have been connected to municipal water systems, if other wells in the 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 on alternate water supplies. An owner must meet the statutory requirement that annual household income not exceed 300 percent of the current federal poverty level.

In FY 2020-21, staff evaluated approximately 97 sites for sampling through the Bernard Allen Fund – most with multiple residences and wells. Review of each file includes the following activities:

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

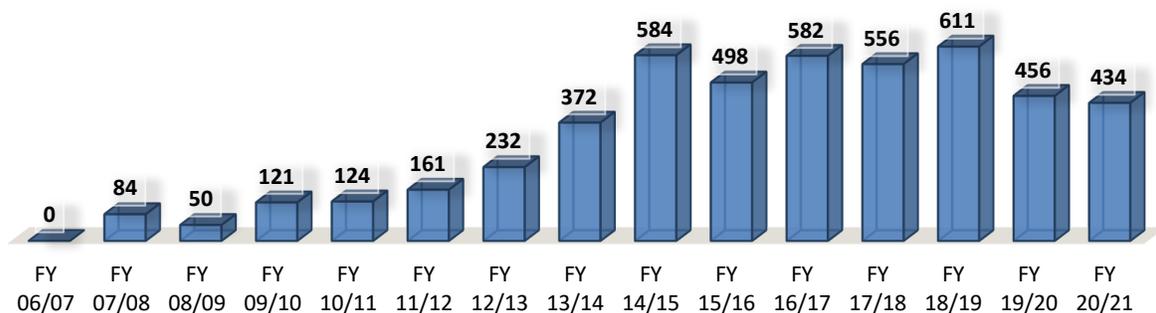
Sampling of Private Wells

There are approximately 341 sites with private drinking water wells in the vicinity of a site without a responsible party. Of those, 202 sites have groundwater contamination that is actively affecting drinking water wells. Most of these sites have contaminated multiple properties and drinking water wells. In many of these cases, the sources of contamination cannot be determined, and it is difficult to predict whether concentrations will increase or decrease over time as groundwater migrates.

Of the 341 sites without a responsible party, there are 139 sites with water supply wells with potential sources of contamination.

During FY 2020-21, Program staff sent 1,174 letters to well owners to request permission to sample drinking water wells. Samples were collected from 434 of these wells. The remaining 740 wells were not sampled because owners did not give permission for sampling, did not respond to the request, were determined to be connected to an alternate water supply or the property was vacant. Those residences with wells that sample results exceeded drinking water criteria were sent health risk evaluations prepared by the division's toxicologist.

WELLS SAMPLED BY FISCAL YR



The number of sites within their respective county is shown below.

Site Locations of Drinking Water Wells Sampled in FY 2020-2120

<u>County</u>	<u># of Sites</u>	<u># of Wells</u>	<u>County</u>	<u># of Sites</u>	<u># of Wells</u>
• Alamance	1	5	• Madison	1	3
• Beaufort	1	2	• Martin	1	19
• Brunswick	2	16	• McDowell	1	25
• Cabarrus	1	8	• Mecklenburg	10	41
• Caswell	3	14	• Nash	1	1
• Catawba	1	5	• Orange	1	10
• Clay	1	7	• Pender	1	7
• Cleveland	1	2	• Person	1	1
• Cumberland	2	19	• Randolph	1	11
• Duplin	1	1	• Robeson	1	6
• Durham	1	12	• Rockingham	2	9
• Forsyth	1	1	• Rowan	5	40
• Gaston	5	33	• Stanly	3	9
• Guilford	4	21	• Stokes	1	8
• Haywood	1	3	• Surry	1	5
• Henderson	1	7	• Union	1	2
• Hoke	1	1	• Vance	1	1
• Iredell	1	23	• Wake	7	41
• Lincoln	4	13	• Wayne	1	2

Summary of the Bernard Allen Memorial Drinking Water Fund

In FY 2020-21, the fund received \$400,000 in appropriations. Expenditures from the fund continue to be primarily used for connecting residences to municipal water systems, providing bottled water, installing point-of-entry treatment systems, maintaining existing point-of-entry treatment systems, and sampling and analyzing drinking water wells for potential contamination. A summary of fund expenditures is shown below.

Bernard Allen Memorial Emergency Drinking Water Fund

Accounting Summary

FY 2020-21

(as of June 30, 2021)

BEGINNING CASH BALANCE:		\$	348,080.96
INCOME (Appropriations from General Fund):		\$	400,000.00
EXPENDITURES:			
	<i>Description</i>		<i>Amount</i>
	Lab Testing	\$	28,450.00
	Bottled Water	\$	532.50
	Water Service Connections	\$	8,280.00
	Point-of-Entry Treatment Systems	\$	151,302.06
	Sampling Contractors and Supplies	\$	122,975.82
	Fund Administration	\$	39,827.24
	Total Expenses	\$	351,367.62
BALANCE AS OF JUNE 30, 2021:		\$	396,713.34
OBLIGATED TO CONTRACTS:		\$	212,097.50
EFFECTIVE CASH BALANCE:		\$	184,615.84

Conclusions

The Bernard Allen Memorial Emergency Drinking Water Fund, administered by the Division of Waste Management in the N.C. Department of Environmental Quality, continues to be a valuable resource for residents in North Carolina at risk from contamination in drinking water wells.

The fund's ability to pay for sampling and analysis of water supply wells, along with providing notification to residents, has been instrumental in helping the state respond to emergency situations. 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. Prior to the fund's creation, the state had no source for providing emergency temporary water supplies in many situations. Future demands on the fund are anticipated to increase based on an increase in the number of private wells tested statewide. The Department will continue to evaluate the eligibility of projects that can be served by the fund as demands change.

The Bernard Allen Program will face additional demands in the future to include the possibility of addressing emerging compounds in private drinking water wells. Additional funding and legislative changes will be needed to address this additional demand.