### North Carolina Department of Environmental Quality

Pat McCrory Governor Donald R. van der Vaart Secretary

#### November 18, 2015

#### **MEMORANDUM**

TO: ENVIRONMENTAL REVIEW COMMISSION

The Honorable Brent Jackson, Co-Chair The Honorable Mike Hager, Co-Chair

HOUSE OF REPRESENTATIVES APPROPRIATIONS SUBCOMMITTEES ON AGRICULTURE

AND NATURAL AND ECONOMIC RESOURCES The Honorable Jimmy Dixon, Chairman The Honorable Pat McElraft, Chairman The Honorable Roger West, Chairman

SENATE APPROPRIATIONS SUBCOMMITTEES ON NATURAL AND ECONOMIC RESOURCES

The Honorable Bill Cook, Co-Chairman

The Honorable Andrew C. Brock, Co-Chairman The Honorable Trudy Wade, Co-Chairman

FROM: Matthew Dockham, Director of Legislative Affairs

SUBJECT: 2015 Bernard Allen Emergency Drinking Water Fund Report

DATE: November 18, 2015

Pursuant to G.S. 87-98(e), the Department, in consultation with the Commission for Public Health and local health departments, shall report no later than 1 October of each year to the Environmental Review Commission, the House of Representatives and Senate Appropriations Subcommittees on Natural and Economic Resources, and the Fiscal Research Division of the General Assembly on the implementation of this section. Please consider the attached as the formal submission of this report.

If you have any questions or need additional information, please contact me by phone at (919) 707-8618 or via e-mail at <a href="mailto:matthew.dockham@ncdenr.gov">matthew.dockham@ncdenr.gov</a>.

cc: Tom Reeder, Assistant Secretary for Environment, NCDEQ Linda Culpepper Director, DWM, NCDEQ

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# Annual Report to the Environmental Review Commission North Carolina General Assembly

## Bernard Allen Emergency Drinking Water Fund

(July 1, 2014 to June 30, 2015)

# **Division of Waste Management**

NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY

http://portal.ncdenr.org

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#### **Executive Summary**

The Bernard Allen Emergency Drinking Water Fund (Fund), administered by the Division of Waste Management, was created in 2006 by the General Assembly to improve the state's response to groundwater contamination and to provide low-income households with a safe drinking water supply.

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

The Fund continues to help provide critical services for many citizens of North Carolina through paying for well testing, providing emergency bottled water and assisting in the payment of permanent waterline connections or point-of-entry treatment systems. In FY 2014-15, the Fund's resources continued to be focused primarily on providing alternate water to affected citizens and investigating potentially contaminated wells across the state through sampling. Sixty-three households received alternate water this fiscal year using the Bernard Allen Fund. To date, 123 households have received alternate water through this fund.

#### FY 2014-15 Activities Update

In FY 2014-15, the Bernard Allen Memorial Emergency Drinking Water Fund (the Fund), administered by the Division of Waste Management (Division), continued to focus on three major priorities: 1) providing permanent alternate water sources; 2) review and research of sites in the state that may be eligible for funding for sampling or alternate water supplies under the program; and 3) testing of private wells suspected of being contaminated. The activities conducted in FY 2014-15 are summarized below.

#### **Alternate Water Provided**

The Fund provided bottled water to residents in Montgomery County while a waterline extension was under construction. The Windblow Road waterline extension was completed in late 2014. The Fund contributed \$60,000 towards the waterline construction. The drinking water wells in this area were contaminated with pesticides.

The Fund provided bottled water to 21 residences in Henderson County while a waterline extension was under construction. The fund provided financial assistance for this waterline extension in the amount of \$287,000. The wells in this area were also contaminated with pesticides.

In addition to the above waterline projects, the Fund connected one residence to municipal water services in Stanly County in FY 2014-15. The Fund provided point-of-entry treatment systems to five other residences: one in Avery County, two in Orange County, one in Caswell County, and one in McDowell County. The Fund provided maintenance for existing point-of-entry treatment systems at 24 additional residences: one in Chatham County, two in Stokes County, two in Pender County, two in Mecklenburg County, one in Gaston County, five in Randolph County, one in Person County, two in Rockingham County, one in Richmond County, one in Union County, two in Guilford County, one in Durham County, and three in Wake County.

Forty-two residences have received bottled water through the Fund in FY 2014-15:

•	Avery County	1	<ul> <li>Chatham County</li> </ul>	1
•	Moore County	1	<ul> <li>Vance County</li> </ul>	1
•	Montgomery County	6	<ul> <li>Randolph County</li> </ul>	1
•	Caswell County	1	<ul> <li>Wayne County</li> </ul>	1
•	Gaston County	2	<ul> <li>Orange County</li> </ul>	2
•	McDowell County	1	<ul> <li>Mecklenburg County</li> </ul>	1
•	Henderson County	21	<ul> <li>Nash County</li> </ul>	2

#### **Site Review and Research**

The division continually researches its catalog of sites with 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, to see if other wells are in the area of concern and may potentially be affected, to identify potential sources of contamination, and to determine ownership of affected residences. The Fund employs staff who test the wells and work with owners and local governments on alternate water supplies. An owner is required to meet the statutory requirement that annual household income not exceed 300% of the poverty level. Staff reviewed approximately 108 site files, most with multiple residences and wells, during this fiscal year using Fund monies. Review of each file includes the following activities:

- Review of the file for historical information about previous sampling and work done on the site(s).
- Identification of locations of the affected properties.
- Identification of additional properties using drinking water wells within 500 foot and 1000 foot radius of potentially affected properties.
- Identification of potential sources of contamination.
- Location of public waterlines in the area to see if properties have been connected to the public water system.

#### Sampling of Private Wells

At the conclusion of FY 2014-15, the division's Inactive Hazardous Sites program had a total of 171 sites where there was no clear responsible party for groundwater contamination affecting drinking water wells. Most sites involved multiple residences and drinking water wells. Some detections were above and some below the federal drinking water standards. In many cases sources of contamination cannot be determined and it can be difficult to predict whether concentrations will rise or fall in the future. Contamination levels change with time as groundwater migrates and the water table rises and falls.

There are an additional 88 sites with water supply wells located less than one-quarter mile from potential sources of contamination and no responsible party. These sites have one or more residential properties/wells associated with them.

During FY 2014-15, the Fund evaluated 1292 wells for sampling. The Fund collected 582 drinking water well samples from 80 sites across the state. The remaining wells were not sampled because owners did not give permission for sampling, did not respond to the request, were determined to now be connected to an alternate water supply or the property was vacant. Locations of the sites are shown below.

	Site	Location	ons of Dri	nking Water W	lells Sampled i	n FY 2	014-2015
		# of	# of			# of	# of
	<u>County</u>	Sites	<u>Wells</u>		<u>County</u>	Sites	<u>Wells</u>
•	Alamance	2	2	•	Henderson	2	65
•	Ashe	1	9	•	Hoke	1	3
•	Avery	1	2	•	Iredell	3	24
•	Bertie	2	2	•	Lincoln	3	26
•	Brunswick	2	13	•	Madison	1	1
•	Buncombe	2	10	•	Martin	1	2
•	Burke	2	9	•	Mecklenburg	8	34
•	Camden	1	1	•	Montgomery	1	2
•	Caswell	2	17	•	Moore	1	2
•	Catawba	2	32	•	Nash	1	5
•	Chatham	2	14	•	New Hanover	1	10
•	Cumberland	3	14	•	Orange	3	32
•	Currituck	1	14	•	Pender	1	2
•	Dare	1	1	•	Randolph	2	8
•	Duplin	1	1	•	Richmond	1	7
•	Davidson	1	1	•	Rockingham	2	9
•	Durham	3	11	•	Rowan	1	3
•	Franklin	1	3	•	Stanly	1	8
•	Gaston	2	26	•	Stokes	1	9
•	Guilford	3	51	•	Wake	7	92
•	Haywood	1	1	•	Vance	2	4

#### **Summary of the Bernard Allen Memorial Drinking Water Fund**

In FY 2014-15, the Fund received appropriations and revenue from interest. Expenditures from the Fund continue to be primarily utilized for contributing to local government waterline projects, providing bottled water, sampling/analyzing drinking water wells for potential contamination, connecting residences to existing municipal water systems, installing point-of-entry treatment systems, and maintaining existing point-of-entry treatment systems. A summary of the Fund expenditures can be found in the Bernard Allen Memorial Emergency Drinking Water Fund Accounting Summary found below.

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

# Accounting Summary FY 2014-15

BALANCE FORWARD:			734,546.11			
INCOME:	<u>Description</u>	<b>.</b>	<u>Amount</u>			
	Appropriations from General Fund	\$ \$	400,000.00 274.21			
	Interest					
	Total Income	\$	400,274.21			
EXPENDIT	ΓURES:					
	<u>Description</u>		<u>Amount</u>			
	Lab Testing	\$	60,655.00			
	Bottled Water	\$	6,704.45			
	Water Service Connections	\$	349,711.90			
	Well Abandonments	\$	150,942.05			
	Point of Entry Treatment Systems	\$	143,531.46			
	Sampling, Equipment & Supplies	\$	8,076.30			
	Staffing <sup>1</sup>	\$	126,740.98			
	Other Operating Expenses	\$	7,956.13			
	Total Expenses	\$	854,318.27			
CURRENT Balance as of June 30, 2015						
BALANCE	:	\$	280,502.05			
Obligated	\$	159,000.00				
Effective (	\$	121,502.05				

<sup>&</sup>lt;sup>1</sup> Includes Sampling Prep, Research, Field Work and Fund Administration

#### **Conclusions**

The Bernard Allen Emergency Drinking Water Fund, administered by the division, continues to be a valuable resource for citizens in North Carolina at risk from contaminated drinking water wells. The Fund's ability to pay for sampling and analyzing drinking water wells and providing notification for residents has been instrumental in helping the state respond to emergency situations statewide. The Fund's ability to provide bottled water to citizens as a temporary water supply has helped as a short-term solution, providing time for longer-term alternatives to be evaluated. Prior to the creation of the Fund, 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. DEQ will continue to evaluate the eligibility of projects that can be served by the Fund as demands change.