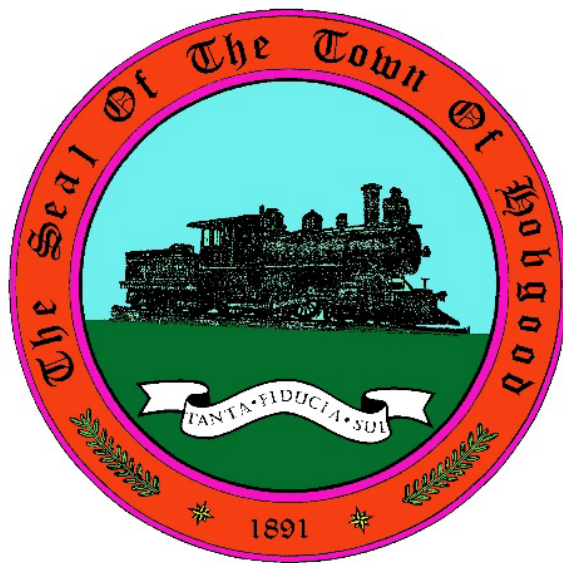


**Wellhead Protection Plan
(WHPP)
The Town of Hobgood,
Halifax County, North Carolina
PWS ID #04-42-035**



September 12, 2022

Revision 4

Contact:

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Background

In 1986, Safe Drinking Water Act (SDWA) amendments added Section 1428, “State Programs to Establish Wellhead Protection Areas”, which requires each state to develop a program to “protect wellhead areas within their jurisdiction from contaminants which may have any adverse effects on the health of persons.” The term wellhead protection area is defined in the law as “the surface and subsurface area surrounding a water well or wellfield, supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water well or wellfield.” North Carolina’s Environmental Protection Agency (EPA) approved Wellhead Protection Program (WHPP) provides technical support to local governments and public water supply systems in their endeavors to develop and implement their own Wellhead Protection (WHP) Plans.

One of North Carolina’s objectives in developing a protection plan is to provide a process for public water system operators to learn more about their groundwater systems and how to protect them. WHP Plans allow communities to take charge of protecting the quality of their drinking water by identifying and carefully managing areas that supply groundwater to their public wells.

Division of Water Resources (DWR), under the Department of Environmental Quality regulations, require any public water supply wells that is to be used as a community or non-transient, non-community water system to meet the following wellhead protection requirements:

- (1) The well shall be located on a lot so that the area within 100 feet of the well is owned or controlled by the person supplying the water. The supplier of water shall be able to protect the well lot from potential sources of pollution and to construct landscape features for drainage and diversion of pollution.
- (2) The minimum horizontal separation between the well and known potential sources of pollution shall be as follows:
 - (A) 100 feet from any sanitary sewage disposal system, sewer, or a sewer pipe unless the sewer is constructed of water main materials and joints, in which case the sewer pipe shall be at least 50 feet from the well;
 - (B) 200 feet from a subsurface sanitary sewage treatment and disposal system designed for 3000 or more gallons of wastewater a day flows, unless the well water source is from a confined aquifer;
 - (C) 500 feet from a septage disposal site;
 - (D) 100 feet from buildings, mobile homes, permanent structures, animal houses or lots, or cultivated areas to which chemicals are applied;
 - (E) 100 feet from surface water;
 - (F) 100 feet from a chemical or petroleum fuel underground storage tank with secondary containment;
 - (G) 500 feet from a chemical or petroleum fuel underground storage tank without secondary containment;
 - (H) 500 feet from the boundary of a ground water contamination area;
 - (I) 500 feet from a sanitary landfill or non-permitted non-hazardous solid waste disposal site;
 - (J) 1000 feet from a hazardous waste disposal site or in any location that conflicts with the North Carolina Hazardous Waste Management Rules cited as 15A NCAC 13A;
 - (K) 300 feet from a cemetery or burial ground; and
 - (L) 100 feet from any other potential source of pollution.

3) The Department may require greater separation distances or impose other protective measures if necessary to protect the well from pollution, taking into consideration factors such as:

- (A) the hazard or health risk associated with the source of pollution;
- (B) the proximity of the potential source to the well;
- (C) the type of material, facility, or circumstance that poses the source or potential source of pollution;
- (D) the volume or size of the source or potential source of pollution;
- (E) hydrogeological features of the site that could affect the movement of contaminants to the source water;
- (F) the effect that well operation might have on the movement of contamination; and
- (G) the feasibility of providing additional separation distances or protective measures.

(4) The lot shall be graded or sloped so that surface water is diverted away from the wellhead. The well shall not have greater than a one percent annual chance of flooding.

(5) If a supplier of water demonstrates that it is impracticable, taking into consideration feasibility and cost, to locate water from any other approved source and an existing well can no longer provide water that meets the requirements of this Subchapter, a representative of the Division may approve a variance for a smaller well lot and reduced separation distances to meet existing demands. Additional monitoring under this Part or other conditions shall be imposed if necessary to mitigate the increased risk from the variance.

In addition to this delineation, communities are encouraged to establish wellhead protection plans, which include the following:

- 1) The formation of a wellhead protection committee to establish and implement the wellhead protection plan and whose role it is to conduct a potential contaminant source inventory, provide options for the management of the WHP area, seek public input into the creation of the WHP plan, seek approval of the WHP plan and to implement the WHP plan;
- 2) Delineation of the contributing areas of the water sources;
- 3) Identification of potential contamination sources within the wellhead protection area;
- 4) Develop and implement wellhead protection area management actions to protect the water sources;
- 5) Develop an emergency contingency plan for alternative water supply sources in the event the groundwater supply becomes contaminated and emergency response planning for incidents that may impact water quality;
- 6) Development of a public education program;
- 7) Conduct new water source planning to ensure the protection of new water source locations and to augment current supplies.

Wellhead protection for public water supply wells is a voluntary program, but water systems across the state are encouraged to take the above steps in protecting all groundwater sources.

The Public Water Supply Section (PWSS) will grant the final approval for WHP Plans. The NC Wellhead Protection Program Coordinator is:

Mr. Danny Edwards
N.C. Source Water Assessment Program Manager
Public Water Supply Section
N.C. Division of Water Resources
N.C. Department of Environmental Quality

Phone: (919) 707-9070
danny.edwards@ncdenr.gov

1634 Mail Service Center
Raleigh, N.C. 27699-1634

Introduction

Hobgood is a small town in southeast Halifax County, located in the Inner Coastal Plain of North Carolina. The town is about 71 miles east of Raleigh. In 2021, Hobgood had a population of 348 people within the town limits. The local economy is based on agriculture and service industries, and crops grown locally include tobacco, soybeans, cotton, and corn. The topography is mostly flat in the area with relief seldom greater than 35 feet, and the town's average elevation is about 95 feet above sea level.

The 1985 Geologic Map of North Carolina shows that underneath a thin veneer of Quaternary to recent sediments, the near-surface sediments in the Hobgood area consist of the Tertiary Yorktown Formation, which is made up of fossiliferous sands and clays. The Yorktown Formation overlies the Cretaceous age Upper Cape Fear Aquifer (UCF) from which the town draws its water. Water quality in the aquifer is very good, and typically requires only the addition of chlorine to disinfect the water. The major drainage feature in the area is Deep Creek, which flows from north to south about two miles west of the town.

The water distribution system has approximately 272 connections that supply a customer base of approximately 691 persons. Hobgood has an emergency interconnection with the Town of Scotland Neck, and the water distribution mains have a total length of 16 miles. The average daily water usage for the town in 2021 was approximately 42,000 gallons per day with peak demand in the summer months.

The Town of Hobgood uses four public water supply wells screened in the confined Upper Cape Fear Aquifer. The pumping cycle for the wells is less than twelve hours per well per day, and they have yields ranging from 120 to 300 gallons per minute and an average depth of over two hundred feet. The system owns two elevated storage tanks of 75,000 and 100,000 gallons to provide pressure and storage for the distribution mains. Chlorine is injected at the wellhead of all four wells for microbial disinfection, while zinc orthophosphate is injected at Wells 3 and 4 for corrosion inhibition and to reduce brown water events.

The Town of Hobgood is a historic southern town that is proud to serve its citizens with pure, good-tasting water. The purpose of the wellhead protection plan is to protect the source aquifer and the capital investment in the wells.

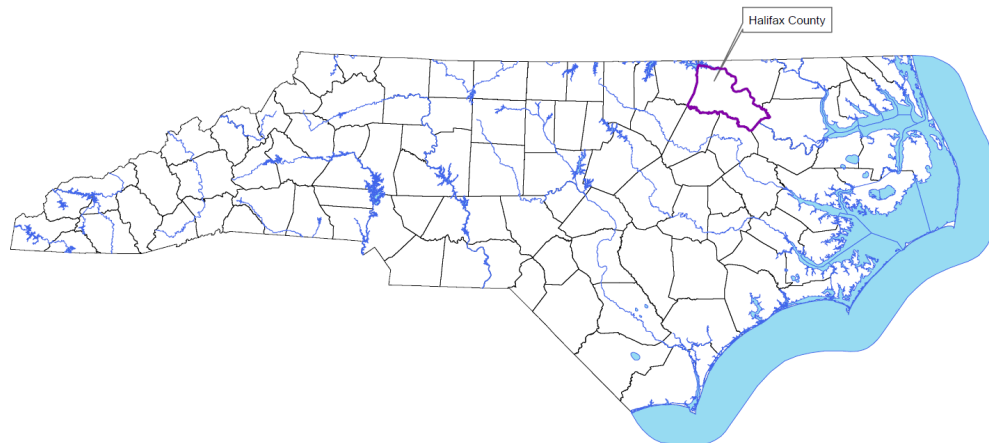


Figure 1. Halifax in North Carolina

System Name	HOBGOOD, TOWN OF
City	HOBGOOD
PWS ID	NC0442035
Source Name	WELL #1
Source Name	WELL #2
Source Name	WELL #3
Source Name	WELL #4

Figure 2. Public Water Supply Information from Source Water Assessment Program (SWAP) Report September 10, 2020

A Source Water Assessment Program (SWAP) Report was made available to the Town of Hobgood by the NC Public Water Supply Section. Water sources can be threatened by many potential contaminant sources, including permitted wastewater discharges, underground storage tanks, urban storm water runoff, or other types of non-point source contamination such as runoff produced by agricultural activities and land clearing for development. A source water assessment is a qualitative evaluation of the potential of a drinking water source to become contaminated by the identified potential contaminant sources (PCSs) within the delineated area. A SWAP Report consists of an assessment area delineation, a potential contaminant source inventory and map, a susceptibility rating, maps, tables and a detailed description of North Carolina's SWAP approach. The Town of Hobgood's water source is four groundwater wells, one of which, Well # 1, has been assigned a qualitative susceptibility rating of Moderate, based on an inherent vulnerability rating of Lower, and a contaminant rating of Moderate. Wells #2, #3, and #4 have been assigned a Susceptibility Rating of Lower based on an Inherent Vulnerability Rating of Lower and a Contaminant Rating of Lower. The rating process is described in detail in Sections 3 and 6 of the SWAP Report. The Town of Hobgood's entire SWAP Report along with a wealth of other information about water sources in North Carolina can be found on the PWS website, [NCDEQ-DWR :: Public Water Supply - Source Water Assessment Reports \(ncwater.org\)](http://ncdeq-dwr.org)

Source Name	Inherent Vulnerability Rating	Contaminant Rating	Susceptibility Rating
WELL #1	Lower	Moderate	Moderate
WELL #2	Lower	Lower	Lower
WELL #3	Lower	Lower	Lower
WELL #4	Lower	Lower	Lower

It is important to understand that a susceptibility rating of higher does not imply poor water quality. Susceptibility is an indication of a water supply's potential to become contaminated by the identified PCSs within the assessment area.

Figure 3. SWAP Results Summary

The Wellhead Protection Area delineation created for this Wellhead Protection Plan is a more accurate and precisely defined area delineated using information specific to each of the Town of Hobgood's four wells.

The Wellhead Protection Committee

The following people were chosen to serve as the Town of Hobgood's Wellhead Protection Committee (WPC):

- Thomas Ellis, Town Administrator,
- Milton Armston, Water and Sewer Commissioner
- Dannie Flanary, Mayor
- Debbie Maner, Source Water Specialist, North Carolina Rural Water Association.

The positions responsible for implementing the plan are the Town of Hobgood Town Council. They have accepted the recommendations made in the Plan by the WPC. The Council has granted the Town Administrator the authority to implement the Plan and to approve any revisions that may be necessary to obtain approval from the Public Water Supply Section (PWSS). Implementation of the Plan will begin immediately following its approval by the PWSS of the North Carolina Department of Environmental Quality (DEQ) and will be completed within ninety (90) days.

Upon completion of the implementation phase of the WHP Plan, the individual responsible for implementation will submit notification to the Public Water Supply Section in accordance with the schedule set forth in the approved WHP Program Plan.

The mission of the Wellhead Protection Committee is to protect the water supply for the Town of Hobgood by developing an appropriate method to educate the public on the importance of the town's sources of drinking water and measures they can take to prevent contamination. Additionally, the town has expressed an interest in seeking funding available through federal or state loans or grants to improve and expand the water system out of town, upgrade two-inch lines, provide fire protection into the county, and to serve underserved residents on existing wells by the next funding cycle deadline of September 30, 2022.

Delineation of the Wellhead Protection Areas

There are several methods that are used to delineate Wellhead Protection Areas (WHPAs). The one that is most appropriate for each well system depends upon many factors including its location within the state and the characteristics of the subsurface geology. The Volumetric Method was used to delineate the Town of Hobgood's WHPAs. **Figures 4 and 5.** show additional well information and the WHPA calculations.

Volumetric Method

In North Carolina, the WHPA for wells withdrawing water from certain confined aquifers encompasses the area surrounding the well for which the time of travel from the outer edge of the area to the well is 10 years. A 10-year period was selected to provide time to assess the potential impact of any ground-water contamination discovered within the WHPA and for developing appropriate remediation and ground-water protection strategies for the water supply. A WHPA based on a longer time of travel may provide a greater degree of protection to the well and allow more advance warning to respond to a contamination incident within the WHPA, but it will also expand the area to manage under the WHP Plan.

WHPAs based on a 10-year time of travel from their outer edge to the pumping well can be estimated by using the ground-water velocity or by estimating the volume of the aquifer required to supply 10 years of withdrawals (i.e., the Volumetric Method). Due to the lack of site-specific information necessary to calculate the ground-water velocity, Hobgood chose the Volumetric method to delineate the WHPA for its water supply wells.

The volume of the aquifer that supplies withdrawals for a specified period of time can be estimated with the following equation:

$$V_p = Q \left(\frac{\text{gal}}{\text{min}} \right) \times t_d \left(\frac{\text{min}}{\text{day}} \right) \times \left(\frac{\text{ft}^3}{7.48 \text{ gal}} \right) \times \left(\frac{365.25 \text{ days}}{\text{year}} \right) \times \frac{P (\text{years})}{n}$$

Where:

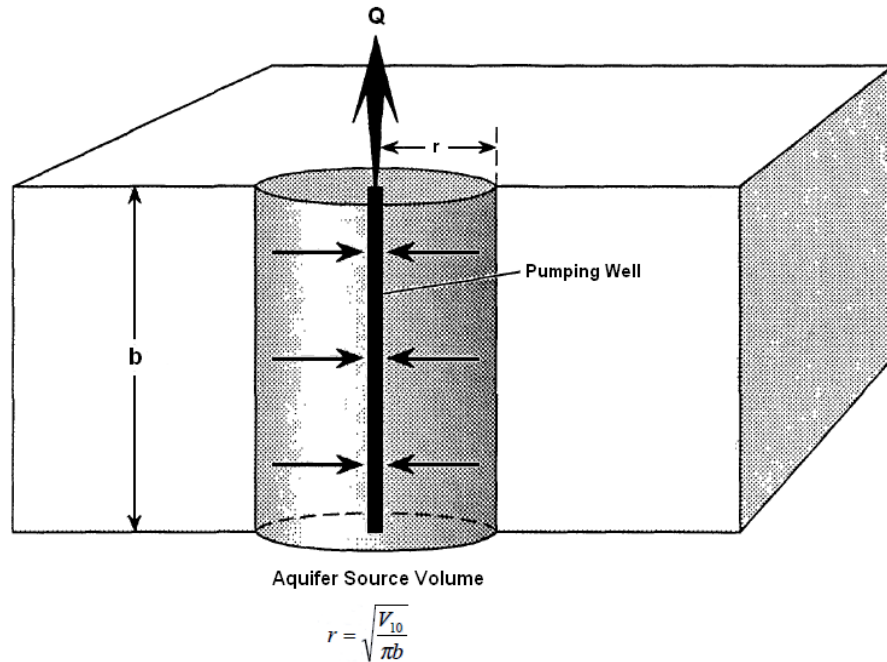
- V_p = the volume of aquifer in ft^3 that supplies withdrawals for period P,
- Q = the well yield in gallons per minute,
- t_d = the daily pumping period in minutes per day,
- P = the period of withdrawals in years, and
- n = the estimated porosity, dimensionless.

The well yield is the maximum sustained pumping rate possible for the well (not the daily pumping rate) as determined from a 24-hour drawdown test pursuant to North Carolina Administrative Code 15A NCAC 18C.0402(g). If well yield information is unavailable, the maximum capacity of the pump installed on the well may be substituted. The daily pumping period t_d is the number of minutes per day that the well is pumped and should equal 720 (the number of minutes in 12 hours). This value is used because State regulations require that the yield of a public water supply well provide the average daily demand in 12 hours. If the actual pumping period exceeds 12 hours, then the actual pumping period in minutes per day should be used. Using a daily pumping period t_d of 720 minutes per day, a period of withdrawal P of 10 years and an estimated porosity of 0.2, the above equation, rounded, reduces to:

$$V_{10} = 1,800,000 \times Q$$

Where: V_{10} = the volume of aquifer in ft^3 that supplies 10 years of withdrawals.

For ease (convenience) in applying the **Volumetric** Method, it is assumed that the volume is contained in a cylinder centered on the well.



Before the radius of the cylinder, and therefore the WHPA, can be determined, it is first necessary to determine or to estimate the thickness (b) of the aquifer (or the thickness of the part of the aquifer) that supplies water to the well. Because information on well yield and aquifer thickness was available from well construction records for each well judged to be withdrawing water from the Upper Cape Fear, the Town of Hobgood calculated the WHPA radii for the wells by substituting the aquifer thickness, along with the calculated volume (V_{10}) into the following equation for each of these wells:

$$r = \sqrt{\frac{V_{10}}{\pi b}}$$

Where:

- r = the radius in feet,
- V_{10} = the volume of the aquifer, in ft^3 , that supplies 10 years of withdrawals,
- π = 3.1416, and
- b = the aquifer thickness or the length of screened or open-hole section, in feet.

A ten-year time-of-travel aquifer source volume method (Volumetric Method) was used to calculate the size of the individual WHPAs. Equation 6 from The Wellhead Protection Guidebook, Step 2 was used to calculate the individual WHPAs. Equation 6 calculates the volume of aquifer necessary to supply withdrawals for a specific number of years. Using information on screen interval depths and Groundwater Management Branch data (Figure 6.), it appears that the wells are withdrawing water from the Upper Cape Fear aquifer. Circular shapes were chosen for the individual wellhead protection areas because of the relatively homogenous ability of coastal plain sediments to transmit water and the low hydraulic gradient in the area. Due to the proximity of wells 1 and 2, their individual WHPAs partially overlapped. Due to this overlap, the individual WHPAs for wells 1 and 2 were combined and the scalloped areas were smoothed out to form a single final WHPA with an oval shape.

Well	Yield (gpm)	Well Depth (ft)	Well Screen Intervals (ft)	GWMB Aquifer	Individual WHPA Radius (ft)	Confinement
Well 1	140	228	186-208; 216-228	Upper Cape Fear	1366	Confined
Well 2	120	225	180-220	Upper Cape Fear	1296	Confined
Well 3	300	208	154-164; 171-191; 196-208	Upper Cape Fear	1999	Confined
Well 4	287	197	156-176; 182-197	Upper Cape Fear	2142	Confined

Figure 4. Town of Hobgood Well Information

Well	Well Yield (gpm)	Daily Period of Well Operation (minutes per day)	10 Year Withdraw Volume (ft ³)	Aquifer Thickness Based on Screen Interval (ft)	Volumetric Area of WHPA (ft ²)	Volumetric Radius of WHPA (ft)
1	140	720	246104279	42	5859626	1366
2	120	720	210946524	40	5273663	1296
3	300	720	527366312	42	12556341	2000
4	287	720	504513772	35	14414680	2142

Figure 5. Town of Hobgood Wellhead Protection Area Delineation Calculations

NED & Hydrogeologic
Framework Results for Well 1

measurements in feet	elevations	depths
Land Surface (1/3 arc sec NED)	90	0
Yorktown CU	78	12
Yorktown	50	40
Upper Cape Fear CU	-5	95
Upper Cape Fear	-19	109
Lower Cape Fear CU	-158	248
Lower Cape Fear	-254	344
Basement rock	-305	395

NED & Hydrogeologic
Framework Results for Well 2

measurements in feet	elevations	depths
Land Surface (1/3 arc sec NED)	82	0
Yorktown CU	78	4
Yorktown	50	33
Upper Cape Fear CU	-3	85
Upper Cape Fear	-17	99
Lower Cape Fear CU	-157	239
Lower Cape Fear	-252	334
Basement rock	-302	384

NED & Hydrogeologic
Framework Results for Well 3

measurements in feet	elevations	depths
Land Surface (1/3 arc sec NED)	71	0
Yorktown CU	69	2
Yorktown	45	26
Upper Cape Fear CU	4	67
Upper Cape Fear	-13	84
Lower Cape Fear CU	-158	229
Lower Cape Fear	-236	307
Basement rock	-284	355

NED & Hydrogeologic
Framework Results for Well 4

measurements in feet	elevations	depths
Land Surface (1/3 arc sec NED)	90	0
Yorktown CU	59	31
Yorktown	39	51
Upper Cape Fear CU	9	81
Upper Cape Fear	-11	101
Lower Cape Fear CU	-162	252
Lower Cape Fear	-222	312
Basement rock	-269	359

Figure 6. Groundwater Management Branch Well Data for the Town of Hobgood

Potential Contaminant Source Inventory

The inventory process begins by looking at the Source Water Assessment Program Report (SWAP) for the Town of Hobgood. Information from twenty State and Federal Databases is combined into that report, and the information is used as a starting point to research files at the various agencies. All relevant information is in the PCS tables and in the summaries that follow the tables.

PCS Name	PCS ID	PCS Type	PCS Risk Rating	Street Address	City	Zip	County
HIGGS, JAMES JR. RESIDENCE	23592	Pollution Incidents	Higher	203 South East Avenue	Hobgood	27843-	Halif
KWIK KORNER MART	00-0-000009736	UST Permits	Higher	301 Commerce St	Hobgood	27843	Halifax
WILEY WHITEHEAD FARMS	20741	Pollution Incidents	Higher	Poplar & First Street	Hobgood	27843-	Halif
HOBGOOD SERVICE CENTER	5499	Pollution Incidents	Higher	Nc 122 & Main St.	Hobgood	27843-	Halif

Potential Contaminant Source Attributes

Well # 1

SWAP Report, September, 2020

PCS Name	PCS ID	PCS Type	PCS Risk Rating	Street Address	City	Zip	County
HOBGOOD SERVICE CENTER	5499	Pollution Incidents	Higher	Nc 122 & Main St.	Hobgood	27843-	Halif

Potential Contaminant Source Attributes

Well # 2

SWAP Report, September, 2020

There were no PCSs identified within the assessment area for Wells # 3, or # 4

Windshield Survey

The WPC conducted a windshield survey of the WHPAs and identified each potential contamination source (PCS) facility or activity that might exist within the WHPAs. Onsite visits were made, and additional information was obtained regarding quantity and types of contaminants kept on site. The PCS list shows the sources identified during the inventory along with quantities and types of contaminants found at the site.

Agricultural Fields

Agricultural fields were located by comparing several different maps and using Google Earth to identify large areas that appeared to be cultivated as cropland. In areas of large-scale crop production, it is difficult to determine what crops are being raised, and what types of fertilizer/pesticides might be being applied as this is always changing or rotating depending on time of year and soils.

Septic Tank Systems and Abandoned Wells

The town operates a wastewater system to dispose of waste. All residents and businesses within WHPAs for Wells #1 and # 2 are connected to the municipal wastewater treatment system.

Residents and business within the WHPAs for Wells # 3 and # 4 all use private septic tank systems to eliminate waste.

There are some private wells within the WHPAs. The town does not have a requirement for new customers to connect to the municipal water.

Potential Contamination Sources

Each potential contamination source identified was assigned a code based on the following list:

Category	Code
Underground Storage Tanks	A
Agricultural Fields/Pesticide Fertilizer Application	B
Farm Operation	C
Major Roads	D
Above Ground Storage Tank	E
Pollution Incident	F
Cemetery	G
Lift Station	H
Fire Department	I

The following list show the potential contaminant source (PCS) types identified during the inventory of the WHPA of each of the wells, and maps for each of the WHPAs follow the list.

Wells #1 and # 2				
Map Code	PCS Site	Owner Contact	Potential Contaminant	Quantity
A-1	Kwik Korner Mart 301 Commerce St. Hobgood, NC 27843	Joseph Day Rt. 2 Box 232 Scotland Neck, NC 27874	UST Permit 00-0-000009736 Installed 5/3/79 Gasoline	2-7,500 gal.
F-1	James Higgs, Jr. Residence 203 South East Avenue Hobgood, NC	999 East 24 J- Street Bronx, New York 10466	Pollution Incident # 23592 See Description	
F-2	Hobgood Service Center 219 Commerce Street NC 122 & Main St. Hobgood, NC 27843	Federal Trust Fund Site	Pollution Incident # 5499 See Description	
F-3	Wiley Whitehead Farms Poplar & First Street Hobgood, NC		Pollution Incident # 20741 UST Incident See Description	
B-1 C-1	Timothy Russell Braddy Property Hwy 125	PO Box 147 Hobgood, NC 27843	Farm Operation Grain Silo Ag Fields –	Unknown

			Pesticide/Fertilizer Application 93.13 acres	
G-1	Hobgood Cemetery	Hobgood, Cemetery W. Fifth St Hobgood, NC 27843	Cemetery - Biological, viruses. 2.5 acres	Unknown
H-1 E-4	Lift Station 3 Pine St.	Town Of Hobgood PO Box 217 Hobgood, NC 27843	Septic Collection System AST Diesel	500 gal.
E-1	Town maintenance yard	Town Of Hobgood PO Box 217 Hobgood, NC 27843	Above ground storage tanks Gasoline Diesel Diesel Diesel – Mobile Generator	550 gal. 300 gal. 280 gal. 180 gal.
I-1	Hobgood VFD 100 W Commerce St.	108 W Commerce St.	Fire Station Has never used or stored firefighting chemicals on site. 0.64 acres	
D-1	Hwy. 125	Highway Division Office 4 P.O. Box 3165 Wilson, NC 27895 (252) 640-6400		Spills
D-2	Hwy. 122	Highway Division Office 4 P.O. Box 3165 Wilson, NC 27895 (252) 640-6400		Spills
E-2	Well # 1	Town Of Hobgood PO Box 217 Hobgood, NC 27843	Diesel for generator	50 gal.
E-3	Well # 2	Town Of Hobgood PO Box 217 Hobgood, NC 27843	Diesel for generator	175 gal.
B-14	Hobgood Charter School, Inc. 5th Street	201 S. Beech Street	Outside WHPA Turfgrass fertilizer	
NA	Cofield Laundromat 302 Poplar, Weldon, NC Wrong location on HWM site locator tool.		Not in the Wellhead Protection Area	
Well # 3				
B-2	Brandon Wilson Hwy. 125	33203 Highway 125 Hobgood, NC 27843	Ag Fields – Pesticide/Fertilizer Application 96.96 acres	Unknown

B-3	Andrew Milton Davis, III Hwy. 125	1685 Whites Fork Rd. Hobgood, NC 27843	Ag Fields - Pesticide/Fertilizer Application 320.68 acres	Unknown
B-4	Roy C. Whitehead, Revoc Trust 33198 Hwy 125	PO Box 116 Scotland Neck, NC 27874	Ag Fields - Pesticide/Fertilizer Application 122.68 acres	Unknown
B-5	Andrew Milton Davis, III Hwy. 125	PO Box 39 Hobgood, NC 27843 1685 Whites Fork Rd. Hobgood, NC 27843	Ag Fields - Pesticide/Fertilizer Application 126.78 acres	Unknown
B-6	Timothy D. Purvis W. 7th St.	PO Box 308 Hobgood, NC 27843	Ag Fields - Pesticide/Fertilizer Application 106.83 acres	Unknown
D-1	Hwy. 125	Highway Division Office 4 P.O. Box 3165 Wilson, NC 27895 (252) 640-6400		Spills
Well # 4				
B-7	Janet White Leggett Property Hwy 125	3609 Woodlawn Rd. Rocky Mount, NC 27804	Ag Fields - Pesticide/Fertilizer Application 267.15 acres	Unknown
B-8	Andrew Milton Davis, III Hwy 125	PO Box 39 Hobgood, NC 27843	Ag Fields - Pesticide/Fertilizer Application 114.13 acres	Unknown
B-9	Andrew Milton Davis, III Arthur Cross Rd.	1685 Whites Fork Rd. Hobgood, NC 27843	Ag Fields - Pesticide/Fertilizer Application 91.37 acres	Unknown
B-10	Andrew Milton Davis, III Arthur Cross Rd.	1685 Whites Fork Rd. Hobgood, NC 27843	Ag Fields - Pesticide/Fertilizer Application 108.85 acres	Unknown
B-11	Andrew Milton Davis, III Hwy. 125	1685 Whites Fork Road Hobgood, NC 27843	Ag Fields - Pesticide/Fertilizer Application 320.68 acres	Unknown
B-12	Barbara Marks Braddy Hwy 125	PO Box 51 Hobgood, NC 27843	Ag Fields - Pesticide/Fertilizer Application 25.44 acres	Unknown
B-13	G4 Land, LLC 32152 Hwy 125	326 Winslow Rd. Scotland Neck, NC 27874	Ag Fields - 150.90 acres	Unknown

			Pesticide/Fertilizer Application	
D-1	Hwy. 125	Highway Division Office 4 P.O. Box 3165 Wilson, NC 27895 (252) 640-6400		Spills
D-3	Arthur Cross Rd.	Highway Division Office 4 P.O. Box 3165 Wilson, NC 27895 (252) 640-6400		Spills

Additional information and description of pollution incidents:

James Higgs, Jr. Residence – UST Incident #23592, 203 Southeast Avenue, Map Code F-1 –

A leak was discovered May 2, 2000, as the result of a leak in UST piping/flood damage from 550-gallon heating oil tank and a 275-gallon heating oil tank. This was a Hurricane Floyd flood site. State Lead contractors removed the USTs and prepared LSA and CSA reports. Two water supply wells are within 1,000 feet and some GW contamination at site. After CSA, property owner Mr. Higgs refused. site visit and there are few 55-gallon drum with contaminated soil still at the site. Approximately 60 cubic yards of soil had been excavated and stockpiled on the site.

Groundwater samples from the March 5, 2001, monitoring event show slight benzene (10 ppm) and naphthalene (40 ppm) contamination in monitoring well # 1A as seen in the table below.

From the WaRO, as the result of a request for more information for this WHPP - based on the minor groundwater contamination at the basin only, with clean GW in the sentinel and deep wells, this site has been reclassified as 'Low Risk' and Mr. Higgs will receive a Notice Of Regulatory Requirements for a Notice of Residual Petroleum soon. (8/3/22)

Compound	Method	MW-1A	MW-2	MW-3	MW-4	MW-5	DW-1	NCAC 2L STD (ug/l)	GCL (ug/L)
Aliphatics & Aromatics, ug/l									
C5-C8 Aliphatics	VPH	ND	ND	ND	ND	ND	ND	420	NA
C9-C18 Aliphatics	VPH/EPH	ND	ND	ND	ND	ND	ND	4,200	NA
C19-C36 Aliphatics	VPH	ND	ND	ND	ND	ND	ND	210	NA
C9-C22 Aromatics	VPH/EPH	91	ND	ND	ND	ND	ND	42,000	NA
Volatile Organics, ug/l									
Benzene	602	10	ND	ND	ND	ND	ND	1	5,000
n-Butylbenzene	602	ND	ND	ND	ND	ND	ND	70	6,900
sec-Butylbenzene	602	ND	ND	ND	ND	ND	ND	70	8,500
tert-Butylbenzene	602	ND	ND	ND	ND	ND	ND	70	15,000
Chlorobenzene	602	ND	ND	ND	ND	ND	ND	50	NA
1,2-Dichloroethane (EDB)	602	ND	ND	ND	ND	ND	ND	0.0004	380
1,2-Dichlorobenzene	602	ND	ND	ND	ND	ND	ND	620	72,500
1,3-Dichlorobenzene	602	ND	ND	ND	ND	ND	ND	620	61,500
1,4-Dichlorobenzene	602	ND	ND	ND	ND	ND	ND	75	39,500
1,2-Dichloroethane	602	ND	ND	ND	ND	ND	ND	0.038	380
1,2-Dichloropropane	602	ND	ND	ND	ND	ND	ND	0.560	560
Isopropylalcohol	602	ND	ND	ND	ND	ND	ND	70	70,000
Ethylbenzene	602	7.2	ND	ND	ND	ND	ND	28	29,000
Hexachlorobutadiene	602	ND	ND	ND	ND	ND	ND	0.44	NA
Isopropylbenzene	602	ND	ND	ND	ND	ND	ND	70	25,000
p-Isopropyltoluene	602	ND	ND	ND	ND	ND	ND	NA	NA
Methyl Tert Butylalcohol	602	ND	ND	ND	ND	ND	ND	200	200,000
Naphthalene	602	ND	ND	ND	ND	ND	ND	21	15,500
n-Propylbenzene	602	ND	ND	ND	ND	ND	ND	70	30,000
Styrene	602	ND	ND	ND	ND	ND	ND	100	100,000
Tetrachloroethene	602	ND	ND	ND	ND	ND	ND	0.7	NA
Toluene	602	ND	ND	ND	ND	ND	ND	1,000	257,500
1,2,3-Trichlorobenzene	602	ND	ND	ND	ND	ND	ND	NA	NA
1,2,4-Trichlorobenzene	602	ND	ND	ND	ND	ND	ND	70	NA
1,2,4-Trimethylbenzene	602	ND	ND	ND	ND	ND	ND	350	28,500
1,3,5-Trimethylbenzene	602	ND	ND	ND	ND	ND	ND	350	25,000
Total Xylenes	602	ND	ND	ND	ND	ND	ND	530	87,500
Semivolatile Organics, ug/l									
Acenaphthene	625	ND	ND	ND	ND	ND	ND	210	2,120
Anthracene	625	ND	ND	ND	ND	ND	ND	2,100	645
Benidine	625	ND	ND	ND	ND	ND	ND	NA	NA
Bis-(2-Ethylhexyl) Phthalate	625	ND	ND	ND	ND	ND	ND	3	NA
di-n-Butylphthalate	625	ND	ND	ND	ND	ND	ND	700	NA
Flourene	625	ND	ND	ND	ND	ND	ND	280	950
Naphthalene	625	40	ND	ND	ND	ND	ND	21	15,500
Phenanthrene	625	ND	ND	ND	ND	ND	ND	210	410
Pyrene	625	ND	ND	ND	ND	ND	ND	210	210
Phenol	625	ND	ND	ND	ND	ND	ND	300	NA
Note: NA = Not Applicable GCL = Gross Contaminant Level ND = Not Detected concentrations in ug/l - micrograms per liter shading exceeds NCAC 2L STD 2L STD - Groundwater Quality Standard (15A NCAC Subchapter 2L)									

Hobgood Service Center – Groundwater Incident #5499, 219 Commerce Street, Map Code F-2 –

This site is a Federal Trust Fund Site, and the latest Groundwater Monitoring Report (3/2/22) indicates that based on the groundwater elevation data, groundwater flows to the west-northwest from the source area. The following table shows the most recent groundwater monitoring result

with contamination remaining in MW – 1. Another annual report for the site is scheduled to be completed soon.

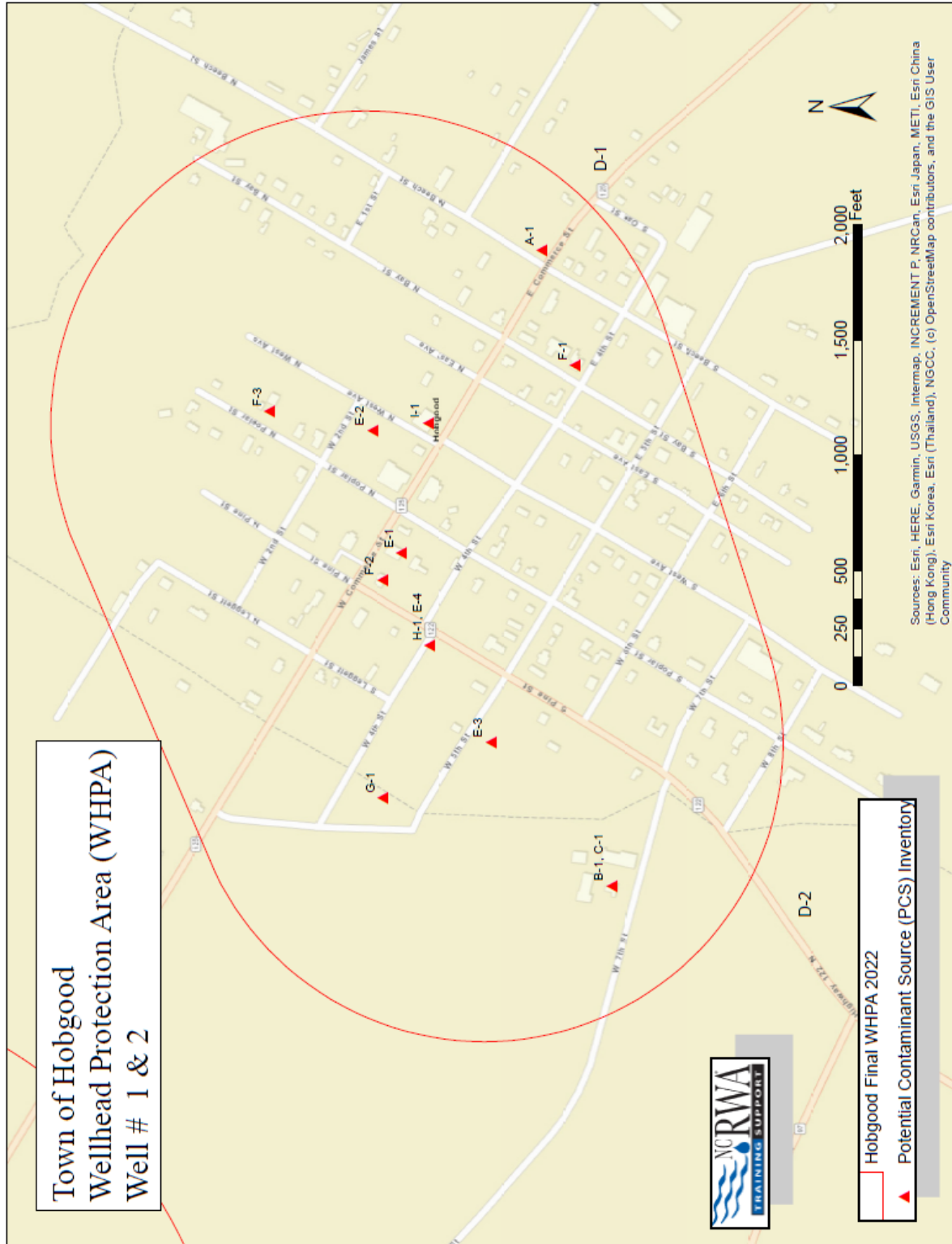
TABLE 3
GROUNDWATER ANALYTICAL DATA
HOBGOOD SERVICE CENTER
219 COMMERCE STREET
HOBGOOD, HALIFAX COUNTY, NORTH CAROLINA
INCIDENT #5489

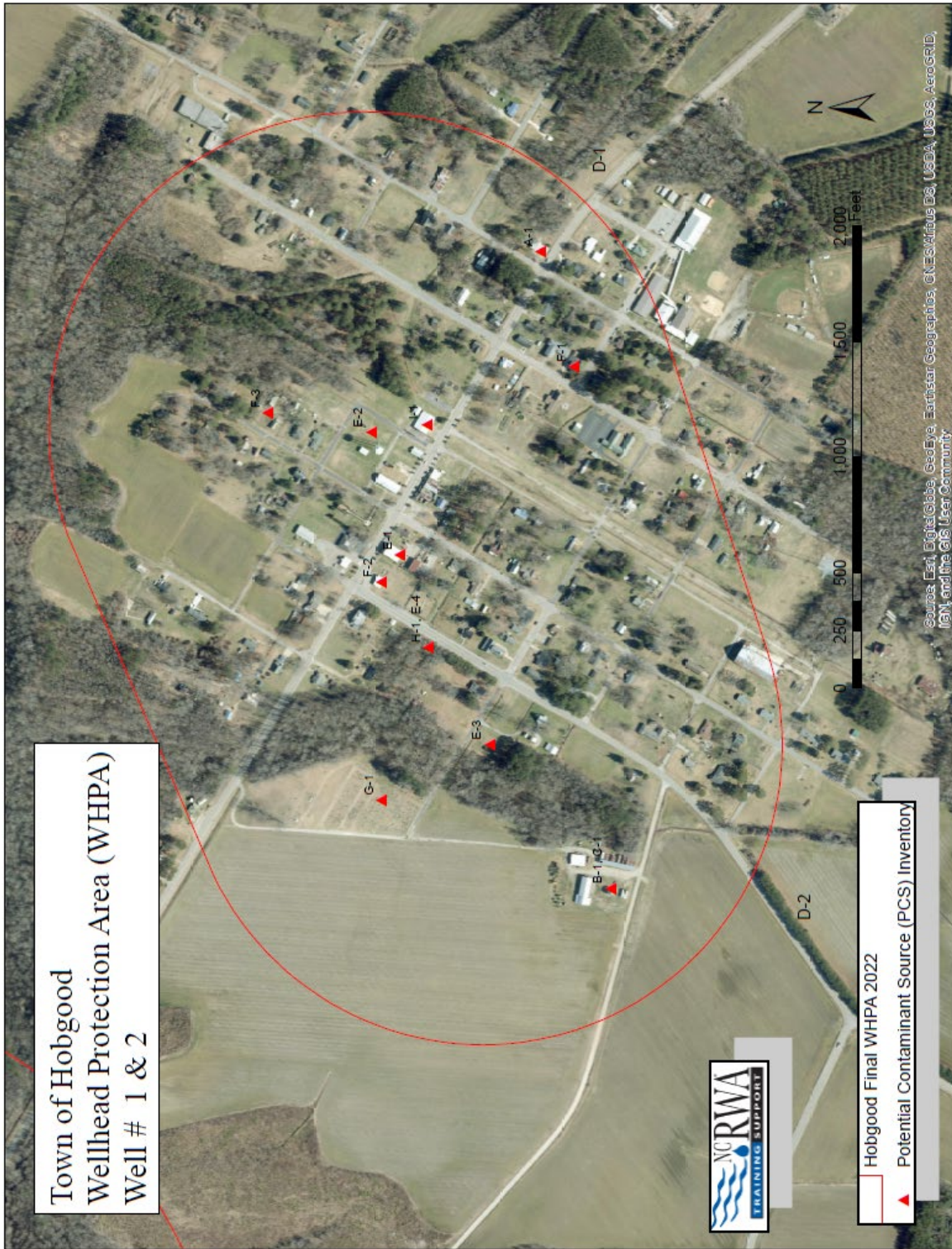
Monitoring Well	Date	Method 6230D or 6200B																	MADEP VPH					
		Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Isopropylbenzene	n-Propylbenzene	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	n-Butylbenzene	sec-Butylbenzene	Isopropyltoluene	EDB	Lead	Acetone	Methylene Chloride	Chloroethane	Styrene	C8-C9 Aliphatics	C10-C15 Aliphatics	C16-C22 Aliphatics	C23-C28 Aromatics
MW-1	8/12/2004	3,800	23,000	1,800	8,800	<50	98	280	540	1,900	520	NR	NR	NR	26	37	NR	NR	NR	49,000	16,000	NA	7,900	
	7/9/2014	Not Sampled/Light Non-Aqueous Phase Liquid																						
	11/3/2015	Not Sampled/Light Non-Aqueous Phase Liquid																						
	4/13/2017	3,400	17,000	1,400	10,800	<200	100J	220	780	2,000	730	88	<200	<200	<200	NA	<20000	--	<240	<200	NA	NA	NA	NA
	6/28/2018	3,700	18,000	1,600	12,200	32J	110	250	360J	3,000	910	120	<100	<100	32J	NA	<10000	--	<120	<100	NA	NA	NA	NA
	3/4/2019*	1,000	6,800	840	6,000	<50	61	150	460	1,900	530	36J	217	<50	<50	NA	1200J	--	<60	167	NA	NA	NA	NA
	4/4/2019*	1,100	5,450	833	5,430	<2,500	<50	117	267	1,550	442	<50	<50	<50	<50	NA	<1,000	80.2	<50	<50	NA	NA	NA	NA
	10/10/2019*	1,330	11,900	1,370	8,360	<50	75.7	187	364	2,170	583	<50	<50	<50	<50	NA	<1,000	<50	<50	<50	NA	NA	NA	NA
	3/23/2020*	4,910	13,200	2,730	16,200	<100	152	370	670	3,880	1,110	<100	<100	<100	<100	NA	<2000	<100	<100	<100	NA	NA	NA	NA
	3/2/2021*	2,460	17,900	2,080	9,930	<50.0	112	325	386	2,470	721	35.1 J	<50.0	81.6	26.4 J	NA	<2,500	<350	<125	<50.0	NA	NA	NA	NA
MW-2	11/3/2015	<0.079	<0.1	<0.13	<0.25	<0.09	<0.12	<0.11	<0.12	<0.18	<0.1	<0.1	<0.11	<0.12	<0.089	NA	<50	--	<0.32	<0.50	NA	NA	NA	NA
	4/13/2017	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NA	<50	--	<0.6	<0.50	NA	NA	NA	NA
	6/28/2018	0.34J	5.5	1.7	11.9	<0.50	0.45J	0.99	1.3J	8.9	3.1	0.99	0.25J	0.15J	<0.50	NA	<50	--	0.56J	<0.50	NA	NA	NA	NA
	4/4/2019	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<10	<0.50	<0.50	<0.50	NA	NA	NA	NA
	10/10/2019	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<10	<0.50	<0.50	<0.50	NA	NA	NA	NA
MW-3	3/23/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<10	<0.50	<0.50	<0.50	NA	NA	NA	NA
	11/3/2015	<0.079	<0.1	<0.13	<0.25	<0.09	<0.12	<0.11	<0.12	<0.18	<0.1	<0.1	<0.11	<0.12	<0.089	NA	<50	--	0.33J	<0.50	NA	NA	NA	NA
	4/13/2017	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NA	<50	--	<0.6	<0.50	NA	NA	NA	NA
	6/28/2018	<0.50	<0.50	<0.50	<1.50	<0.50	<0.50	<0.50	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<10	<0.50	<0.50	<0.50	NA	NA	NA	NA
	4/4/2019	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<10	<0.50	<0.50	<0.50	NA	NA	NA	NA
MW-4	10/10/2019	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<10	<0.50	<0.50	<0.50	NA	NA	NA	NA
	3/23/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<10	<0.50	<0.50	<0.50	NA	NA	NA	NA
	4/13/2017	<0.5	<0.5	0.16J	0.38J	<0.5	<0.5	0.30J	<1	1.7	0.61	0.39J	0.13J	<0.5	<0.5	NA	<50	--	<0.6	<0.50	NA	NA	NA	NA
	6/28/2018	<0.50	<0.50	<0.50	<1.50	<0.50	<0.50	<0.50	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<50	--	<0.60	<0.50	NA	NA	NA	NA
	4/4/2019	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<10	<0.50	<0.50	<0.50	NA	NA	NA	NA
RW-1	10/10/2019	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<10	<0.50	<0.50	<0.50	NA	NA	NA	NA
	3/23/2020	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<10	<0.50	<0.50	<0.50	NA	NA	NA	NA
	4/13/2017	<0.5	<0.5	0.16J	0.38J	<0.5	<0.5	0.30J	<1	1.7	0.61	0.39J	0.13J	<0.5	<0.5	NA	<50	--	<0.6	<0.50	NA	NA	NA	NA
	6/28/2018	<0.50	<0.50	<0.50	<1.50	<0.50	<0.50	<0.50	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<50	--	<0.60	<0.50	NA	NA	NA	NA
	4/4/2019	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<10	<0.50	<0.50	<0.50	NA	NA	NA	NA
2L GW Standard		1	600	600	500	20	70	70	6	400	400	70	70	25	0.02	15	6000	5	3	70	400	700	10,000	200
GCL		5,000	260,000	84,500	85,500	20,000	25,000	30,000	6,000	28,500	25,000	6,900	8,500	11,700	50	15,000	6,000,000	5,000	3,000	70,000	NE	NE	NE	NE

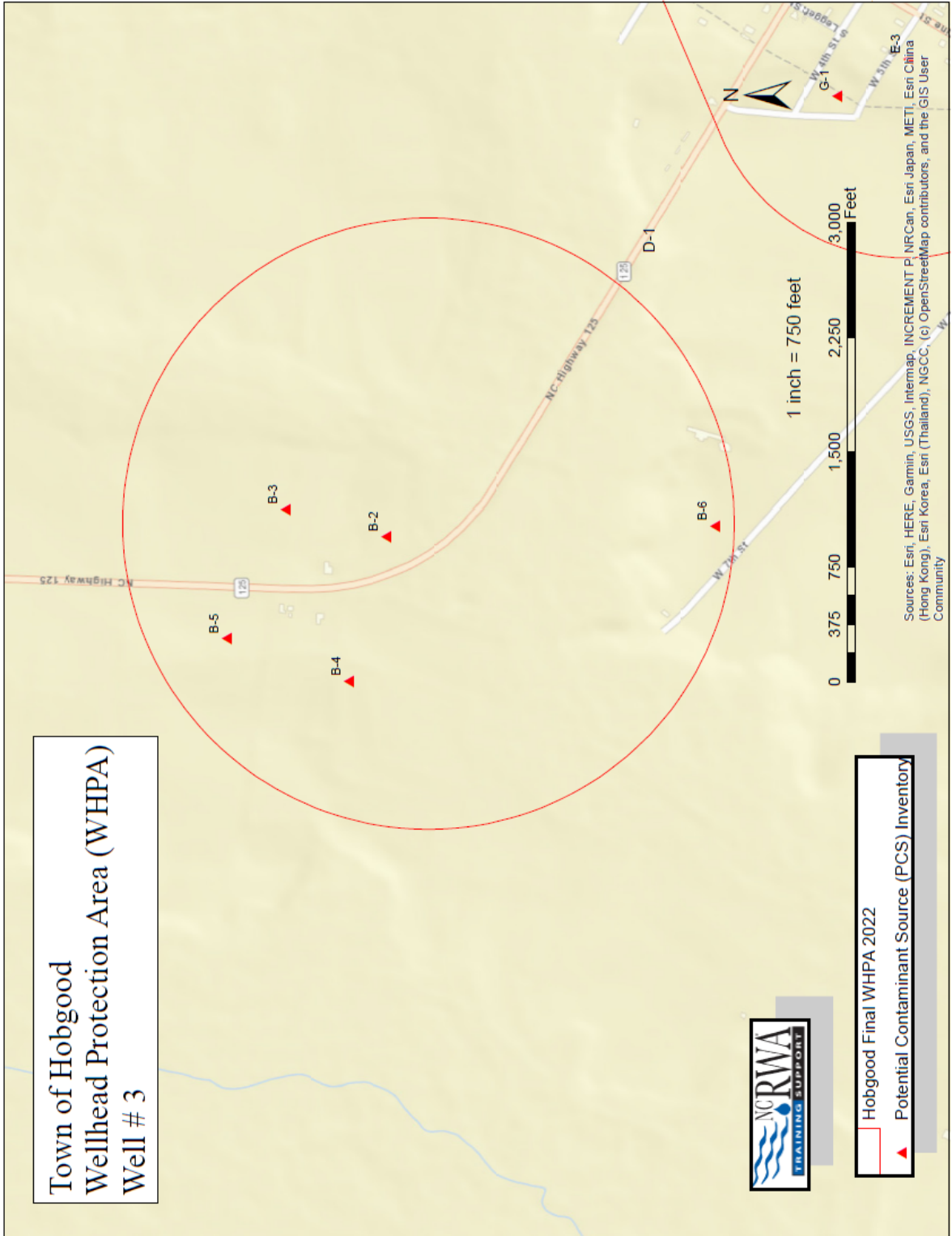
Notes:
 MTBE = Methyl Tertiary Butyl Ether
 EDB = Ethylene Dibromide (1,2-Dibromoethane)
 Concentrations are reported in micrograms per liter (ug/l) = parts per billion (ppb)
 *C = Not Detected at or above the laboratory detection limit and/or laboratory reporting limit
 J = Estimated value below method reporting limit
 NR = Not Reported
 NA = Not Analyzed
 Concentrations in bold print equal or exceed the NCDEQ 15A 2L NCAC Groundwater Standard (2L Standard).
 GCL = Gross Contamination Level
 NE = Not Established
 * - Sampling event occurred after Enviro-BAC injection in MW-1.

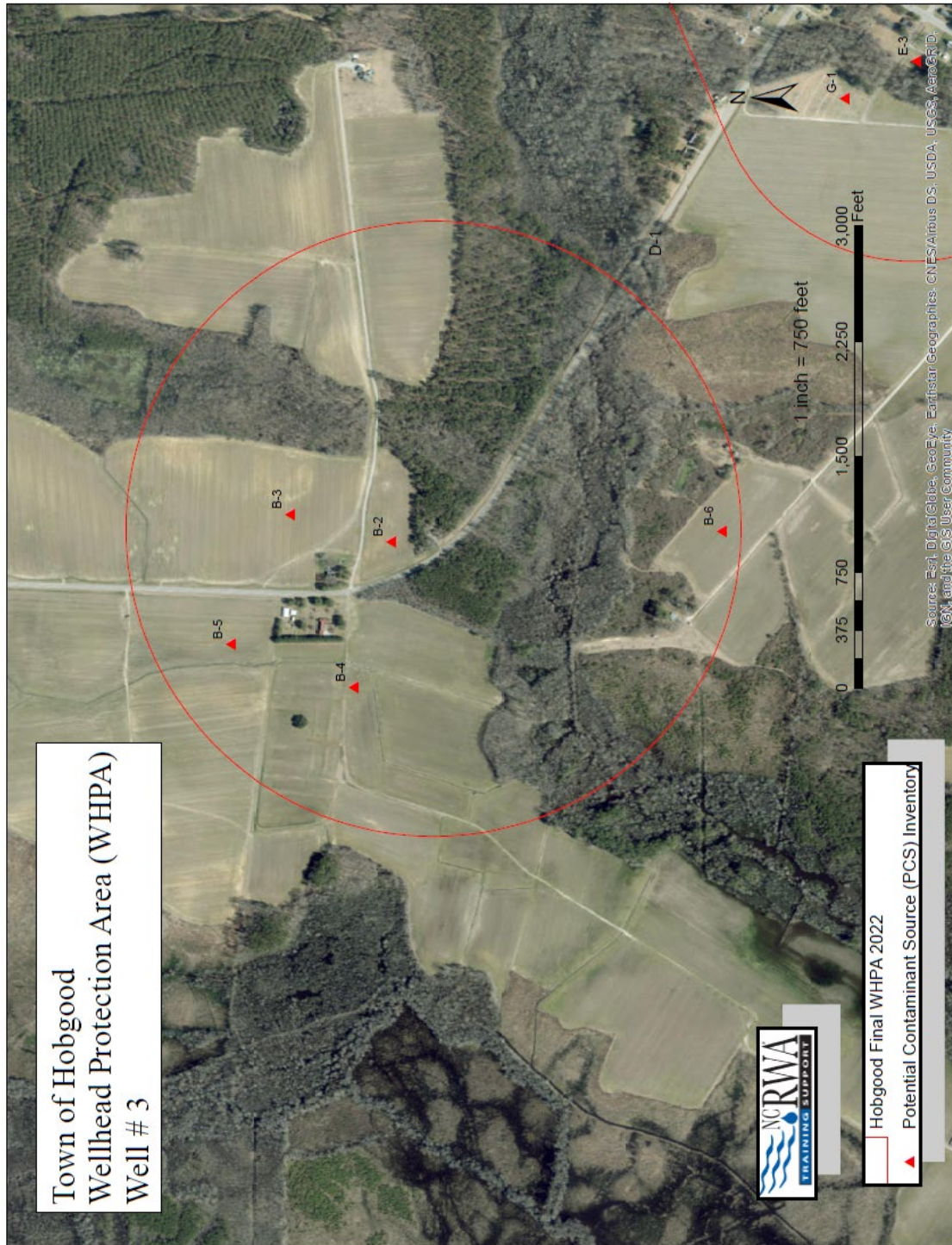
Whiley Whitehead Farms - UST Incident # 20741, Poplar & First Street, Map Code F-3 -
 One 10,000 gallon diesel UST removed from the site in 1998. From a report submitted in 1999, soil contamination was detected in samples at 2.4 ppm **TPH (Total Petroleum Hydrocarbon)(Die - sampling method)** in sample 1A and 4.8 TPH (Die) in sample 1C. (From the Raleigh Regional Office files) From the Washington Regional Office who has taken possession of the file and is following up as a result of a request for information to update this WHPP. Mr. Whitehead passed away in 2006, so that site will be forwarded to State Lead. The GIS location needs to be relocated based on the actual location in the reports. It should be near the northern end of Poplar Street about the same distance away but north of Hobgood Well #1 (Parcels w/ some run down barns / sheds, that are now owned by Dennis Bell). 206(?) North Poplar St. The location has been changed in the HWM site locator tool. (8/4/22)

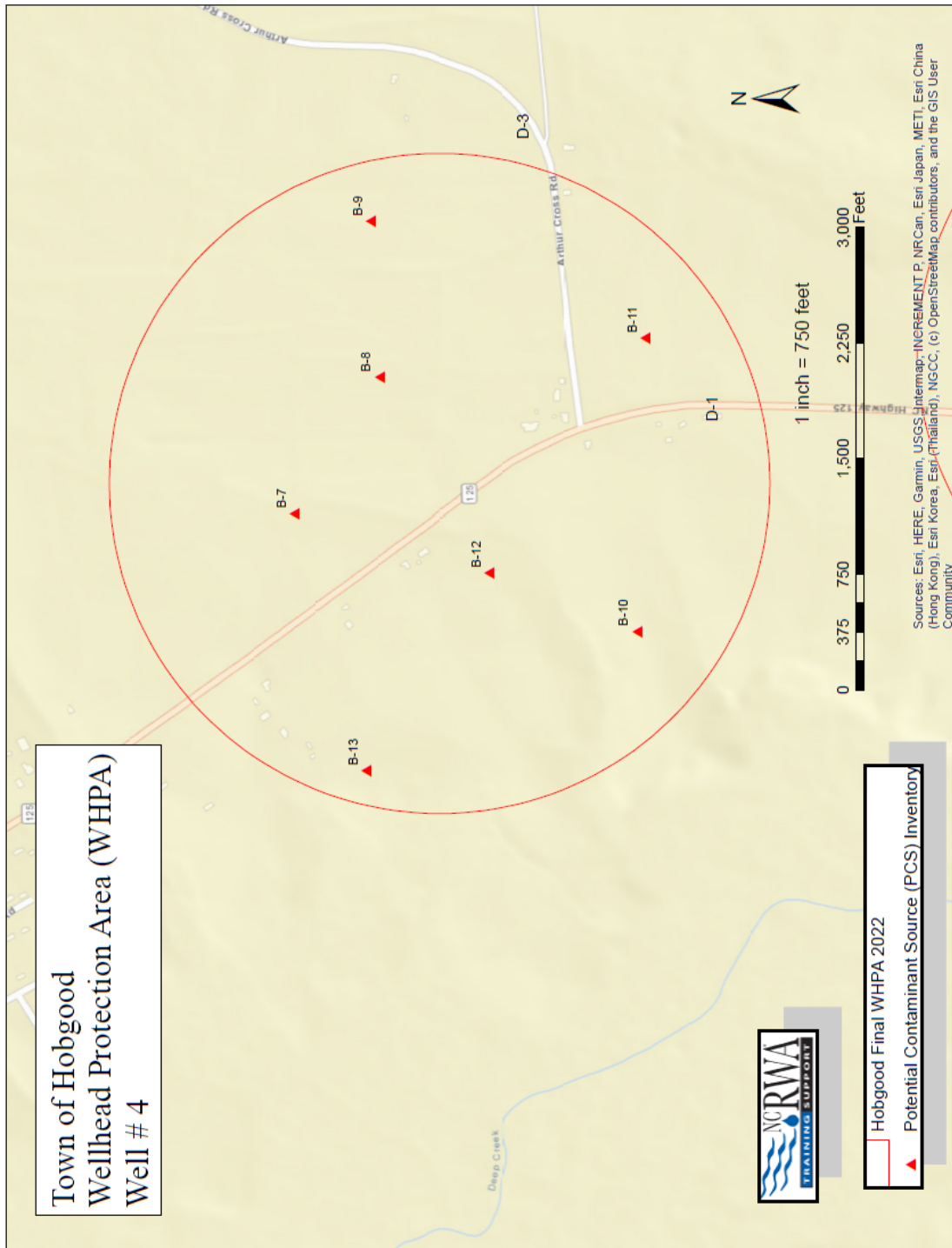
Maps on the following pages show the town's Wellhead Protection Areas with Potential Contaminant Source locations.

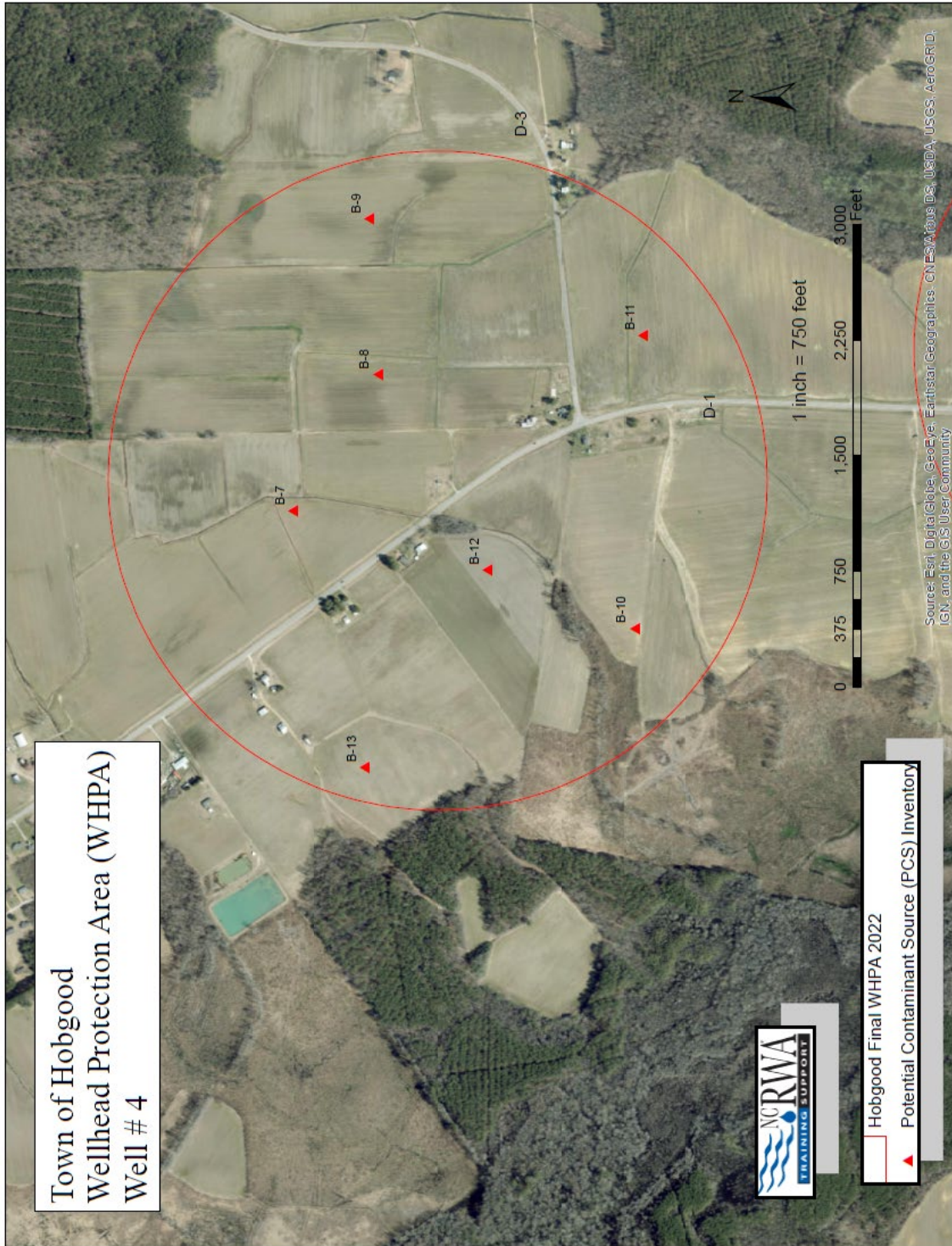












Risk Assessment

Risk Assessment Method

The water supply wells for the town are constructed in a confined aquifer with protective clay confining units above and below the water-bearing zones. The aquifer is composed chiefly of fossiliferous sands and clays.

For each WHPA, the PCSs were ranked according to the threat each presented to the water supply well or wells. The following method was used to rank each PCS in each WHPA:

Each PCS was assigned to a risk category of higher, moderate, or lower based on information adapted from the EPA (1993), and from the Oregon Wellhead Protection Program (See Classification Chart in Appendix). Each PCS was assigned a numerical "category" score to correspond with the risk category (e.g., higher (H)-3, moderate (M)-2, lower (L)-1). Sites with known soil and/or groundwater contamination were assigned a score of "4" and a symbol of "X." Each site of potential or known contamination was then assigned a "proximity" score calculated with the following equation:

proximity score = 1 - (distance from the well (or well center point for combined wells)/radius of the WHPA)

The final PCS ranking was obtained by multiplying the category score by the proximity score for each potential contaminant site. This resulted in a relative ranking of each PCS within a given WHPA according to the threat it poses to the water supply well. Assessing the relative risk of contamination within each WHPA from the PCSs it contains allows for a determination of (1) which water supply wells are at greatest risk of contamination, and (2) which PCSs should be considered first with respect to wellhead protection. Once the risk assessment is carried out, priorities can be set to manage the PCSs more effectively.

Town of Hobgood Numerical Risk Assessment:

PCS Site	Map Code	Risk Category	Risk	Radius	Distance Well 1 (ft.)	Proximity Score Well # 1	Overall Risk Well # 1
Kwik Korner Mart	A-1	H	3	1366	1080	0.21	0.63
James Higgs, Jr. Residence	F-1	X	4	1366	864	0.37	1.47
Hobgood Service Center	F-2	X	4	1366	674	0.51	2.03
Wiley Whitehead Farms	F-3	X	4	1366	472	0.65	2.62
Lift Station 3	H-1 E-4	M M	4	1366	994	0.27	1.09
Town Maintenance Yard	E-1	M	2	1366	648	0.53	1.05
Well # 1	E-2	M	2	1366	5	1.00	1.99
Hobgood VFD	I-1	L	1	1366	269	0.80	0.80
Hwy. 125	D-1	M	2	1366	327	0.76	1.52
Hwy. 122	D-2	M	2	1366	718	0.47	0.95
						Total	14.15

PCS Site	Map Code	Risk Category	Risk	Radius	Distance Well 2 (ft.)	Proximity Score 2	Overall Risk Well 2
Hobgood Service Center	F-2	X	4	1296	833	0.36	1.43
Timothy Russell Braddy Property	B-1 C-1	H H	6	1296	678	0.48	2.86
Hobgood Cemetery	G-1	L	1	1296	499	0.61	0.61
Lift Station 3	H-1 E-4	M M	4	1296	485	0.63	2.50
Town Maintenance Yard	E-1	M	2	1296	828	0.36	0.72
Well # 2	E-3	M	2	1296	5	1.00	1.99
Hwy. 125	D-1	M	2	1296	842	0.35	0.70
Hwy. 122	D-2	M	2	1296	321	0.75	1.50
						Total	12.33

PCS Site	Map Code	Risk Category	Risk	Radius	Distance Well 3 (ft.)	Proximity Score 3	Overall Risk Well 3
Brandon Wilson	B-2	L	1	2000	105	0.95	0.95
Andrew Milton Davis, III	B-3	L	1	2000	530	0.74	0.74
Roy C. Whitehead	B-4	L	1	2000	660	0.67	0.67
Andrew Milton Davis, III	B-5	L	1	2000	1141	0.43	0.43
Timothy D. Purvis	B-6	L	1	2000	1536	0.23	0.23
Hwy. 125	D-1	M	2	2000	111	0.94	1.89
						Total	4.90

PCS Site	Map Code	Risk Category	Risk	Radius	Distance Well 4 (ft.)	Proximity Score Well # 4	Overall Risk Well # 4
Janet White Leggett Property	B-7	L	1	2142	125	0.94	0.94
Andrew Milton Davis, III	B-8	L	1	2142	252	0.88	0.88
Andrew Milton Davis, III	B-9	L	1	2142	1475	0.31	0.31
Andrew Milton Davis, III	B-10	L	1	2142	956	0.55	0.55
Andrew Milton Davis, III	B-11	L	1	2142	1134	0.47	0.47
Barbara Marks Braddy	B-12	L	1	2142	303	0.86	0.86
G4 Land, LLC	B-13	L	1	2142	717	0.67	0.67
Hwy. 125	D-1	M	2	2142	163	0.92	1.85
Arthur Cross Rd.	D-3	M	2	2142	1035	0.52	1.03
						Total	7.56

Summary Risk Assessment

The wells in all three wellfields are screened in the highly confined Upper Cape Fear aquifer, so the risk from small volume spills near the surface is relatively low. Taking into consideration the nature and number of PCSs and the location of each PCS in relation to the well's location in each of the WHPAs, a ranking of the vulnerability of the water supply wells is as follows with the well at the highest risk being designated as number one. Well # 1 is the most vulnerable to contamination from the surface as there are more PCSs that area and they rank higher using this risk assessment method.

1. Well # 1 = 14.15
2. Well # 2 = 12.33
3. Well # 4 = 7.56
4. Well # 3 = 4.90

Management of the Wellhead Protection Areas

There are two methods of managing a Wellhead Protection Area. They are regulatory and non-regulatory. The Town of Hobgood has chosen a non-regulatory approach to manage its wellhead protection areas, which will include the following:

A Wellhead Protection Brochure and/or newsletter will be delivered to each resident, business, agricultural operation, and industry within the Wellhead Protection Areas. Copies of this brochure will be made available at town offices, the public library, and other locations deemed necessary for public education on Wellhead Protection. Distribution of a brochure to all town residents will be considered, possibly by mailing a copy in each water bill. In general, the brochure and/or newsletter will convey to each citizen/business the following information:

- An explanation of what groundwater is and the number of wells in their particular system
- An explanation of the Wellhead Protection Program.
- Sources of ground-water pollution
- Tips on protecting their water supply
- Information on proper disposal of household hazardous wastes and oils (i.e., not disposed of through septic systems, pouring on ground, or through regular garbage collection)
- Information on proper use of fertilizers, herbicides, and pesticides
- Information on household hazardous waste collection opportunities
- Information on proper maintenance of heating oil tanks and septic systems
- Phone numbers to contact for more information

Town of Hobgood personnel will be educated on Wellhead Protection and steps they can take to reduce the potential for contamination (e.g., information about best management practices, standard operating procedures, waste handling practices, etc.). The Town of Hobgood will also contact the North Carolina Division of Environmental Assistance and Customer Service (DEACS) to investigate steps that the town can take to reduce the amount of waste released into the air and water and on the land at the town owned and/or managed facilities.

Educational Brochures

The Town of Hobgood has been provided with copies of EPA Bulletins regarding the management of certain activities that might impact groundwater quality. These Bulletins can be printed and distributed to residents and businesses as educational tools. They address Stormwater, Small Scale Pesticides, Septic systems, Large Scale Pesticides, the DEACS brochure, a CRP Continuous Fact Sheet, Chemical Users, Above Ground Storage Tanks, Vehicle Washing, Underground Storage Tanks, and Managing Sanitary Sewer Overflows and Combined Sewer Overflows to Prevent Contamination of Drinking Water.

EPA/Watershed Academy list of Source Water Protection: Best Management Practices and Other Measures for Protecting Drinking Water Supplies may be found at:

Source Water Protection | Watershed Academy Web | US EPA

Waste Management Practices

The Town of Hobgood will provide information to each business, industry, and farm located within the WHPAs on waste handling practices, best management practices, standard operating procedures, and waste oil disposal methods which could be employed to reduce the potential for ground water contamination. The town will also provide information regarding the North Carolina Division of Environmental Assistance and Customer Service (DEACS) to each business, industry, and farm located within the WHPA. Owners/operators of potential contamination sources will be encouraged to contact the DEACS. The DEACS provides free technical and other non-regulatory assistance to reduce the amount of waste released into the air and water and on the land. The DEACS serves as a central repository for waste reduction and pollution prevention information. The DEACS emphasizes waste reduction through pollution prevention, encourages companies and government agencies to go beyond compliance, and provides information about the environmental permitting process. This information is provided at no charge to North Carolina businesses, industries, government agencies, and the general public upon request. For additional information, the DEACS may be contacted at 1-877-623-6748 or to report an environmental emergency, call 1-800-858-0368. Their website is [Environmental Assistance and Customer Service | NC DEQ](#)

Chemical Storage

The town will provide information to each business, industry, and farm located within the WHPA on chemical storage practices, best management practices for handling and disposal of chemicals, and resources for the development of spill response plans. Operators/owners of potential contaminant sources which store hazardous chemicals will be encouraged to follow all OSHA regulations and standards including proper labeling of chemicals, proper chemical storage and handling practices, and maintaining records of Safety Data Sheets (SDS) for all chemicals onsite. Businesses, industries, and agricultural operations who employ staff will be encouraged to train their employees on the proper handling and disposal of all hazardous chemicals. All owners/operators of potential contaminant sites which use, store, or handle hazardous chemicals will be provided with a contact name and number for The Town of Hobgood for reporting any chemical release or spill to the ground surface or if damage is found to any sewage or drain lines or chemical storage disposal containers that could potentially cause a contamination event. In the event of any large chemical release reported, the town will contact the NC Hazardous Materials Williamston Regional Response Team at (800) 545-7781 or (252) 792-3521.

Abandoned Wells

Owners of improperly constructed/abandoned wells identified within the WHPAs will be provided information regarding the threat posed to the water supply by these wells. Owners of improperly constructed/abandoned wells will be encouraged to have these wells properly abandoned in accordance with N.C.'s well construction standards found at 15A NCAC 2C.0100, "Criteria and Standards Applicable to Water Supply and Certain Other Wells". If information exists that a well is improperly constructed or is contributing to the contamination of groundwater, The town will notify the Water Quality Regional Operations Section of the Division of Water Resources.

Owners of improperly constructed/abandoned wells will also be provided information about The Community Conservation Assistance Program (CCAP), which is a voluntary, incentive-based program designed to improve water quality through the installation of various best management practices (BMPs) on urban, suburban and rural lands not directly involved with agriculture

production. CCAP provides monetary assistance to abandoned wells that are no longer being used but have not been properly abandoned.

[CCAP BMPs \(ncagr.gov\)](https://www.ncagr.gov)

Underground Storage Tanks

All owners/operators of regulated underground storage tanks (USTs) and other facilities subject to federal and/or state regulations located within the WHPAs will be requested to supply documentation that their facility is in compliance with said regulations. Operators of UST's will be asked to supply the town with a copy of their UST permit. If any UST sites are found to be non-compliant, the Underground Storage Tank Section of the State Division of Waste Management will be notified.

Abandoned Underground Storage Tanks

If an abandoned UST site is found, the town will contact the North Carolina Division of Waste Management, UST Section, to determine if a closure report was submitted demonstrating that no soil or groundwater contamination was identified during the removal of UST's. If a closure report was not submitted, the town will notify the UST Section of the location of the facility within the WHPAs and its proximity to a public water supply well.

Pollution Incidents

For soil or ground-water contamination incidents occurring within the WHPA, the town will contact the state agencies with oversight responsibilities for remediation to determine if remediation efforts are proceeding in a timely fashion and in accordance with any schedules established by these agencies. Through this process, the town will bring to the attention of the State agencies with oversight responsibilities for remediation any failures by the responsible parties to comply with required monitoring and corrective action. The town will also notify the State agencies with oversight responsibilities for remediation of the location of the facilities within the WHPAs and their proximity to a public water supply well. The town will also contact the State agencies with oversight responsibilities for the contamination incidents and notify them of the locations of any sites issued notices of "No-Further Action" occurring within the WHPAs and will request a review of this assessment.

Solid Waste Disposal

The NC Solid Waste Program regulates safe management of solid waste through guidance, technical assistance, regulations, permitting, environmental monitoring, compliance evaluation and enforcement. Information about landfill regulations can be found on their website. [Solid Waste Section | NC DEQ](#)

The NC Division of Environmental Assistance and Customer Service (DEACS) website also provides information about items that are banned from landfills. [Environmental Assistance and Customer Service | NC DEQ](#)

There is a list of Halifax County waste collection sites on their website [Halifax County, NC](#). Individual municipalities must be contacted for waste disposal information. A list of sites is provided in the Appendix.

It appears that the closest location for the Town of Hobgood residents to dispose of household hazardous waste would be in Pitt County. A brochure with location and contact information is included in the Appendix.

Automotive Repair

Any automotive repair shops in the Wellhead protection area currently, and any new businesses that move into the Wellhead Protection Area that produce auto wastes (oils, acids, anti-freeze, etc.) will be provided information on waste handling practices, best management practices, standard operating procedures, and waste oil disposal methods which could be employed to reduce the potential for ground water contamination. They will also be provided with information regarding the North Carolina Division of Environmental Assistance and Customer Service (DEACS) Owners/operators of these facilities will be encouraged to contact the DEACS.

Farm Operations/Agricultural Operations

The town will contact all facilities or agricultural operations within the WHPAs with pesticide storage or otherwise involved with the application of pesticides to ensure that they are pesticide operators licensed by the State of North Carolina and that proper records are maintained to ensure that all NC Pesticide Laws are adhered to. The town will provide information to these facilities or agricultural operations on waste handling practices, best management practices, standard operating procedures, and proper waste disposal methods which could be employed to reduce the potential for ground water contamination. These facilities will also be provided with information regarding the North Carolina Division of Environmental Assistance and Customer Service (DEACS).

The town will also coordinate with the Pesticide Disposal Assistance Program (PDAP) to provide information about proper disposal of pesticides. The PDAP is a consumer services program in the North Carolina Department of Agriculture and Consumer Services. The PDAP, part of the Structural Pest Control and Pesticides Division, is a NON-REGULATORY program that provides cost-free assistance to farmers and homeowners. The goal of the Pesticide Disposal Assistance Program is to assist the citizens of North Carolina by managing and supervising the safe collection and lawful disposal of banned, outdated, or unwanted pesticides. Additional information about the PDAP along with the current collection schedule can be located at:

[NCDA&CS - SPCAP - Pesticides \(ncagr.gov\)](http://ncagr.gov)

Underground Storage Tanks

The town will notify any individual, industry, business, or government agency installing or planning to install a regulated underground storage tank within the town's wellhead protection area of the following regulation:

North Carolina Underground Storage Tank (UST) Regulation 15A NCAC 2N .0301 stipulates specific siting and secondary containment requirements for UST systems installed after January 1, 1991. The rule is summarized as follows:

- (1) No UST system may be installed within 100 feet of a public water supply well or within 50 feet of any other well used for human consumption.
- (2) Secondary containment is required for UST systems within 500 feet of a well serving a public water supply or within 100 feet of any other well used for human consumption.

Violations of this regulation will be reported to the Division of Waste Management, Underground Storage Tank Section. The UST Section will also be notified of the location of the facility within the WHPAs and its proximity to a public water supply well or any other well used for human consumption.

A regulated UST system is any underground storage tank and associated piping that contains petroleum (including gasoline, diesel and used oil) or a hazardous substance as defined by the State rules (15A NCAC 2N). Tanks containing heating oil for use on the premises where stored are not regulated.

Above Ground Storage Tanks

Owners of above ground storage tanks (ASTs) containing oil with a volume greater than 660 gallons or a combination of ASTs with an aggregate volume greater than 1320 gallons are subject to the Oil Pollution Prevention regulations contained in Federal Regulations found at 40 CFR 112. In most cases, these facilities must prepare and implement a Spill Prevention Control and Countermeasures (SPCC) Plan. The town will verify the compliance status with regard to this regulation of each subject AST located within the WHPAs. Facilities with subject ASTs found not to be in compliance with this regulation will be notified of their regulatory responsibility under this regulation.

Fire Stations

It is believed that no firefighting chemicals have ever been used at the Hobgood Volunteer Fire Department site, but a copy of the “Aqueous Film-Forming Foam (AFFF)” fact sheet (dated August 2020) is included in the Appendix that can be shared with the fire department. It was developed by the Interstate Technology Regulatory Council (ITRC). The town will also encourage the fire department to visit the ITRC’s Fire Fighting Foams website at: <https://pfas-1.itrcweb.org/3-firefighting-foams/> for additional information.

Septic Tanks and Heating Oil Tanks

All farms, residents, businesses, and industries in the WHPA with septic tanks and home heating oil tanks will be distributed a copy of the Wellhead Protection Brochure and any other information the town can obtain from county and/or State agencies on proper septic tank and heating oil tank maintenance.

Lift Stations

The Town of Hobgood Public Works personnel inspect the wastewater lift stations daily. The wastewater collection system is inspected two times a year.

Fertilizer and Pesticide Application

The town will distribute copies of the EPA source Water protection practice bulletins: “Managing Turfgrass and Garden Fertilizer Application”, “Managing Large-Scale Application of Pesticides”, and “Managing Agricultural Fertilizer Application” to facilities that apply fertilizer and pesticides on properties within the WHPA. Copies of all are provided with this document.

Additional EPA Source Water Protection Bulletins can be found at:

[Document Display](#) | [NEPIS](#) | [US EPA](#)

The NC Cooperative Extension Service works with the Halifax County Solid Waste Department to provide pesticide recycling for local farmers. The Pesticide Disposal Assistance Program takes in unused pesticides and pesticide containers for disposal. The program has funds to operate the program at least once in each county of the state every other year. The Extension Service provides notice of the service in the local paper, and residents are instructed where to drop off their waste and how it should be labeled and stored.

Transportation Corridors and Railways

The town will regularly monitor public state databases and will regularly contact the NCDEQ, UST Section of the **Raleigh and the Washington Regional** Offices to determine if there have been any new contaminant spills or releases on any of the corridors within the town's wellhead protection areas. Local fire department personnel, as well as police personnel, will be requested to provide information to the town in the event such situation should arise.

Cemeteries

The town will contact the North Carolina Cemetery Commission to determine if any complaints have been filed with regards to any cemeteries located within the town's wellhead protection area. Should a complaint have been filed, a record of the advice and/or resolution will be kept on file by the town. Laws regarding cemeteries may be found at the North Carolina Cemetery Commission's website, [North Carolina Cemetery Commission - \(nccemetery.org\)](http://nccemetery.org)

Grain Elevators and Silos

The town will encourage owners/operators of Grain Elevators and Silos to contact OSHA for information regarding dust explosion safety.

Emergency Contingency Plan

The primary person responsible for implementing the emergency contingency plan is the Town Administrator. The back-up person responsible for implementation is the Mayor.

Should a major oil or chemical spill occur within the Wellhead Protection Area, appropriate emergency agencies would be notified. The first of these would include the Halifax County Fire Department and the Halifax County Emergency Coordinator.

Halifax County Fire Department

911

Halifax County Emergency Coordinator

252-583-2088

If power is lost to the Town of Hobgood's wells there are emergency generators at the water treatment plants for Wells # 1 and # 2.

If evidence exists that indicates that a well is contaminated, it will immediately be taken offline and not returned to service until it is determined that water quality from the impacted well is in compliance with standards governing public water supplies. If one of The Town of Hobgood's wells were to become contaminated, residents would be notified by radio, television, newspaper, door-to-door and by telephone not to drink the water until further notice. The regional office of the Public Water Supply Section would be notified immediately of the situation and asked for assistance. Sampling (i.e. bacteriological, VOCs, SOCs, etc.) would begin to determine the contaminant involved and the extent of contamination. A systematic flushing of the distribution system would begin with follow-up sampling conducted as needed until the system was determined to be free of contamination and in compliance with standards governing public water supplies. After consultation with the Public Water Supply Section, residents would be notified that the Town of Hobgood's water was once again safe for consumption.

Ice storms, hurricanes, and floods can potentially disrupt water service. The elevated storage tanks will be filled before any major weather events that could disrupt service. Town personnel will place a priority on restoring well operation once an outage is identified. Pump failure or decreased yield in one well can be resolved until it is repaired or rehabilitated, by pumping from the unaffected well.

Short term contingency plan – The town has the capacity to store 175,000 gallons of water in its two elevated storage tanks. It uses an average of 42,000 gallons per day so if the tanks were filled to capacity, the town would have enough water for a little over four days should an emergency occur where they could not use their wells.

Long term contingency plan - In the long term, the town has a water interconnection with the Town of Scotland Neck. The connection has never been tested, nor is there an interlocal emergency use agreement between the two towns. However, it is believed that the connection is usable. As part of this Wellhead Protection Plan, both towns are encouraged to enter into an agreement where water could be received from and provided to the other in the case of

emergency. Otherwise, if an emergency occurred where none of the Town of Hobgood's wells could be used, water would have to be brought in from an outside source.

NC WaterWARN, Water/Wastewater Agency Response network (WARN), is a group of utilities committed to helping each other conduct response and recovery operations. A WARN provides a system aid that may be utilized by water/wastewater utilities requiring emergency assistance from member utilities. NC WaterWARN provides a voluntary mutual aid and assistance network to combat water-related incidents throughout the state of North Carolina and an organized system for requesting assistance in the form of personnel, emergency equipment, materials and other required resources. If they have not already, The Town of Hobgood Water System is strongly encouraged to join the NC Water Warn network. Additional information and a mutual aid agreement can be found here [NC Water WARN - NC Water WARN](#).

Emergency Contact Numbers and Additional Resources:

Name	Resource
Primary person responsible for implementing emergency contingency plan Name & Position: Thomas Ellis, Town Administrator Cell – 252-578-1733 Office – 252-826-4573	Emergency Response
Secondary Person Name & Position: Dannie Flanary, Mayor Cell- 252-813-0854 Office-252-826-4573	Emergency Response
Emergency Connection Contacts: Town of Scotland Neck Nancy Dempsey Town Clerk Phone - 252-826-3152 Cell/Mobile - 252-908-4199 Secondary Contact Bobby Davis Phone - 252-826-3152 Cell/Mobile - 252-908-4199 Mailing Address PO Box 537 Scotland Neck, NC 27874	
Local Resources: Halifax County Emergency Coordinator 252-583-2088	Emergency Response
Town of Hobgood	252 826-4573
Halifax County Water System	252 583-1451
Halifax County Health Department	252 583-5021
Halifax General Hospital	252 535-8011
Halifax County Sheriff's Office	252 583-8201
Roanoke Rapids Daily Herald	252 537-2505
WZRU Radio	252 537-3333
Public Water Supply Section 1634 Mail Service Center	Technical Assistance Regulatory guidance

Raleigh, NC 27699-1634 919-707-9100	
NC Department of Environmental Quality Washington Regional Office 943 Washington Square Mall Washington, NC 27889 Tel: 252-946-6481	UST Section, Hazardous Waste Section Spills, Regulatory information, and technical assistance
Name	Resource
Raleigh Regional Office 3800 Barrett Drive Raleigh, NC 27609 Phone: 919-791-4200 Fax: 919-571-4718	Water Quality Regional Operations Section, Public Water Supply Section, Technical Assistance Regulatory guidance
Department of Transportation District Traffic Engineer Mr. Michael Poe 1561 Mail Service Center Raleigh, North Carolina 27699-1561 Local Office –828-265-5380	Emergency spill notification
National Guard 119 US Highway 13 And 17 S Windsor, NC 27983-9117 (252) 794-2371	Emergencies, as available: Generators, 400-gallon water trailers, bottled water, transportation
NC Rural Water Association Post Office Box 590 Welcome, NC 27374 336-731-6963	Technical assistance Education
North Carolina Cooperative Extension Service Campus Box 7602 North Carolina State University Raleigh, NC 27695-7602 919-515-2811 www..bae.ncsu.edu	Educational brochures, publications
US EPA Regional Office AST/SPCC Program Region IV 61 Forsyth Street Atlanta, GA 30365-3415 404-562-8761 www.epa.gov/oilspill	Above ground storage tank information
US EPA Regional Office GW & UIC Section Region IV Atlanta Federal Center 61 Forsythe St. Atlanta, GA 30303-8960 www.epa.gov	Educational brochures, publications
Division of Environmental Assistance and Customer Service (DEACS) 1639 Mail Service Center	Technical and non-regulatory assistance to reduce waste

Raleigh, NC 27699-1639 1 877-623-6748 https://deq.nc.gov/about/divisions/environmental-assistance-and-customer-service	
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Public Participation

The Town of Hobgood will put a copy of their updated Plan on their website and **post a notice at the Town Hall**. The public will be invited to review a draft copy of the plan and make comments. Any comments received and considered beneficial will be incorporated into the final copy of the WHPP. Documentation is included.

Public Notification Example

The Town of Hobgood, with assistance from the North Carolina Rural Water Association, is in the process of updating their Wellhead Protection Plan. This is a voluntary program intended to assist in protecting the town's water supply from contamination, and to identify vulnerable areas around their wells called "Wellhead Protection Areas." Another goal of this program is to make residents and businesses aware that chemicals and other pollutants spilled or dumped in the vicinity of the "Wellhead Protection Areas" can be drawn into the wells, possibly contaminating the community's drinking water supply.

A draft copy of the updated Wellhead Protection Plan is available for review and comment at the Hobgood Town Hall, 207 Commerce Street. The public is invited to review the plan and submit any comments or suggestions to the Town of Hobgood. All written comments will be reviewed by the Wellhead Protection Committee, and any suggestions or comments that may be beneficial will be incorporated into the plan.

If you have any questions or comments, please contact the Hobgood Town Administrator at 252-826-4573.

New Public Water Supply Wells

The Town of Hobgood will amend its Wellhead Protection Plan to include any new well(s) added to its water system. The following steps will be taken to address any new wells added to the water system.

1. Develop a preliminary WHPA for the proposed well in order to determine the area of vulnerability.
2. Develop a contaminant source inventory for the preliminary WHPA.
3. Submit the information obtained in items 1 and 2 above to the WPC committee identified in Section 1. Any information required by the Public Water Supply Section (PWSS) relating to the development and construction of new public water supply (PWS) wells must also be submitted.
4. If the WPC committee grants provisional approval of the proposed WHP Plan and the PWSS grants approval to construct or expand the PWS well or well system, then work may proceed with well construction.
5. Finalize the WHPA delineation for the new well.
6. Finalize the contaminant source inventory for the WHPA.

7. Submit finalized WHPA and contaminant source inventory to the WPC committee.
8. Once approval is received, implement any necessary regulatory and or non-regulatory potential source management practices.
9. Submit the amended WHP Plan and all necessary supporting information to the PWSS for review and approval.

Future Wellhead Protection

The Town of Hobgood is aware that an effective local Wellhead Protection (WHP) Program is an ongoing process requiring monitoring of the Wellhead Protection Area (WHPA) and periodic review and updating of an approved WHP Plan. Therefore, the town's WHP Committee will monitor the WHPA for any new or previously unidentified potential contaminant sources (PCSs) and activities occurring within the approved WHPAs. The town will amend the PCS inventory and other Plan components (e.g. the management strategies, emergency contingency plan, etc.) as necessary to incorporate any new threats to the town's groundwater source of drinking water. Additionally, the PCS inventory will be updated annually using the same procedures used to develop the original PCS inventory. The town will also fully update the WHP Plan every five years or at any time a new well is constructed for use with the town's water supply system, or a major land use change occurs within a WHPA. The individual responsible for implementation of the WHP Plan will submit notification to the Public Water Supply Section annually upon completion of the PCS inventory update or immediately following the completion of a major revision. Any amended or revised sections of the approved WHP Plan resulting from an update or revision will also be submitted upon completion.

Appendix
Well Construction Data
PCS Inventory Information
Management Information



Pearson Pump Sales & Service, Inc

PO Box 1254
 2400 N William St
 Goldsboro, NC 27530
 Office (919) 734-4267
 Fax (919) 734-1002
 Jerri-Rae@PearsonPump.com

To: Town of Hobgood	RE: Well #1 Head Calculations
Attn: Thomas Ellis	Pages: 1 of 1
Phone: 252-578-1733	Date: June 15, 2016
Email: thomasellis@embarqmail.com	From: Jerri-Rae Pearson Phillips

Pump Set = 147'
 Static = 50'
 P/L = 70' @ 140gpm (3 hour)
 S.C. = 140gpm = 7gpm / ft. dd
 (70' - 50')

Tank Overflow Elevation	118'
Projected Pumping Level At 85gpm Using S.C. = 7gpm / ft. dd	62.15'
Column F / L Through 147' of 3" Galvanized Pipe	5'
Well Head F / L	1'
F / L Through 100' of 4" DIP	1'
TDH	182.15'

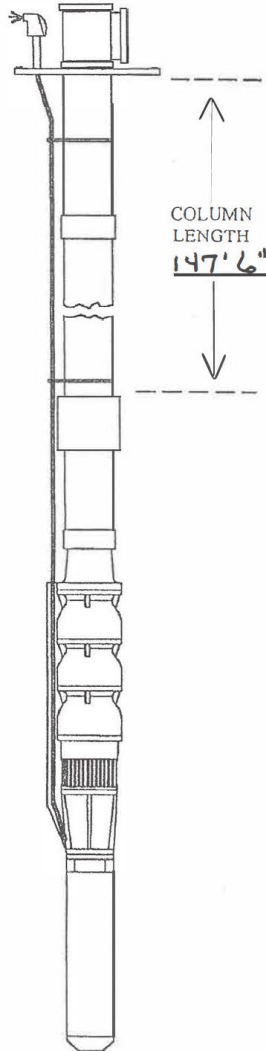
- Grundfos 85S75-6 Will Do 106gpm @ 182'
- Increased Friction Loss And Lower Pumping Level Will Settle The Pump Flow Between 85gpm And 106gpm When Pumped Online
- Please Note: Well Has Been Relined With 4" Casing And Screen From 175' To Bottom (228') Because Of Sand Intrusion Through Original 6" Well Screens. Due to Higher Entrance And Uphole Velocities Through 4" Screen And Casing, The 85S75-6 7-1/2HP Pump End Was Selected For This Application

NC General Contractor PU License No. 27330
 NC Well Contractors Certification No. 2948
 NC Pump Installation Contractor No. 389



Pearson Pump Sales & Service, Inc.

PO Box 1254
2400 N William Street
Goldsboro, NC 27530
Office (919) 734-4267
Fax (919) 734-1002



Customer	Hobgood
Well	
Date	5.6.16

Pump Data:

Make	Grundfos
Model	85575.6
Stages	3
GPM	83
TDH	
Serial Number	N/A

Motor Data:

Manufacturer	Franklin
HP	1.5
Voltage	230
Phase	3
Cycle	60
RPM	3450
Motor Date Code	11C

Well Info:

Well Size	6 x 4 BS x SS
Well Depth	228'
Static Water Level	50'
Date Recorded	2-26-16
Video Performed	Yes
Airburst Rehab	No
Sent Cust. Copy	

Column Pipe:

Size	3"
Length	147'6"
Material	Galv

Submersible Pump Cable:

Length & Size	147' #10 D.J.
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Airline:

Length & Size	147' 3/8"
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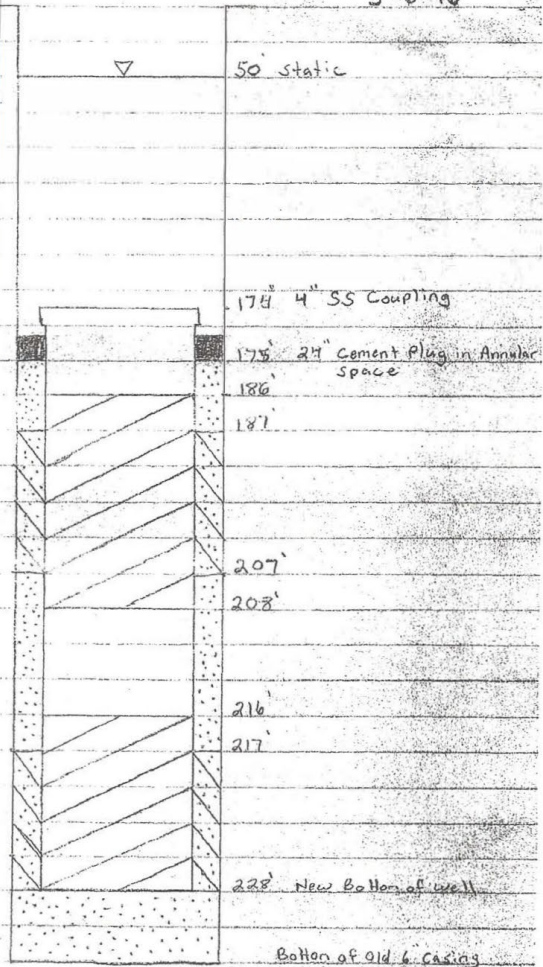
Check Valve:

Size	3" In Pump
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Hobgood Well #1

5-6-16

- 6" Black Steel x 4" Stainless Steel well
- 4" Screens are .020" slot
- Size #1A Gravel
- 4" casing is Stainless Steel
- New 4" Screens overlap old screens by 12" top and bottom
- Pump Set 147



Legend	
	New 4" Screen
	Old 6" Screen
	Size #1A Gravel
	Portland Cement



180
157
—
23

WELL NO. 1

Drilled October, 1966
Depth 250'
Tuscaloosa Formation
Yield 120 GPM
12' Draw Down
Static 34'
6" Case
Depth top of first screen(20' deep) 195'
10' No screen
Second Screen 20'

WELL NO. 2

Drilled October, 1966
Depth 225'
Tuscaloosa Formation
Yield 120 GPM
15' Draw Down
29' Static
6" Case
One 40' Screen at 180'

This information obtained from Rivers & Associates

Magette Well & Pump Company

WELL 3

AHOSKIE, NORTH CAROLINA

LOG OF WELL For TOWN of SCOTLAND NECK
 Located at 6 mi. SE in HALIFAX County, State NC.
 Date Drilling Started OCT. 19 1978 Date Started OCT. 19 1978
 Finished Drilling OCT. 23 1978 Finished OCT. 26 1978

Formation And Depth Of Well				Dimensions Of Casing And Screen						
Total Depth Of All Strata	Depth Of Each Stratum	Formation Found At: Each Stratum		Total Length Of All Screens And Casings		Length Of Each Sec. Of Screen Or Casing		Specify Screen Or Casing	Size Of Screen Or Casing	Guage Of Screen
		Fe.	In.	Fe.	In.	Fe.	In.		In.	
				40				P. CASING	16"	
				154				CASING	8"	
17				164		10		SCREEN	8"	.050
38				171		7		CASING	8"	
47				191		20		SCREEN	8"	.050
62				196		5		CASING	8"	
70				208		12		SCREEN	8"	.080
102										
133										
147										
189										
205										

WELL DATA:
 Preliminary Test
 Date Tested OCT. 24 1978 Static Level 23'
 Production 300 GPM Pumping Level
 Permanent Test
 Date Tested OCT. 26+27 1978 Static Level 23'
 Production 300 GPM Active St. Level
 Draw Down 90 Pumping Level 113'
 Remarks:
CASING 4' ABOVE GROUND LEVEL

WELL #4

Magette Well & Pump Company

AHOSKIE, NORTH CAROLINA

Scotland Neck #2

Scites South in Halifax County, State N.C.

Oct. 26, 1978 Date Started Oct. 26, 1978

Nov. 3, 1978 Finished Nov. 14, 1978

Dimension And Depth Of Well		Dimensions Of Casing And Screen						
		Total Length Of All Screens And Casings		Length Of Each Sec. Of Screen Or Casing		Specify Screen Or Casing	Size Of Screen Or Casing	Guage Of Screen
Formation Found At Each Stratum		Ft.	In.	Ft.	In.			In.
		30				P.T. CASING	16"	
		156				CASING	8"	
18	clay + sand	176		20'		SCREEN	8"	.050 304 S.S.
	fine sand	182		6'		CASING	8"	
40	mud	197		15'		SCREEN	8"	.070 304 S.S.
57	sand							
62	sand							
70	mud							
	sand							
	sand							
	gray clay							
	clay sand							
	sand							
	medi. sand							
	sand							
	sand							
	sand							

WELL DATA:

Preliminary Test

Date Tested Nov. 8, 1978 Static Level 38'

Production 287 GPM Pumping Level

Permanent Test

Date Tested Nov. 13+14, 1978 Static Level 38'

Production 250 GPM Active St. Level

Draw Down 85' Pumping Level 123 1/2'

Remarks: CASING 4 ft. Above ground

Potential Contamination Sources by Risk Category

Higher Risk Potential Contamination Sources for Ground Water PWS Systems

COMMERCIAL/INDUSTRIAL

- Automobile Body shops
 - Gas stations
 - Repair shops
- Chemical /petroleum processing/storage
- *Sewer lines
- Utility right-of-way/pesticide use
- Chemical/petroleum pipelines
- Wood/pulp/paper processing and mills
- Dry cleaners
- Electrical/electronic manufacturing
- Fleet/trucking/bus terminals
- Furniture repair/manufacturing
- Home manufacturing
- Junk/scrap/salvage yards
- Machine shops
- Metal plating/finishing/fabricating
- Mines/sand or gravel excavations
- Parking lots/malls (>50 spaces)
- Photo processing/printing
- Plastics/synthetics producers
- Research laboratories

OTHER

- Road salt storage areas
- Military installations
(for classified risks not otherwise listed)

AGRICULTURAL/RURAL

- Farm machinery repair
- Rural machine shops
- *Intensive livestock operations; Lagoons, spray fields
- Fertilizer, pesticide, and petroleum storage, distribution, handling, mixing, and cleaning areas
- *Sewage sludge (biosolids) storage, handling, mixing and cleaning areas
- *Sewage sludge (biosolids) land application
- Unauthorized/illegal disposal of wastes/chemicals

RESIDENTIAL/MUNICIPAL

- Airports - maintenance/fueling areas
- Railroad yards/maintenance/fueling areas
- Landfills/dumps
- Utility stations - maintenance areas
- *Septic systems - high density (>1/acre)
- *Sewer lines
- *Stormwater drains/discharges
- Fertilizer, pesticide, sewage sludge

- Notes:*
1. This is a list of potential sources of contamination not a list of known databases of contaminants.
 2. Higher risk potential contaminant sources are considered to have a higher potential for drinking water contamination than those designated moderate risk or lower risk Facility-specific management practices are not taken into account in estimating risks and assigning these categories.
 3. An asterisk [*] indicates activities that may be associated with microbiological contamination.

Potential Contamination Sources by Risk Category (Con't)

Moderate Risk PCSs

COMMERCIAL/INDUSTRIAL

- Car washes
- Cement/concrete plants
- Food processing
- Hardware/lumber/parts stores

AGRICULTURAL/RURAL

- *Auction lots
- *Boarding stables
- Crops, irrigated (berries, Christmas trees, hops, mint, orchards, vineyards, nurseries, greenhouses, vegetables, sod)

NOTE: Drip-irrigated crops are considered lower risks.

- Drinking water treatment plant residuals/sludge application

RESIDENTIAL/MUNICIPAL

- Drinking water treatment plants
- Golf courses
- Housing - high density (>1 house/.5 acres)
- Motor pools
- Parks
- Waste transfer/recycling stations
- Wastewater treatment plants
- collection stations

OTHER

- Above ground storage tanks
- Construction/demolition areas
- Hospitals
- Transportation corridors
 - Freeways/state highways
 - Railroads
 - Right-of-way maintenance (herbicide use areas)
- Irrigation, water supply, or monitoring wells

Lower Risk PCSs

COMMERCIAL/INDUSTRIAL

- Office buildings/complexes
- RV/mini storage

AGRICULTURAL/RURAL

- Crops, non-irrigated (grains, grass seeds, hay)
- *Rangeland
- Managed forests/silviculture

RESIDENTIAL/MUNICIPAL

- Apartments and condominiums
- Campgrounds/RV parks
- Fire stations
- Schools
- Housing – low density (< 1 house/.5 acres)

OTHER

- Medical/dental offices/clinics
- Veterinary offices/clinics

SOURCE: Adapted from EPA (1993), and from the Oregon Wellhead Protection Program

N.C. DIVISION OF ENVIRONMENTAL ASSISTANCE AND CUSTOMER SERVICE

Customer service through technical, compliance and financial assistance





The N.C. Division of Environmental Assistance and Customer Service (DEACS) assists citizens, businesses, local governments and communities statewide on a diverse range of environmental issues.

DEACS technical services:

- **Toll-free hotline** with experienced staff to answer your environmental questions
- **On-site assessments** and training for waste, water and energy management
- **Compliance** information and tips
- Environmental **recognition** programs
- **Grants** for recycling businesses and local governments
- **Recycling** infrastructure support
- Statewide points of contact for **permit information** and **environmental assistance**



Within the N.C. Department of Environment and Natural Resources, DEACS works to protect and improve North Carolina's environment while supporting a strong economy.

Environmental Assistance Hotline

1-877-623-6748 (toll-free)

eac@ncdenr.gov

ncenvironmentalassistance.org





United States Department of Agriculture

Farm Service Agency

Conservation Reserve Program – Continuous Enrollment Period

FACT SHEET
June 2021

Overview

The U.S. Department of Agriculture (USDA) is accepting offers for specific conservation practices under the Conservation Reserve Program Continuous Signup.

The USDA Farm Service Agency's (FSA) CRP is a voluntary program that contracts with agricultural producers so that environmentally sensitive agricultural land is devoted to conservation benefits. CRP participants establish long-term, resource-conserving vegetative species, such as approved grasses or trees (known as "covers"), to control soil erosion, improve the water quality and enhance wildlife habitat. In return, FSA provides participants with annual rental payments and cost-share assistance. Continuous signup enrollment contracts are 10 to 15 years in duration.

The Food Security Act of 1985, as amended, authorized CRP. The program is also governed by regulations published in 7 CFR, part 1410. The program is implemented by FSA on behalf of USDA's Commodity Credit Corporation. To offer land for continuous enrollment, producers should contact their local FSA office.

Benefits

CRP protects millions of acres of American topsoil from erosion and is designed to safeguard the nation's natural resources. By reducing water runoff and sedimentation, CRP protects groundwater and helps improve the condition of lakes, rivers, ponds and streams. The vegetative covers also make CRP a major contributor to increased wildlife populations in many parts of the country.

Administration

FSA administers CRP while technical support functions are provided by:

- USDA's Natural Resources Conservation Service (NRCS);
- State forestry agencies;
- Local soil and water conservation districts; and
- Other non-federal providers of technical assistance



Continuous Enrollment

Under continuous CRP signup, environmentally sensitive land devoted to certain conservation practices can be enrolled in CRP at any time. Offers are automatically accepted provided the land and producer meet certain eligibility requirements and the enrollment levels do not exceed the statutory cap. Unlike CRP enrollments under general CRP signups or CRP Grasslands, offers for continuous enrollment are not subject to competitive bidding during specific periods.

If the offered acres are currently enrolled in CRP under a CRP contract that expires September 30, then the effective start date of the new CRP contract must be the following October 1.

If the offered acres are not currently enrolled in CRP, then the producer may choose to defer the effective start date of the new CRP contract for up to six months after the offer is approved.

Who is Eligible?

A producer must have owned or operated the land for at least 12 months prior to submitting the offer, unless:

- The new owner acquired the land due to the previous owner's death;
- The ownership change occurred due to foreclosure where the owner exercised a timely right of redemption in accordance with state law; or
- The circumstances of the acquisition present adequate assurance to FSA that the new owner did not acquire the land for the purpose of placing it in CRP.



United States Department of Agriculture

CRP – CONTINUOUS ENROLLMENT PERIOD - JUNE 2021

Eligible Land

Land must be cropland that is planted or considered planted to an agricultural commodity four of the six crop years from 2012 to 2017 and is physically and legally capable of being planted (no planting restrictions due to an easement or other legally binding instrument) in a normal manner to an agricultural commodity. Certain marginal pastureland that may be devoted to riparian buffers, wildlife habitat buffers, or wetland buffers is also eligible.

Eligible Practices

Land must be eligible and suitable for any of the following conservation practices:

- Grass Waterway
- Shallow Water Area for Wildlife
- Contour Grass Strip
- Filter Strip
- Riparian Buffer
- Denitrifying Bioreactor on Filter Strip and Riparian Buffer
- Saturated Filter Strip and Riparian Buffer
- Habitat Buffers for Upland Birds
- Wetland & Buffer SAFE Practices
- Wetland Restoration on Floodplain and Non- floodplain
- Prairie Strips
- Windbreaks, Shelterbelts and Living Snow Fences
- Marginal Pastureland Wetland Buffer and Wildlife Habitat Buffers
- Long Leaf Pine Establishment
- Duck Nesting Habitat
- Pollinator Habitat
- Bottomland Timber Establishment on Wetlands
- Farmable Wetlands Program (FWP) Constructed Wetland
- FWP Aquaculture Wetland Restoration
- FWP Flooded Prairie Wetland
- Farmable Wetlands and Farmable Wetland Buffer
- Wellhead Protection Area Practices
- State Acres for Wildlife Enhancement (SAFE)
- Highly Erodible Land Initiative (HELI)

Payments

Under CRP continuous signup, FSA provides eligible participants with annual rental payments and cost-share assistance.

A Signup Incentive Payment of 32.5 percent of the first full year annual rental payment is paid at contract approval on all newly enrolled Continuous CRP contract acreage. A Practice Incentive Payment of up to 50 percent is paid for installing the practice.

Annual Rental Payments

- In return for establishing long-term, resource-conserving covers, FSA provides annual rental payments at 90 percent of the existing rate to eligible CRP continuous participants based on per acre cropland and marginal pasture land rental rates, plus a 10 percent “inflationary” adjustment, determined by FSA.
- The per-acre annual rental rate may not exceed the calculated rate or \$300/acre. Producers may elect to receive a rental rate amount less than the maximum payment rate.
- **Climate-Smart Practice Incentive:** FSA provides an incentive of 3, 5, or 10 percent for CRP practices that will increase carbon sequestration, reduce GHG emissions, and otherwise are climate smart practices. The incentive amount is based on the estimated benefits of each practice.
- **Water Quality Incentive:** FSA provides a 20 percent rental rate incentive for CRP water quality practices that will improve water quality by reducing sediment loading, nutrient loading and harmful algae blooms.

Cost-Share Assistance

Cost-share of up to 50 percent of the re-reimbursable cost of installing the practice is provided by FSA.

Cost-share assistance is not available for any management activity.

More Information

For more information about FSA and its programs, visit www.fsa.usda.gov or contact your local FSA office. To find your local FSA office, visit:

[farmers.gov/ service-locator](http://farmers.gov/service-locator)

Community Conservation Assistance Program

Abandoned Well Closure

Definition/Purpose

An abandoned well closure is the sealing and permanent closure of a supply well no longer in use. This practice serves to prevent entry of contaminated surface water, animals, debris or other foreign substances into the well. It also serves to eliminate the physical hazards of an open hole to people, animals and machinery. Cost share for this practice is limited to \$1,500 per well.

Policies

1. Bored, hand dug and drilled wells may be closed.
2. Cost share may be provided for wells that have been abandoned for over three years.
3. If the abandoned well site is associated with a new development project, it is not eligible to receive cost share assistance.
4. A well abandonment record (GW-30) must be completed by certified well contractor and submitted to the N.C. Division of Water Quality. The well closure must comply with all applicable state and local requirements for well abandonment and closure.
5. Payment will be based on 75% of actual cost with receipts, with the cost to the N.C. CCAP not to exceed \$1,500.
6. The BMP must be inspected by district technical staff within 9-12 months following closure to ensure surface water is properly diverted and closure is adequate.
7. Minimum life of BMP is one year.

N.C. NRCS Practice Standard 351 – Well Decommissioning

<https://efotg.sc.egov.usda.gov/references/public/NC/NC351May2015.pdf>

N.C. Administrative Rule: 15A NCAC 2C.0113

<http://ehs.ncpublichealth.com/oswp/docs/2C-0100-RULES-FINAL-Sep2009.pdf> (p. 20,21)

N.C. General Statutes 87-83 through 87-99

http://www.ncga.state.nc.us/EnactedLegislation/Statutes/HTML/ByArticle/Chapter_87/Article_7.html



Aqueous Film-Forming Foam (AFFF)

1 Introduction

Aqueous film-forming foam (AFFF) is a highly effective firefighting product intended for fighting high-hazard flammable liquid fires. AFFF products are synthesized by combining hydrocarbon foaming agents with fluorinated surfactants to achieve a product that has been used at military installations, civilian airports, petroleum refineries, bulk storage facilities, and chemical manufacturing plants (Hu et al. 2016; CONCAWE 2016).

This fact sheet is targeted to local, state, and federal regulators and tribes in environmental, health and safety roles as well as AFFF users at municipalities, airports, and industrial facilities. This fact sheet is not intended to replace manufacturer specifications or industry guidance for AFFF use, or to discuss alternatives in detail. It is only intended to educate users on AFFF use to reduce and eliminate potential harm to human health and the environment. Additional information is available in the Guidance Document.

2 What is AFFF?

Class B firefighting foams are commercial surfactant solutions that are designed and used to combat Class B flammable fuel fires. All Class B foams are not the same. Although not usually categorized this way from a fire protection viewpoint, they can be divided into two broad categories from a per- and polyfluoroalkyl substances (PFAS) perspective: fluorinated foams that contain PFAS and fluorine-free foams (F3) that do not contain PFAS.

There are six groups of Class B foams that contain PFAS and four groups of Class B foams that do not contain PFAS. Figure 1 illustrates all categories of Class B foams. This fact sheet focuses on AFFF only as these are the primary foams that contain fluorosurfactants.

ITRC has developed a series of fact sheets that summarize recent science and emerging technologies regarding PFAS. The information in this and other PFAS fact sheets is more fully described in the *ITRC PFAS Technical and Regulatory Guidance Document (Guidance Document)* (<https://pfas-1.itrcweb.org>).

This fact sheet outlines methods to properly identify, handle, store, capture, collect, manage, and dispose of AFFF to limit potential environmental impacts, and includes:

- Definition of AFFF
- Best Management Practices for AFFF use
- Regulations Affecting Sale and Use
- Foam Research and Development

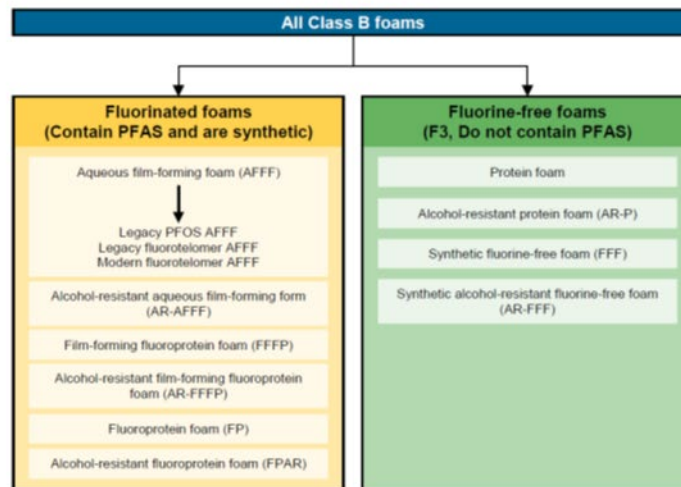


Figure 1. Types of Class B foams.
Source: S. Thomas, Wood, PLC. Used with permission.

Aqueous Film-Forming Foam (AFFF) *continued*

AFFF is considered a fluorinated foam and when mixed with water, the resulting solution achieves the interfacial tension characteristics needed to produce an aqueous film that spreads across the surface of a hydrocarbon fuel (petroleum greases, tars, oils and gasoline; and solvents and alcohols) to extinguish the fire and to form a vapor barrier between the fuel and atmospheric oxygen to prevent re-ignition. This film formation is the defining feature of AFFF.

AFFF has been used at chemical plants, flammable liquid storage and processing facilities, merchant operations (oil tankers, offshore platforms), municipal services (fire departments, firefighting training centers), oil refineries, terminals, and bulk fuel storage farms, aviation operations (aircraft rescue and firefighting, hangars), in some industrial fire extinguishers, and military facilities.

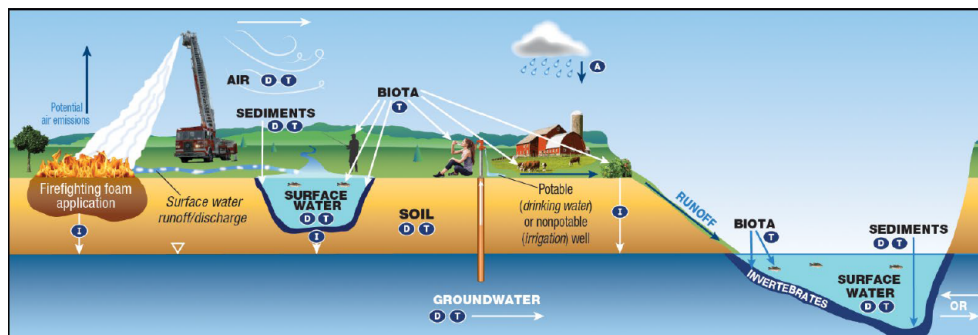
There are three possible types of AFFF, each is presented in Figure 1:

- legacy PFOS AFFF (manufactured in the US from the late 1960s through 2002)
- legacy fluorotelomer AFFF (contain some long-chain PFAS) (manufactured in the US from the 1970s until 2016)
- modern fluorotelomer AFFF (short-chain PFAS became the predominant fluorochemicals used in manufacturing in response to USEPA 2010/2015 voluntary PFOA Stewardship Program)

Most foam manufacturers now produce Class B F3s. Performance of these foams should be evaluated carefully as future purchasing decisions are made. Organizations should determine whether a Class B F3 can achieve the required performance specifications for their specific flammable liquid hazards as part of pre-planning for replacement materials (FFFC 2016). As of publication, F3s do not meet the performance requirements of the Mil-Spec and therefore are not used at federal- and FAA-regulated facilities (FAA 2020). A mandate within the FAA Reauthorization Act of 2018 (enacted October 5, 2018) directs the FAA to stop requiring the use of fluorinated foam no later than 3 years from the date of enactment (October 4, 2021), so F3 use is anticipated at FAA-regulated facilities in the near future. The National Defense Authorization Act of fiscal Year 2020 (signed into law Dec 20, 2019) requires the DOD to phase out its use of AFFF at all military installations by Oct. 1, 2024, with limited exceptions, and immediately stop military training exercises with AFFF. The secretary of the Navy must publish specifications for PFAS-free firefighting foam at all military installations and ensure that the foam is available for use by Oct. 1, 2023.

3 Best Management Practices (BMPs) for Class B AFFF Use

Firefighting foams are an important tool to protect human health and property from flammable liquid fire threats. Proper management and usage strategies combined with the ongoing refinement of environmental regulations will allow an informed selection of the viable options to sustainably use firefighting foams. BMPs should be established for the use of any firefighting foam to prevent possible releases to the environment that can lead to soil, groundwater, surface water, and potentially drinking water contamination. The discharge of firefighting foams to the environment is of concern because of the potential negative impact they can have on ecosystems and biota. AFFF, due to the presence of PFAS, poses a unique challenge to protecting the environment when it is released. Specifically, for AFFF, the amount of PFAS from foam that may enter groundwater depends on the type and amount of foam used, the degree of containment, when and where the foam was used, the type of soil and the depth to groundwater. AFFF is typically discharged on land but can run off into surface water or stormwater or infiltrate to groundwater. A conceptual site model (CSM) is presented in Figure 2.



KEY A Atmospheric Deposition D Diffusion/Dispersion/Advection I Infiltration T Transformation of precursors (abiotic/biotic)
Figure 2. CSM for fire training areas.

Source: Adapted from figure by L. Trozzolo, TRC. Used with permission.

Aqueous Film-Forming Foam (AFFF) *continued*

BMPs should consider the entire life cycle for AFFF, including procurement and inventory, foam systems and operations, emergency firefighting operations, immediate investigative and clean-up actions, treatment and disposal and system replacement.

The procurement and inventory of foam should be carefully considered. Foams should be selected that meet the performance specification requirements governing the use. Foams procured should be documented, labelled clearly and adequately contained. Foam use and disposal should be carefully tracked and recorded.

When evaluating foam systems and operations, from fixed-system testing, mobile firefighting equipment testing and appropriate training exercises, engineering and administrative controls as well as personal protective equipment (PPE) should be carefully evaluated. During emergency firefighting operations following a release of firefighting foam, PPE should be used correctly, maintained, and decontaminated routinely. Immediate investigative and clean-up actions include initial mitigation efforts such as source control, containment tactics, and recovery tactics.

The treatment and disposal of AFFF products and environmental media impacted with PFAS can be complex, time consuming, and costly. Practitioners should be aware of approved and available disposal options prior to the generation of PFAS-impacted waste or the start of an AFFF replacement project to avoid potentially lengthy waste storage timeframes. Currently, available disposal options for AFFF and PFAS-impacted materials are limited and each option has its advantages and disadvantages. More information is included in the Guidance Document.

Firefighting foam replacement is complex and could require a complete system review and, potentially, redesign and modification of system components to meet the new objectives or material and performance requirements. Foam replacement should include an evaluation of specific hazards and application objectives, a review of applicable performance standards, an understanding of engineering requirements for foam product storage and application, and a check to ensure that the foam product is approved for use for the specific hazards being mitigated.

4 Regulations Affecting the Sale and Use of AFFF

There are many State, Federal, and International regulations and guidance documents governing the procurement, use, and disposal of AFFF. Activities range from AFFF take-back programs and prohibition of manufacture, sale, use, and import of AFFF through to restrictions and requirements for disposal. Refer to the Guidance Document for further information.

BMPs start with pre-planning and deciding which foam to keep in stock. The team should consider key factors such as these:

- Whether F3 alternatives can meet site-specific performance requirements
- Site-specific evaluation of likely fire hazards and potential risks for life, public safety, and property
- Potential environmental, human health, and financial liabilities associated with AFFF releases
- Site constraints, including existing equipment retrofit requirements to adapt to alternate foams



Figure 3. Life cycle considerations for AFFF.
 Source: S. Thomas, Wood, PLC. Used with permission.

Aqueous Film-Forming Foam (AFFF) *continued*

5 Foam Research and Development

A substantial amount of research related to AFFF alternatives and replacement chemistries has recently been completed and/or is being considered at the time of publication. For more information related to this topic, please refer to the Guidance Document. Several organizations globally have made investments in research and development around AFFF from the assessment of their use, environmental impacts, as well as socioeconomic impacts of transition to and performance specifications of F3 alternatives.

6 References and Acronyms

The references cited in this fact sheet and further references can be found at <https://pfas-1.itrcweb.org/references/>.
The acronyms used in this fact sheet and in the Guidance Document can be found at <https://pfas-1.itrcweb.org/acronyms/>.



Per- and Polyfluoroalkyl Substances (PFAS) Team Contacts

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August 2020

HALIFAX COUNTY SOLID WASTE CONVENIENCE CENTERS

**WINTER SCHEDULE
(November – February)**

(Follows Daylight Savings Time Schedule)

NAME	TUES	WED	THURS	FRI	SAT	SUN
SUMMIT 9056 Hwy. 158 586-7484	CLOSED	8:00 – 5:00	CLOSED	CLOSED	8:00 – 5:00	1:00 – 5:00
AIRPORT 85 Airbase Rd 308-1785	CLOSED	8:00 – 5:00	CLOSED	8:00 – 5:00	8:00 – 5:00	CLOSED
RIGHTMYER 1919 Rhea-Smith Rd. 308-1790	8:00 – 5:00	CLOSED	8:00 – 5:00	CLOSED	8:00 – 5:00	CLOSED
HOLLISTER 1130 Ita Road 586-7490	CLOSED	8:00 – 5:00	CLOSED	CLOSED	8:00 – 1:00	CLOSED
ENFIELD 775 White Swan Rd 445-1349	8:00 – 5:00	CLOSED	8:00 – 5:00	CLOSED	8:00 – 5:00	CLOSED
MARY CHAPEL CH. 6655 Mary Chapel Ch. 826-2219	CLOSED	8:00 – 5:00	CLOSED	CLOSED	8:00 – 5:00	CLOSED
CROWELL'S 1722 Old 125 445-4073	CLOSED	8:00 – 5:00	CLOSED	CLOSED	8:00 – 3:30	CLOSED

RESIDENTIAL USE ONLY – NO COMMERCIAL WASTE ACCEPTED

Sites Will Accept: Yard Waste, Appliances, Old Furniture, Mattresses, 4 tires per visit
 Sites will NOT Accept: Construction Material and Demolition, Old Batteries, Commercial Waste
 (For more information, call the individual site or 583-1807)

HALIFAX COUNTY LANDFILL

921 LILES RD, LITTLETON
 Scale House Phone #: 252-586-7516
 Accounts/Billing Phone #: 252-583-1807
 Monday – Friday: 8:00 – 4:00
 Landfill Accepts: Construction and Demolition Materials, Tires, Yard Waste and
 White Goods (such as appliances and other metals)

HALIFAX COUNTY TRANSFER STATION

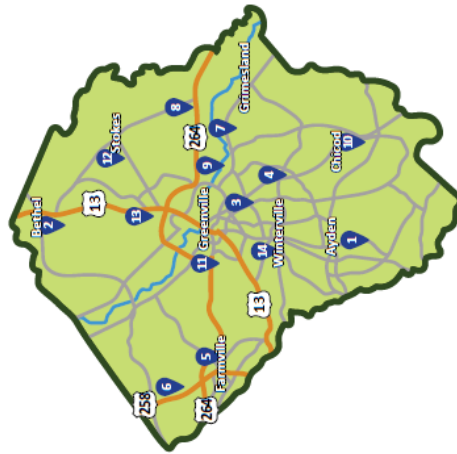
921 Liles Road, Littleton
 252-586-7516
 Monday – Friday: 8:00 – 4:00
COMMERCIAL AND RESIDENTIAL WASTE ACCEPTED

USING YOUR COUNTY'S CONVENIENCE DROP-OFF SITES

Designed for residents of Pitt County, this easy reference guide on the county's waste and recycling services tells how to properly prepare your recyclables and dispose of other special wastes.

Pitt County operates and maintains staffed convenience drop-off sites listed on the back of this brochure. These convenience drop-off sites are for residential waste and recycling only. All commercial and business waste generators must contract with a private waste hauler or take waste directly to the Transfer Station. For more information, visit: pittcountync.gov/depts/solidwaste

Use this map of Pitt County to find the nearest convenience site listed on the back of this brochure.



CONVENIENCE DROP-OFF SITES

The following staffed convenience sites are available for residential waste and recycling *only*.

Hours of Operation

April - October:

Monday - Saturday: 7:30 a.m. - 7:30 p.m.
Sunday: 2 p.m. - 7:30 p.m.

November - March:

Monday - Saturday: 7:30 a.m. - 6 p.m.
Sunday 2 p.m. - 6 p.m.

Closed on:

Thanksgiving Day, Christmas Day and Easter

- 1 Ayden-Grifton**
5171 Weyerhaeuser Rd.
252-746-9261
- 2 Bethel**
3993 Creek Bank Rd.
252-825-8681
- 3 Bells Fork**
4554 County Home Rd.
252-355-2296
- 4 Falkland**
5661 NC 43 North
252-830-5598
- 5 Farmville**
3457 Wesley Church Rd.
252-753-7240
- 6 Fountain**
3879 U.S. 258
252-749-3525
- 7 Grimesland**
3558 Avon Rd.
252-758-1372
- 8 Pactolus**
525 Second St.
252-830-5232
- 9 Port Terminal**
911 Port Terminal
252-758-0884
- 10 Shelmerdine**
8270 NC 43 South
252-746-3821
- 11 Stantonsburg**
3701 Stantonsburg Rd.
252-830-3864
- 12 Stokes**
2453 NC 903 North
252-752-6991
- 13 Wellcome**
673 Briley Rd.
252-830-3876
- 14 Winterville**
4818 Reedy Branch Rd.
252-355-3718
- T Transfer Station**
3025 Landfill Rd.
Greenville, NC 27834
Mon-Fri: 8 a.m. - 4:00 p.m.
Sat: 8 a.m. - 12 p.m.
Closed Sundays



**DON'T TANGLE OR CONTAMINATE!
RECYCLE MORE
FOR A GREENER STATE**



**A GUIDE FOR USING PITT COUNTY'S
SOLID WASTE AND RECYCLING
CONVENIENCE SITES**

Recycling Coordinator: 252-902-3353
Environmental Office: 252-714-4442
pittcountync.gov/depts/solidwaste

Potential Contamination Source Data

To maintain a common basis for assessing sources of public drinking water in North Carolina, only regulatory agency databases with state-wide coverage were used to develop the inventory of PCSs. Within these databases, only those PCSs with available location data could be used. All PCS datasets were provided to the Public Water Supply Section "as is"; therefore, the accuracy of the location data is unverified. It is recognized that some problems exist with respect to the accuracy, reliability, quality and completeness of the data obtained from regulatory agency databases. The Public Water Supply Section makes no claim or guarantee of data quality, correctness, completeness, or validity and does not warranty or assure this data in any way.

Unless otherwise noted, all data containing latitude and longitude was included in the assessments. Records that did not have location information were not used. A GIS shapefile was created using the latitude and longitude in decimal degrees.

Animal Operations

This data set represents permitted animal facilities consisting of swine, cattle, poultry and horse farms that are required to have Certified Animal Waste Management Plans (CAWMP). Animal facilities are defined by General Statute 143-215.10B as feedlots involving 250 or more swine, 100 or more confined cattle, 75 or more horses, 1,000 or more sheep, or 30,000 or more confined poultry with a liquid waste management system.

The Division of Water Resources' (DWR) rules mandated that all animal facilities in operation prior to January 1, 1994 register with the division. Since January 1, 1994, any new animal facilities were required to obtain a CAWMP before starting their animal operation. In addition, any animal facilities in operation prior to January 1, 1994 were required to obtain a CAWMP by December 31, 1997. As of January 1, 1997, all new animal facilities were required to obtain a permit from DWR prior to construction and be certified prior to startup, and all existing animal facilities were to be permitted by DWR over the next 5 years.

The data set was obtained from the DWR, Water Quality Regional Operations, Animal Feeding Operations Branch in February of 2019. For additional information about this data, contact the Animal Feeding Operations staff by phone at 919-707-9129 or visit their website at: <https://deq.nc.gov/about/divisions/water-resources/water-quality-permitting/animal-feeding-operations>.

CERCLA-Fed. Remediation

This data set was provided by the Federal Remediation Branch (FRB), which is part of the Superfund Section within the N.C. Division of Waste Management. It represents sites where the FRB is working with USEPA, and in some cases the Department of Defense, to investigate, assess, remediate, or monitor hazardous waste contamination. These sites are regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), which established authority for the government to respond to the release/threat of release of hazardous waste, including cleanup and enforcement actions. Some of these sites, which meet specific criteria set out in the USEPA's Hazard Ranking System (HRS), are included on the National Priorities List (NPL). The NPL identifies sites that appear to warrant cleanup measures. The NPL sites are eligible for remedial action financed by a federal trust fund with a state cost share or by potential responsible parties (PRP).

The data set was downloaded from the *NC Department of Environmental Quality Online GIS* website at: <https://data-ncdenr.opendata.arcgis.com/datasets/federal-remediation-branch>. It was dated May 23, 2019. For additional information about this data, contact the Division of Waste Management, Federal Remediation Branch by phone at 919-707-8213 or visit their website at: <https://deq.nc.gov/about/divisions/waste-management/superfund-section/federal-remediation-branch>.

Hazardous Waste Sites

This data set represents the location of sites within North Carolina that are regulated by the hazardous waste portions of the Resource Conservation and Recovery Act (RCRA). This includes large quantity generators, small quantity generators, transporters of hazardous waste, permitted treatment, storage, or disposal (TSD) facilities and TSD facilities that are under an Order or a Consent Agreement. (Note: facilities that are conditionally exempt small quantity generators may also be included if they are also a transporter or TSD facility.) The data is extracted from the USEPA RCRAInfo database.

The data set was downloaded from the *NC Department of Environmental Quality Online GIS* website at: <https://data-ncdenr.opendata.arcgis.com/datasets/hazardous-waste-sites>. It was dated March 19, 2019. For additional information about this data, contact the Division of Waste Management, Hazardous Waste Section staff by phone at 919-707-8202 or visit their website at: <https://deq.nc.gov/about/divisions/waste-management/hw>.

Inactive Hazardous Waste Sites

This data set represents hazardous substance spill and disposal sites and includes active and inactive facilities and a variety of property types. Some of the sites are regulated under the CERCLA and are included because they do not fall under the responsibility of other environmental programs. The term "inactive" refers to the fact that cleanup was inactive at large numbers of sites at the time of program enactment. This data set includes closed remediation sites that have land use restrictions recorded as part of the remedy.

The data set was downloaded from the *NC Department of Environmental Quality Online GIS* website at: <https://data-ncdenr.opendata.arcgis.com/datasets/inactive-hazardous-sites-1?geometry=-90.11%2C33.656%2C-69.379%2C36.796>. It was dated November 26, 2019. For additional information about this data, contact the Division of Waste Management, Inactive Hazardous Sites Branch by phone at 919-707-8327 or visit their website at: <https://deq.nc.gov/about/divisions/waste-management/superfund-section/inactive-hazardous-sites-program>.

Non-Discharge Permits

The non-discharge database identifies domestic, industrial, and municipal facilities that are permitted to apply treated wastewater effluent, reclaimed water, and residuals to the land surface.

Data was obtained from the DWR, Water Quality Permitting Section, Non-Discharge Branch in April of 2019. For additional information about this data, contact the program staff by phone at 919-707-3654 or visit their website at: <http://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/non-discharge-permitting>.

NPDES Permits

The National Pollutant Discharge Elimination System (NPDES) PCS category consists of multiple data sets identifying facilities permitted for the operation of point source discharges to surface waters in accordance with the requirements of Section 402 of the Federal Water Pollution Control Act. Point sources are discrete conveyances such as pipes or man-made ditches. The NPDES Permit Program controls water pollution by regulating point sources that discharge pollutants into public waters. This category also include facilities with active and expired State Stormwater Permits. The individual data sets that comprise this category include the following

- **NPDES Stormwater Permits**

This data set represents the location of facilities with active or expired NPDES Stormwater Permits and facilities with No Exposure Certifications. The goal of the NPDES Stormwater Permitting Program is to prevent stormwater runoff from washing harmful pollutants into surface waters. Both individual and general permits are included.

Data was obtained from the Division of Energy, Mineral, and Land Resources, Stormwater Permitting Program in February of 2019. For additional information about this data, contact the program staff by phone at 919-707-3639 or visit their website at: <https://deq.nc.gov/about/divisions/energy-mineral-land-resources/stormwater>.

- **NPDES Wastewater General Permits**

This data set represents the location of active wastewater treatment facilities that are permitted under the NPDES Permit Program. The listed facilities are covered by a general NPDES permit, which is written to cover multiple dischargers with similar operations and types of discharges.

Data was obtained from the DWR, Water Quality Permitting Section, NPDES Wastewater Permitting Program in February of 2019. For additional information about this data, contact the program staff by phone at 919-707-3601 or visit their website at: <https://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/npdes-wastewater-permits>.

- **NPDES Wastewater Individual Permits**

This data set represents the location of active wastewater treatment facilities that are permitted under the NPDES Permit Program. Each listed facility is covered by an individual NPDES permit that is written to reflect the site-specific conditions of the facility based on submitted information. The individual NPDES permit is unique to the facility.

Data was obtained from the DWR, Water Quality Permitting Section, NPDES Wastewater Permitting Program in February of 2019. For additional information about this data, contact the program staff by phone at 919-707-3601 or visit their website at: <https://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/npdes-wastewater-permits>.

- **State Stormwater Permits**

This data set contains the locations of facilities with active and expired State Stormwater Post-Construction Permits. The Post-Construction Permit Program requires subject new developments to install and maintain permanent stormwater management measures that are designed to protect surface waters from the impacts of the development's stormwater runoff after the construction process is complete.

Data was obtained from the Division of Energy, Mineral, and Land Resources, Stormwater Permitting Program in March of 2019. For additional information about this data, contact the program staff by phone at 919-707-3639 or visit their website at: <https://deq.nc.gov/about/divisions/energy-mineral-land-resources/stormwater>.

PCB Sites

This data set identifies generators, transporters, commercial storers and/or brokers and disposers of Polychlorinated Biphenyls (PCBs). Concern over the toxicity and environmental persistence of PCBs resulted in the Toxic Substances Control Act (TSCA). This act prohibits the manufacture, processing, and distribution in commerce of PCBs. Thus, TSCA legislates true "cradle to grave" (from manufacture to disposal) management of PCBs in the United States. PCBs are mixtures of synthetic organic chemicals with the same basic chemical structure and similar physical properties ranging from oily liquids to waxy solids. Due to their non-flammability, chemical stability, high boiling point and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications. These included electrical applications, heat transfer materials, hydraulic equipment, plastics, rubber, and many others.

The data set was obtained from the USEPA, Office of Pollution Prevention and Toxics in February of 2019. For additional information about this data, contact the PCB staff at 404-562-8512 or visit their website at: <https://www.epa.gov/pcbs/learn-about-polychlorinated-biphenyls-pcbs>.

Each record that contained a physical address that could be address matched was included in the data set. Public Water Supply Section staff performed the address matching.

Pollution Incidents

The Pollution Incidents PCS category consists of multiple data sets containing information regarding the release of pollutants into the environment that have, or are likely to have, impact on the groundwater resources of the State. The initial information regarding these releases is usually obtained from responsible parties or concerned citizens, who report a release to the NC Department of Environmental Quality. After an incident is reported, regional office staff investigate the reported incident and enter the results of their investigation into a state-wide database. The individual data sets that comprise this category include the following:

- **AST Incidents**

This data set represents sites where there has been a discharge of petroleum to the soil and/or groundwater, from a source other than an Underground Storage Tank (UST) system, e.g., Aboveground Storage Tank (AST) system, spills, dumping, etc. All included records have an incident number and have not been closed out.

This data set was downloaded from the NC Department of Environmental Quality Online GIS website at: <https://data.ncdenr.opendata.arcgis.com/datasets/ast-incidents>. It was dated June

13, 2019. For additional information about this data, contact the Division of Waste Management, Underground Storage Tank Section staff by phone at 919-707-8171 or visit their website at: <https://deq.nc.gov/about/divisions/waste-management/ust/ast-program>.

- **Dry-Cleaning Sites - Contaminated**

This data set contains an inventory of reported incidents from sites contaminated with dry-cleaning solvents. Substances released into the environment include solvents used in the dry-cleaning process.

This data set was downloaded from the NC Department of Environmental Quality Online GIS website at: <https://data.ncdenr.opendata.arcgis.com/datasets/dry-cleaning-sites-contaminated-1>. It was dated May 23, 2019. For additional information contact the Division of Waste Management, Dry-Cleaning Solvent Cleanup Act Program staff by phone at 919-707-8365 or visit their website at: <https://deq.nc.gov/about/divisions/waste-management/dry-cleaning-solvent-cleanup-act-program>.

- **UST Incidents**

This data set represents sites where there has been a release of petroleum to the soil and/or groundwater, from an UST system. All included records have an incident number and have not been closed out.

The data set was downloaded from the NC Department of Environmental Quality Online GIS website at: <https://data.ncdenr.opendata.arcgis.com/datasets/ust-incidents?geometry=-166.201%2C-29.535%2C168.311%2C29.229>. It was dated June 13, 2019. For additional information about this data, contact the Division of Waste Management, Underground Storage Tank Section staff by phone at 919-707-8171 or visit their website at: <https://deq.nc.gov/about/divisions/waste-management/ust>.

Septage Disposal Sites

This data set represents all active and permitted Septage Land Application Site (SLAS) and Septage Detention and Treatment Facility (SDTF) sites in North Carolina. The Septage Management Program assures that septage (a fluid mixture of untreated and partially treated sewage solids, liquids, and sludge of human or domestic origin that is removed from a septic tank system) is managed in a responsible, safe and consistent manner across the state.

The data set was obtained from the Division of Waste Management, Solid Waste Section in May of 2019. For additional information about this data, contact the Septage Management Program staff by phone at 919-707-8283 or visit their website at: <https://deq.nc.gov/about/divisions/waste-management/waste-management-rules/septage>.

Soil Remediation Sites

This data set represents sites that have received a permit from the NC Underground Storage Tank Section, under the Petroleum Contaminated Soil Remediation Permit Program. These sites are used to bioremediate soil that has been contaminated by leaking petroleum storage tanks. Bioremediation is a treatment process that uses naturally occurring microorganisms (yeast, fungi, or bacteria) to break down, or degrade, hazardous substances. These microorganisms break down

organic compounds, such as petroleum products that are hazardous to humans, into harmless products (mainly carbon dioxide and water). Sites that have been "closed out" were excluded.

The data set was obtained from the Division of Waste Management, Underground Storage Tank Section in February of 2019. For additional information about this data, contact the Underground Storage Tank Section staff by phone at 919-707-8171 or visit their website at: <https://deq.nc.gov/about/divisions/waste-management/ust>.

Solid Waste Facilities

This data set represents all the permitted Municipal Solid Waste (MSW), Construction and Demolition (CDLF), Land-Clearing and Inert Debris (LCID) and Demolition (older facilities) landfill facilities. Coal Ash landfills and Tire landfills are also included. These facility types undergo inspections and groundwater monitoring as part of facility management. This data set also includes active solid waste facility types that are not designated as landfills, such as compost, household hazardous waste, incinerators, medical waste, tire processing and transfer stations.

The data set was obtained from the Division of Waste Management, Solid Waste Section in May of 2019. For additional information about this data, contact the Solid Waste Section staff by phone at 919-707-8247 or visit their website at: <https://deq.nc.gov/about/divisions/waste-management/solid-waste-section>.

Tier II Sites

This data set contains an inventory of facilities that store hazardous materials and are subject to the reporting requirements of the Emergency Planning and Community Right to Know Act (EPCRA). EPCRA was authorized by Title III of the Superfund Amendments and Reauthorization Act (SARA). Tier II forms require basic facility identification information, employee contact information for both emergencies and non-emergencies, and information about chemicals stored or used at the facility including:

- The chemical name or the common name as indicated on the Safety Data Sheet (SDS);
- an estimate of the maximum amount of the chemical present at any time during the preceding calendar year and the average daily amount;
- a brief description of the manner of storage of the chemical;
- the location of the chemical at the facility; and
- an indication of whether the owner of the facility elects to withhold location information from disclosure to the public.

Data, from the 2018 reporting year, was obtained from the Department of Public Safety, Division of Emergency Management. For additional information about this data contact the Division of Emergency Management staff at 919-436-2746 or visit their website at: <http://www.ncdps.gov/Emergency-Management/Hazardous-Materials/EPCRA-Tier-2>.

Old Landfill Sites

This data set contains the locations of non-permitted landfills that closed prior to January 1, 1983, when waste disposal permitting regulations commenced. These sites are not currently in operation.

The data set was downloaded from the NC Department of Environmental Quality Online GIS website at: <http://data-ncdenr.opendata.arcgis.com/datasets/pre-regulatory-landfill-sites-1>. It was dated November 14, 2018. For additional information about this data, contact the Division of Waste Management, Pre-regulatory Landfill Program staff by phone at 919-707-8327 or visit their website at: <https://deq.nc.gov/about/divisions/waste-management/superfund-section/pre-regulatory-landfill-program>.

UIC Permits

The Underground Injection Control (UIC) Program protects groundwater quality by preventing illegal waste disposal and by regulating the construction and operation of wells used for injecting approved substances, aquifer recharge, and other activities. The most common types of injection wells in North Carolina are used for:

- Aquifer Storage and Recovery (ASR)
- Geothermal Heating and Cooling
- In-Situ Groundwater Remediation
- Stormwater Infiltration - effective May 1, 2012

The data set was obtained from the DWR, Groundwater Protection Program in March of 2019. For additional information about this data, contact the UIC Program staff by phone at 919-807-6496 or visit their website at: <https://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/ground-water-protection/injection-wells>.

UST Permits

A UST system is a tank and any underground piping connected to the tank that has at least 10 percent of its combined volume underground. The federal UST regulations apply only to underground tanks and piping storing either petroleum or certain hazardous substances. These facilities are regulated under Subtitle I of RCRA and must be registered with the state and receive an operating permit annually. Until the mid-1980s, most USTs were made of bare steel, which is likely to corrode over time and allow UST contents to leak into the environment. Faulty installation or inadequate operating and maintenance procedures also can cause USTs to release their contents into the environment. The greatest potential hazard from a leaking UST is that the petroleum or other hazardous substance can seep into the soil and contaminate groundwater. A leaking UST can also present other health and environmental risks, including the potential for fire and explosion. The facilities included in this data set have active Underground Storage Tank systems registered with the UST Section.

Data was obtained from the Division of Waste Management, Underground Storage Tank Section in May of 2019. For additional information about this data, contact the Underground Storage Tank Section staff by phone at 919-707-8171 or visit their website at: <https://deq.nc.gov/about/divisions/waste-management/ust>.

References

North Carolina Department of Environment and Natural Resources, Division of Water Resources, UST Section, Water Quality Regional Operations, Washington Regional Office Files, Washington Regional Office, 943 Washington Square Mall, Washington, NC 27889, Tel: 252-946-6481

Smutko, L. Steven, Danielson, Leon E., Jennings, Gregory D., (1995). Protecting Local Underground Water Supplies, The North Carolina Wellhead Protection Guidebook, North Carolina Department of Environment, Health and Natural Resources, Division of Environmental Management, Groundwater Section, Raleigh, North Carolina, Approved March 20, 1995.

North Carolina Department of Environment and Natural Resources, Division of Environmental Health, Public Water Supply Section, The North Carolina Wellhead Protection Guidebook, Developing a Local Wellhead Protection Program, 2003

NC Division of Waste Management Site Locator Tool

<https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=7dd59be2750b40bebefa49fc383f688>

NC Active Stormwater Permits Site

<https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=8d3108c9364b4ef3966c07118f2cf4f9>

NC DEQ SWAPInfo 2.0

<https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=26f4e2b3140f4e58825e48781cceb5e>

The Town of Hobgood website <https://www.thetownofhobgood.com>

Halifax County website <https://www.halifaxnc.com/>

Glossary of acronyms and abbreviations

AST-Above ground Storage Tank
CAP-Corrective Action Plan
DEACS-Division of Environmental Assistance and Customer Service
DWM-Division of Waste Management
DWR-Division of Water Resources
EPA-Environmental Protection Agency
GPD-gallons per day
Gpm-gallons per minute
LSA-Limited Site Assessment
NCDEH-North Carolina Department of Environmental Health
NCDEQ-North Carolina Department of Environmental Quality
NOV-Notice of Violation
NPDES-National Pollutant Discharge Elimination System
PCS-Potential Contamination Source
Ppb-parts per billion
Ppm-parts per million
PWS-Public Water Supply
PWSS-Public Water Supply Section
RRO-Raleigh Regional Office
SOC-Semi-volatile Organic Compound
SPCC-Spill Prevention Control and Countermeasures
TPH – Total Petroleum Hydrocarbons
UIC-Underground Injection Control
UST-Underground Storage Tank
VOC-Volatile Organic Compound
WaRO-Washington Regional Office
WHPA-Wellhead Protection Area
WHPP-Wellhead Protection Program or Plan
WPC-Wellhead Protection Committee