

Report on the Inactive Hazardous Sites Program and the Bernard Allen Memorial Drinking Water Fund

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Inactive Hazardous Sites Response Act

- Inactive Hazardous Sites Response Act addresses properties contaminated with hazardous substances
- Prior to the 1980s, virtually no regulations on disposal of solid and hazardous wastes
- Thus old disposals/discharges of various chemical-containing wastes
- Also, newly occurring spills of products containing hazardous substances

Sites include:

- Abandoned chemical wastes
- Spills and disposal of various chemicals on manufacturing and other properties
- Residential properties with contaminated soils/groundwater from previous uses or discharges by homeowner

Inventory of Sites Contaminated With Hazardous Substances FY11-12

- Currently 1930 open contaminated site cases
- 49 new sites on average discovered each year
- 15 sites completed and assigned “No Further Action Status” on average each year
- 465 sites currently assigned “No Further Action Status”

High-Risk Site Exposure Concerns

- ⦿ Contaminated drinking water supplies
- ⦿ Direct contact with contaminated soils on residential property
- ⦿ Vapors from contaminated groundwater entering homes and other buildings

High-Risk Sites FY11-12

(Includes sites with soil contamination on residential property, with contaminant detections in water supply wells or where water supply wells are within $\frac{1}{4}$ mi of a source)

- **314 responsible party high risk sites**
 - 79 sites with detections in water supply wells
 - 235 additional sites with wells < 1/4mile from source
- **271 high risk sites-No responsible party**
 - 152 sites with detections in water supply wells
 - 89 additional sites with wells < $\frac{1}{4}$ mile from source
 - 29 additional residential soil contaminated sites
 - 1 surface water intake for water supply <1/4 mile
- **Staff are able to work on about 150-160 high risk sites with and without responsible parties at a time**
- **13 project managers & 2 supervisors in the non-landfill portion of the program plus 1 Bernard Allen Program Manager**

Inactive Hazardous Sites Program Staff Oversight Activities FY11-12 (non-landfill program)

Ongoing voluntary cleanup actions under agreements:

- REC Program-123
- State staff supervised – 70

Spill Response Actions – 30

Additional Priority Site Actions-151

What Makes a Site “Orphaned”?

- ◉ Discharger is bankrupt or out of business
- ◉ Discharger does not have sufficient funds to address
- ◉ Cannot determine what party discharged the contamination

Difficulties in Determining Responsibility

- Not required to keep records of spills and disposal prior to the 1980s
- Many operators in succession may have used same chemicals
- High cost of cleanup (thousands to millions of \$) an incentive not to be forthcoming with facts

Comparison of Definition of a Responsible Party Federal vs State

Inactive Hazardous Sites Response Act

Those entities who:

- Discharge or deposit
- Contract or arrange for any discharge or deposit
- Accept for discharge or deposit
- Transport or arrange for transport for the purpose of discharge or deposit
- Owner liability is implied not express: “an innocent landowner who is a bona fide purchaser of the inactive hazardous substance or waste disposal site without knowledge or without a reasonable basis for knowing that hazardous substance or waste disposal had occurredshall not be considered a responsible party”

CERCLA

- Past and present owners and operators are liable unless eligible for certain exceptions

Funding Sources for Orphaned Sites

- ◉ US EPA
- ◉ Pre-Regulatory Landfill Fund
- ◉ Bernard Allen Memorial Drinking Water Fund
- ◉ Inactive Hazardous Sites Cleanup Fund
- ◉ Bankruptcy Claims

Pre-Regulatory Landfill Sites

- 676 Pre-Regulatory Landfill Sites
(Not counted in inventory of 1930 sites)
- State-wide disposal tax funds assessment and mitigation of risks posed by these sites
- Approximately \$9 million in income annually
- 7 staff implement program (cap on administration expenses)

Pre-Regulatory Landfill Sites

FY11-12

- 55 sites had ongoing or completed contaminant investigations
- Several of these in the remedial design phase nearing cleanup stage
- 168 water supply wells sampled
- Alternate water provide to 7 homes:
 - Albermarle Dump-Albermarle/Stanly
 - Fairview Landfill-Fairview/Buncombe
 - Little Mountain Landfill-Columbus/Polk

Bernard Allen Memorial Drinking Water Fund

- Has been receiving 2.5% of Scrap Tire Tax since Nov 2009 (approx. \$400K annually)
- Used to sample wells and to provide alternate drinking water to affected homes
- Alternate Water Provided FY11-12 (*Each has 1 or more homes*):
 - Atkinson Road-Hamlet/Richmond
 - Barwell Road-Raleigh/Wake
 - Brekenwood Subdivision-Pleasant Garden/Guilford
 - Clontz Residence-Marshville/Union
 - Country Club Lane-Roxboro/Person
 - Durwood Grocery-Willard/Pender
 - Mary Chappell-Hamlet/Richmond
 - Montgomery County/Moore County Pesticide Contaminated Wells
 - Needmore General Store-Fuqua-Varina/Wake
 - Painter Well-Belmont/Gaston
 - Priddy Site-Lawsonville/Stokes
 - Post Road-Shelby/Cleveland
 - Scercy Wells-Charlotte/Mecklenburg
 - Sipe Well-Hickory/Catawba
 - Staley PCE-Liberty/Randolph
 - Union Road-Gastonia/Gaston
 - VFW Road-Reidsville/Rockingham

Bernard Allen Memorial Drinking Water Fund

Alternate Water for Contaminated Water Supply Wells

- For wells with hazardous substance contamination and other pollutants
- Can be from natural conditions or normal application of pesticides
- Contaminant must be greater than Fed. drinking water standard
- Owner income must be less than 3X US poverty guidelines to receive alternate water funding
- Fund can pay no more than 1/3 of water line cost and no more than \$10K/residence

Inactive Hazardous Sites Cleanup Fund FY11-12 Contaminant Assessment to Determine Risk/Responsibility

FY11-12 Inactive Hazardous Site Cleanup Fund Income: \$475,743 (mostly from Scrap Tire Tax)

- Biddle Street-New Bern/Craven
- Fairland Lane-Lincolnton/Lincoln
- Hollingsworth Property-Fayetteville/Cumberland
- Paziuk Warehouse-Wilmington/New Hanover
- Pender Plating-Burgaw/Pender
- Phoenix Recycling-Havelock/Craven
- Pleasant Garden Road Contamination-Pleasant Garden/Guilford
- Rochelle Street Wells-Durham/Durham
- Safety-Kleen-Wallace/Duplin
- Stoller Chemical-Severn/Northampton
- Villa Mobile Home Park-Kannapolis/Cabarrus
- Walker Drum Disposal-Gold Hill/Rowan
- Wrightsville Avenue-Wilmington/New Hanover

Inactive Hazardous Sites Fund

Providing Alternate Water FY11-12

(Sites listed have one or more homes affected)

- Brekenwood Subdivision-Pleasant Garden/Guilford (properties not qualifying for Bernard Allen)
- Busick Road-Reidsville/Rockingham
- Pawley Drive Contamination-Charlotte/Mecklenburg
- Priddy Site-Lawsonville/Stokes (properties not qualifying for Bernard Allen)
- Woodleaf and Ridge Site-Salisbury/Rowan

Inactive Hazardous Sites Cleanup Fund FY11-12

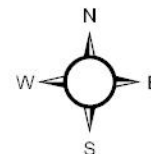
Source Removals/Remedial Action

- **Cheeseman Property-Rockwell/Cabarrus**
 - Lead contaminated soil removed from residential property
 - \$10,887 spent FY11-12, \$24,307 total through FY11-12
- **Crowders Mountain State Park-Gastonia/Gaston**
 - Crushed drums of mixed chemical wastes removed from residential/park property
 - \$69,803 spent FY11-12, \$160,080 total through FY11-12
- **G&B/Farmer Property-Scotland Neck/Halifax**
 - Contaminated soil from wood treating operation on residential property removed
 - \$101,243 spent FY11-12, \$138,077 total through FY11-12
- **Levi Watts Property-Tabor City/Columbus**
 - Lead contaminated soil removed from residential property
 - \$53,505 spent FY11-12, \$81,182 total through FY11-12
- **Texfi-Fayetteville/Cumberland**
 - Mixed solvents in soils and groundwater at textile plant next to City of Fayetteville water plant (below ground tank and water intake near contamination)
 - Source remediation underway; Estimated cleanup costs in tens of millions of dollars
 - \$58,892 in bankruptcy funds spent FY11-12, \$1.7 million spent in mixed funds through FY11-12
 - \$161,631 remained at end of FY11-12
- **Vinegar Hill-Tabor City/Columbus**
 - Lead contaminated soil removed from residential property
 - \$74,996 spent in FY11-12, \$83,226 total through FY11-12

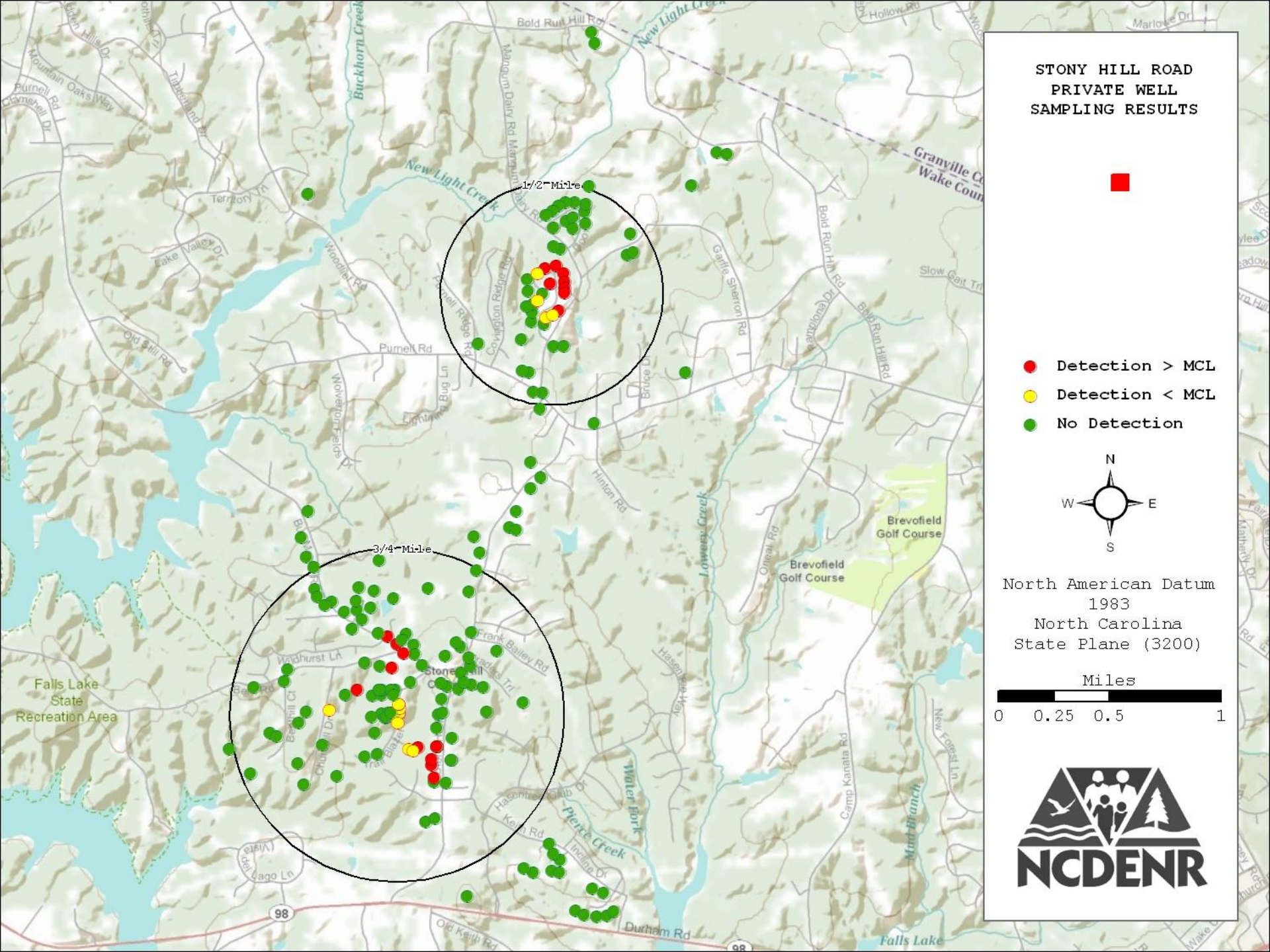
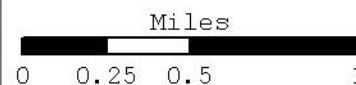
STONY HILL ROAD PRIVATE WELL SAMPLING RESULTS



- Detection > MCL
- Detection < MCL
- No Detection



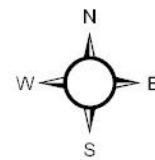
North American Datum
1983
North Carolina
State Plane (3200)



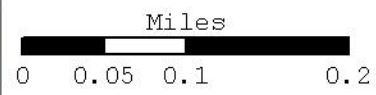
STONY HILL ROAD SOIL VAPOR SAMPLING RESULTS



- Result ABOVE Screening Level
- Result BELOW Screening Level



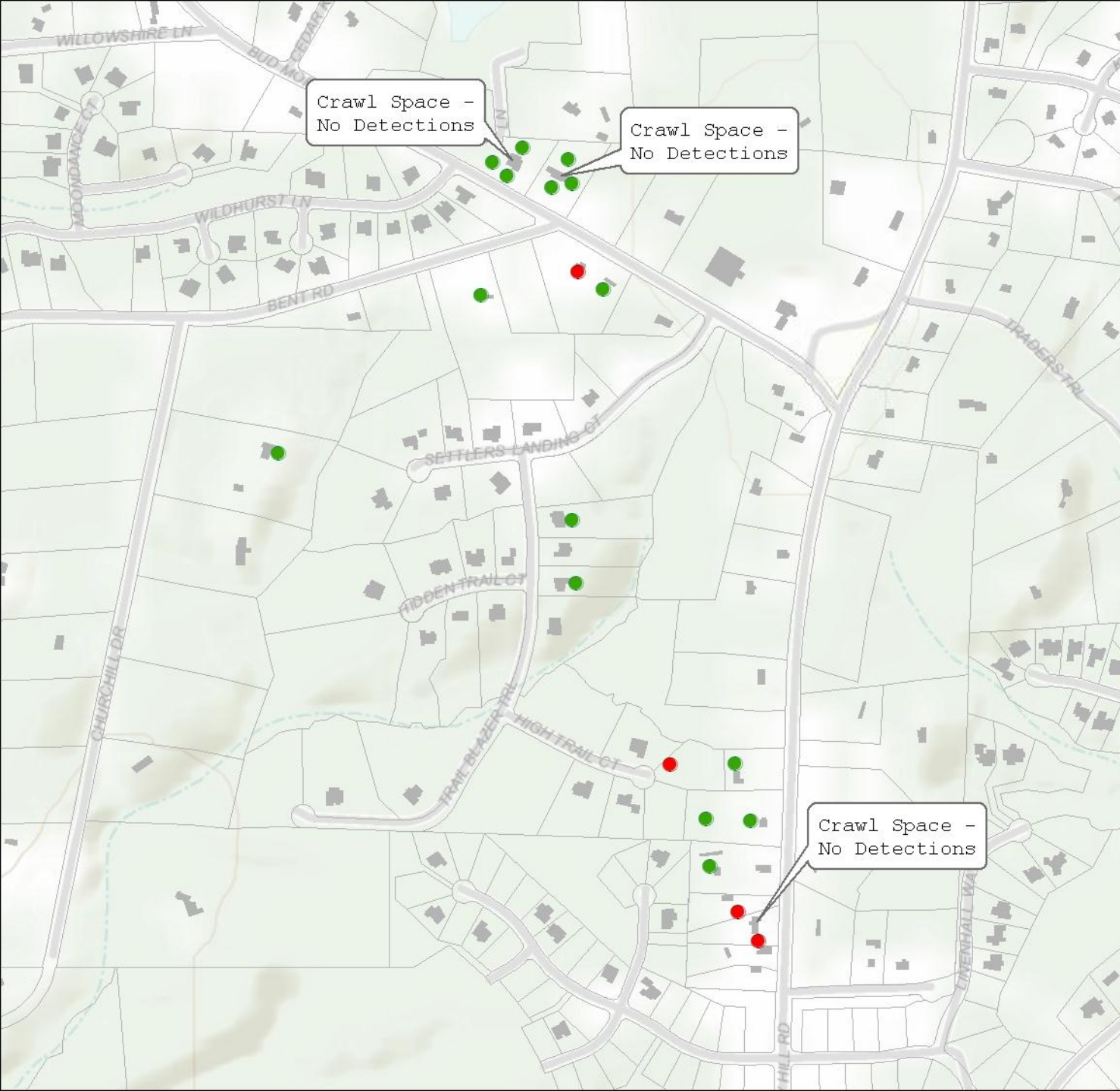
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1983
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Crawl Space -
No Detections

Crawl Space -
No Detections

Crawl Space -
No Detections

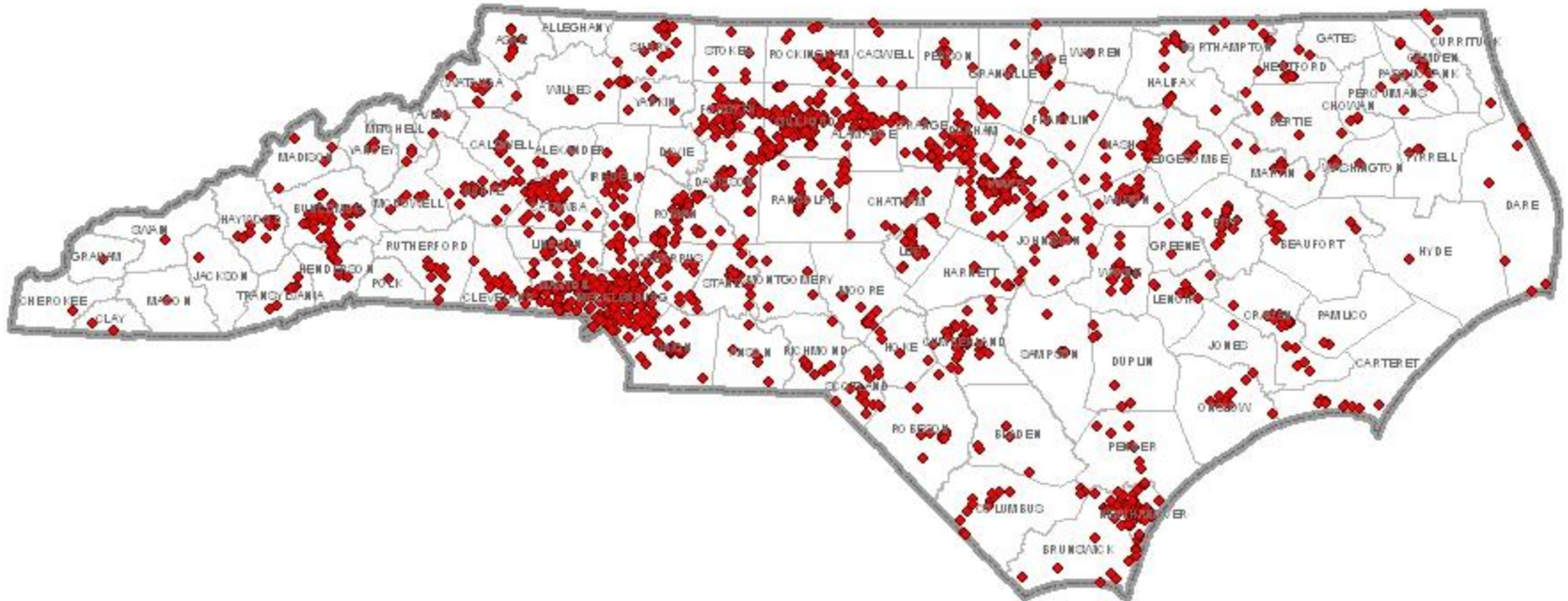


Current Issues

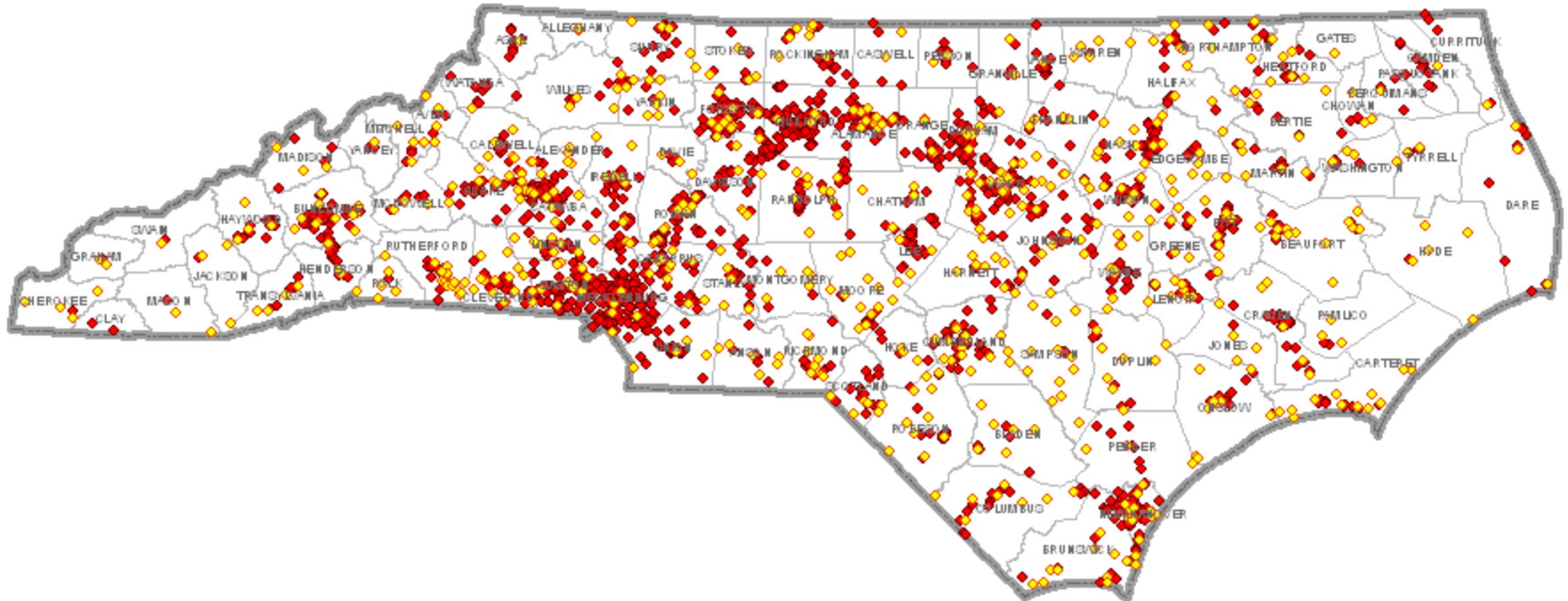
- 585 known high risk sites
- 1930 non-landfill sites cataloged
- Staff can work on 150-160 at a time
- Each take years to address
- About $\frac{1}{2}$ of sites anticipated to be orphaned
- Limitations on use of Bernard Allen Funds

Recommendations

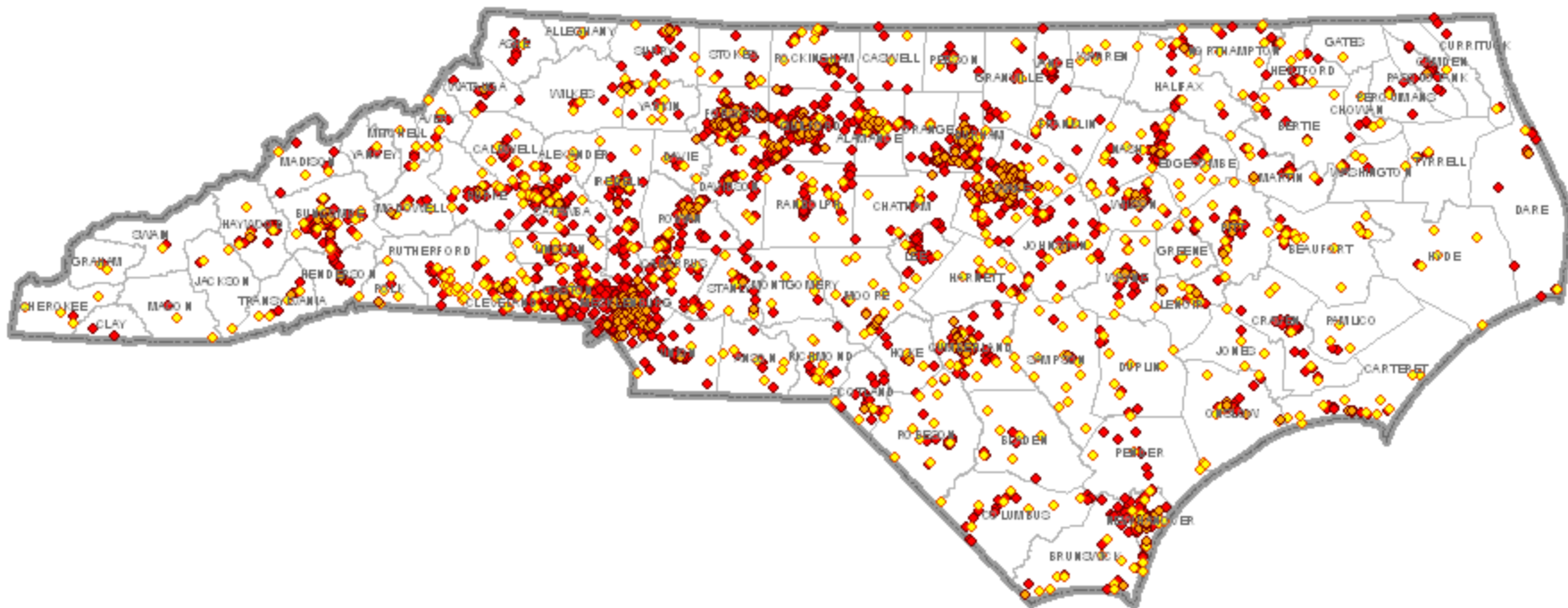
- Consider changes to the statutory provisions of the Inactive Hazardous Sites Response Act to make more consistent with federal law (Superfund)
- Consider statutory changes in Bernard Allen legislation:
 - Increase the amount per household for extending water lines from \$10K to \$50K.
 - Modify provision which limits water line expenditures to no more than 1/3 the total project cost to apply only in cases of greater than 10 homes.
 - Allow more frequent testing of wells in certain situations.
- New efforts to educate the public on importance of testing their water supply well should be initiated



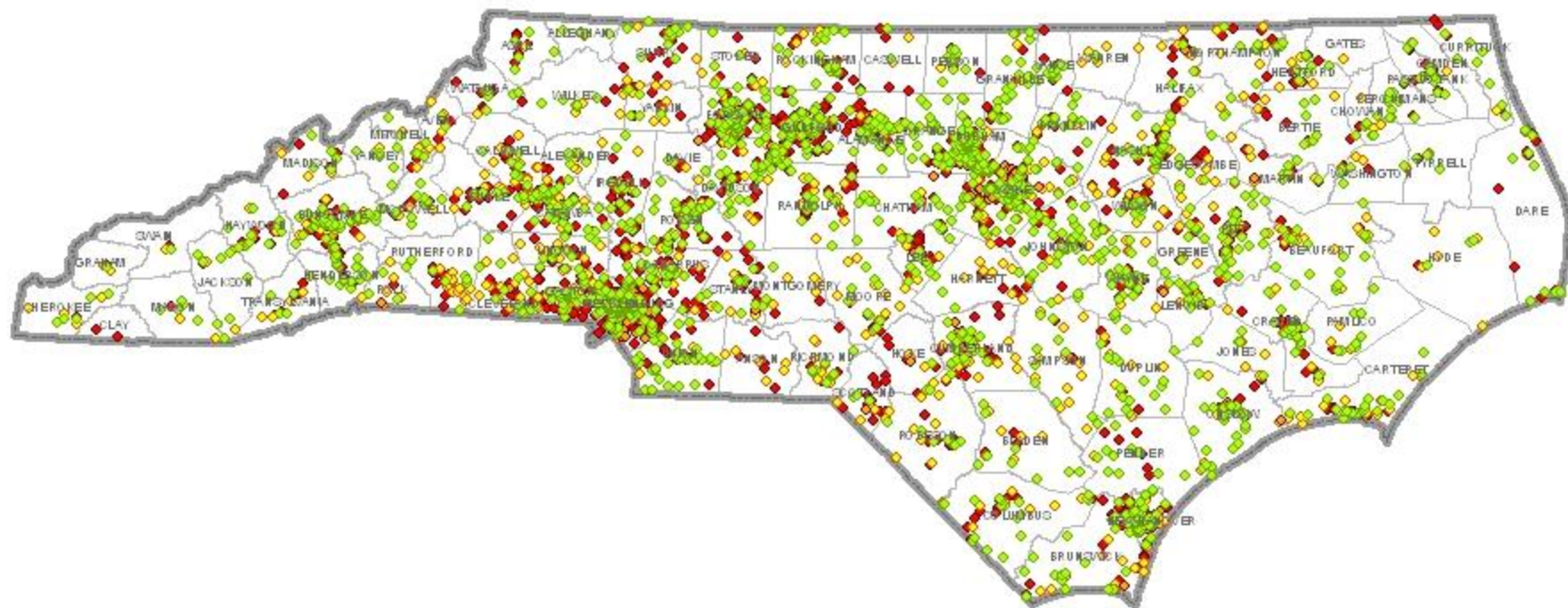
◆ Inactive Hazardous Sites



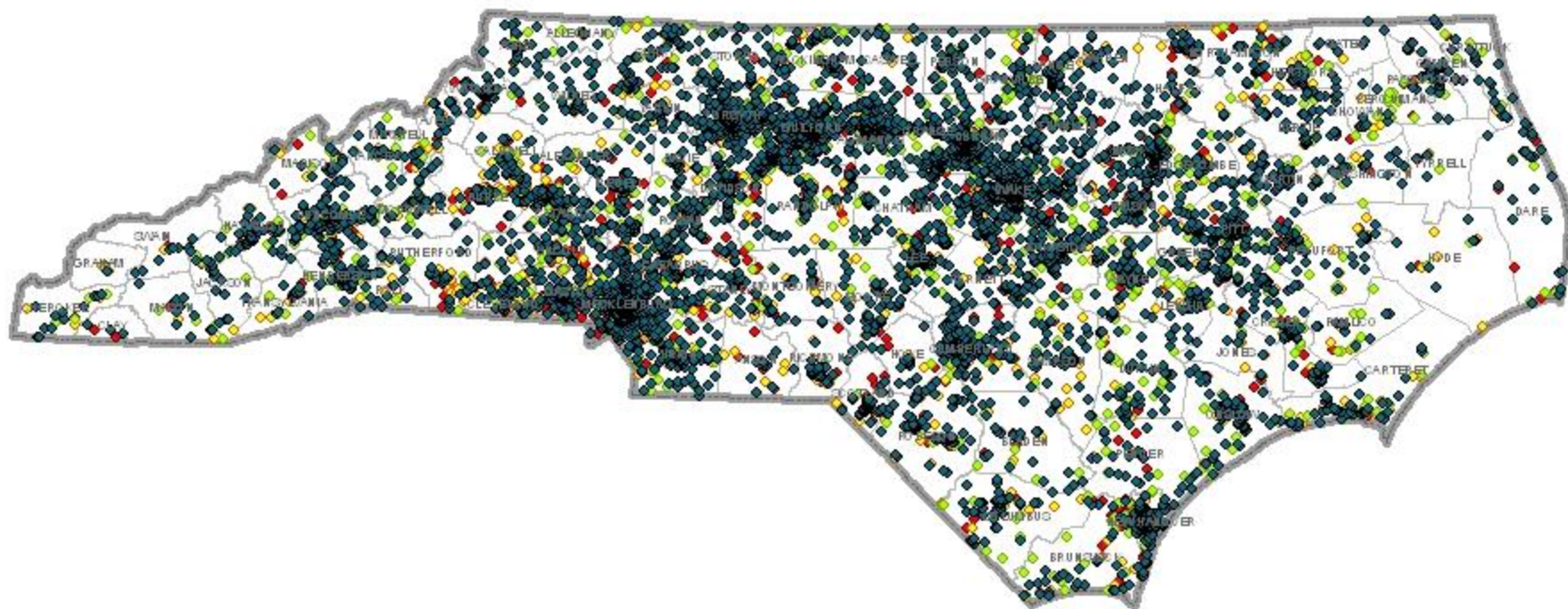
- ◆ Pre-regulatory Landfills
- ◆ Inactive Hazardous Sites



- ◆ DSCA
- ◆ Pre-regulatory Landfills
- ◆ Inactive Hazardous Sites



- ◆ AST Incidents (Open)
- ◆ DSCA
- ◆ Pre-regulatory Landfills
- ◆ Inactive Hazardous Sites



- ◆ UST Incidents (Open)
- ◆ AST Incidents (Open)
- ◆ DSCA
- ◆ Pre-regulatory Landfills
- ◆ Inactive Hazardous Sites