

# The Freedom Industries Spill: Lessons Learned and Needed Reforms

Presentation to:  
Joint Legislative Oversight Commission  
on State Water Resources

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# The Freedom Industries Spill

## Lessons Learned and Needed Reforms



Photos: Marc Glass.

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January 20, 2014

# Downstream Strategies

- Environmental consultants
- Started in 1997
- Staff of 11
- Offices in Morgantown and Alderson



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Downstream Strategies offers environmental consulting services that combine sound interdisciplinary skills with a core belief in the importance of protecting the environment and linking economic development with natural resource stewardship.

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# Clients

- Federal (VA, USFWS, ARC)
- State (DEP, Conservation Agency)
- Local (Pocahontas Co., Jefferson Co.)
- Foundations and nonprofits
- Universities (WVU, Kent State)
- Attorneys
- Individuals
- Private businesses

# West Virginia Rivers Coalition

A statewide nonprofit organization focused on protecting West Virginia's water resources and upholding people's right to use and enjoy clean water.



# It's time to change the tone

- ⦿ Elected officials, agency heads, and members of the Legislature
- ⦿ Anti-regulation, anti-EPA rhetoric
- ⦿ Protecting human health and the environment is directly linked to a thriving, diversified economy

# Failures at multiple levels

## ⦿ Government

- Federal
- State
- Local

## ⦿ Private industry

- Freedom Industries
- West Virginia American Water

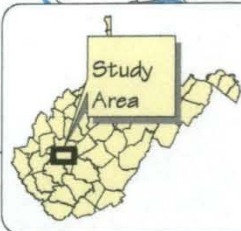
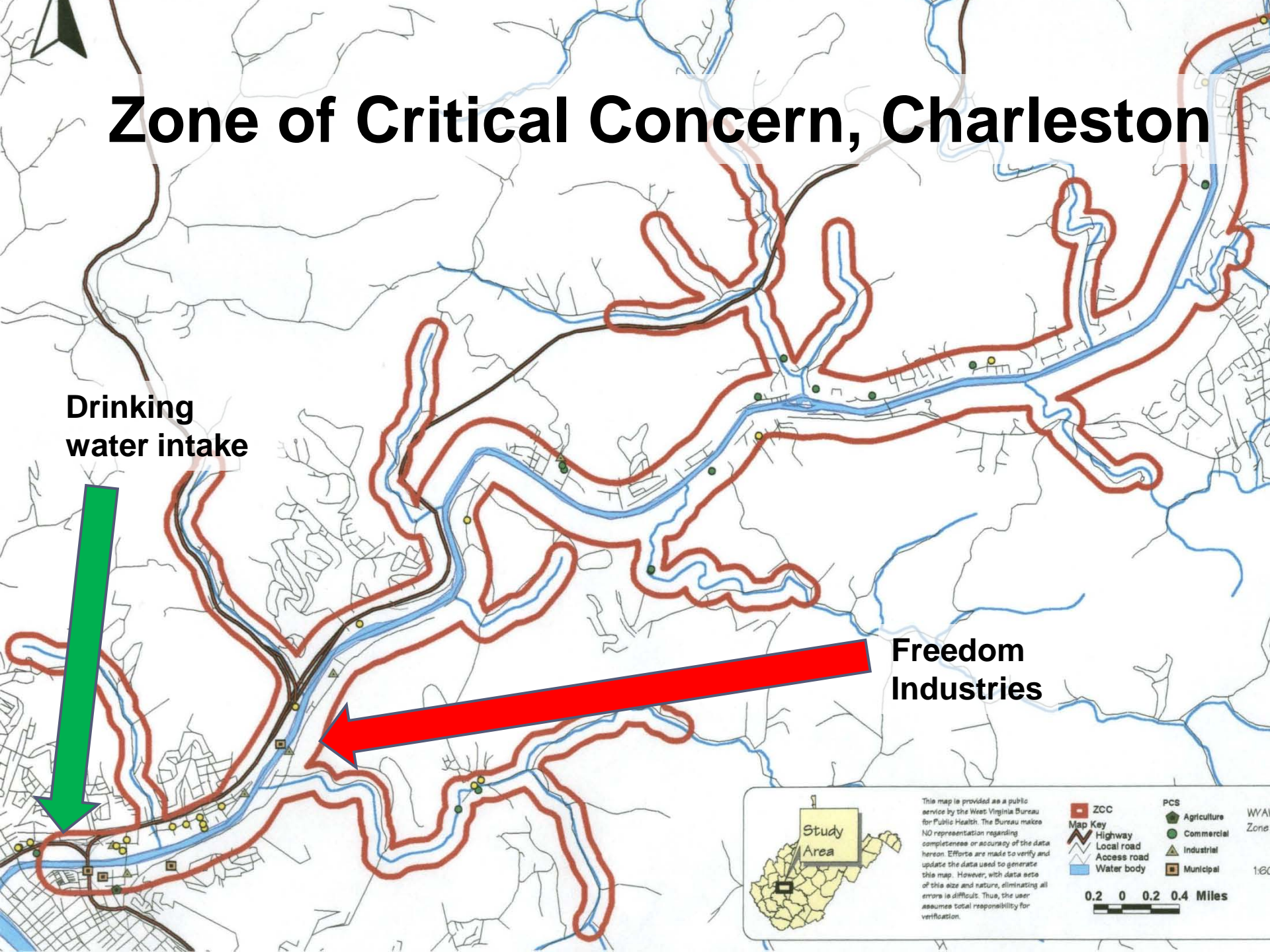
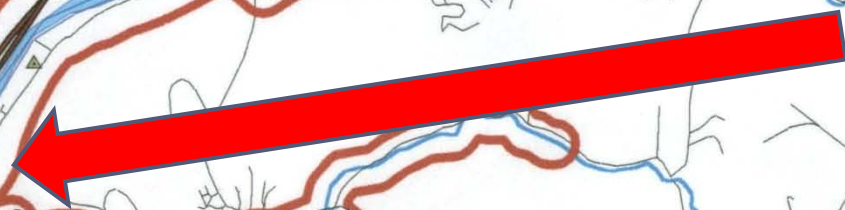


# Zone of Critical Concern, Charleston

Drinking water intake



Freedom Industries

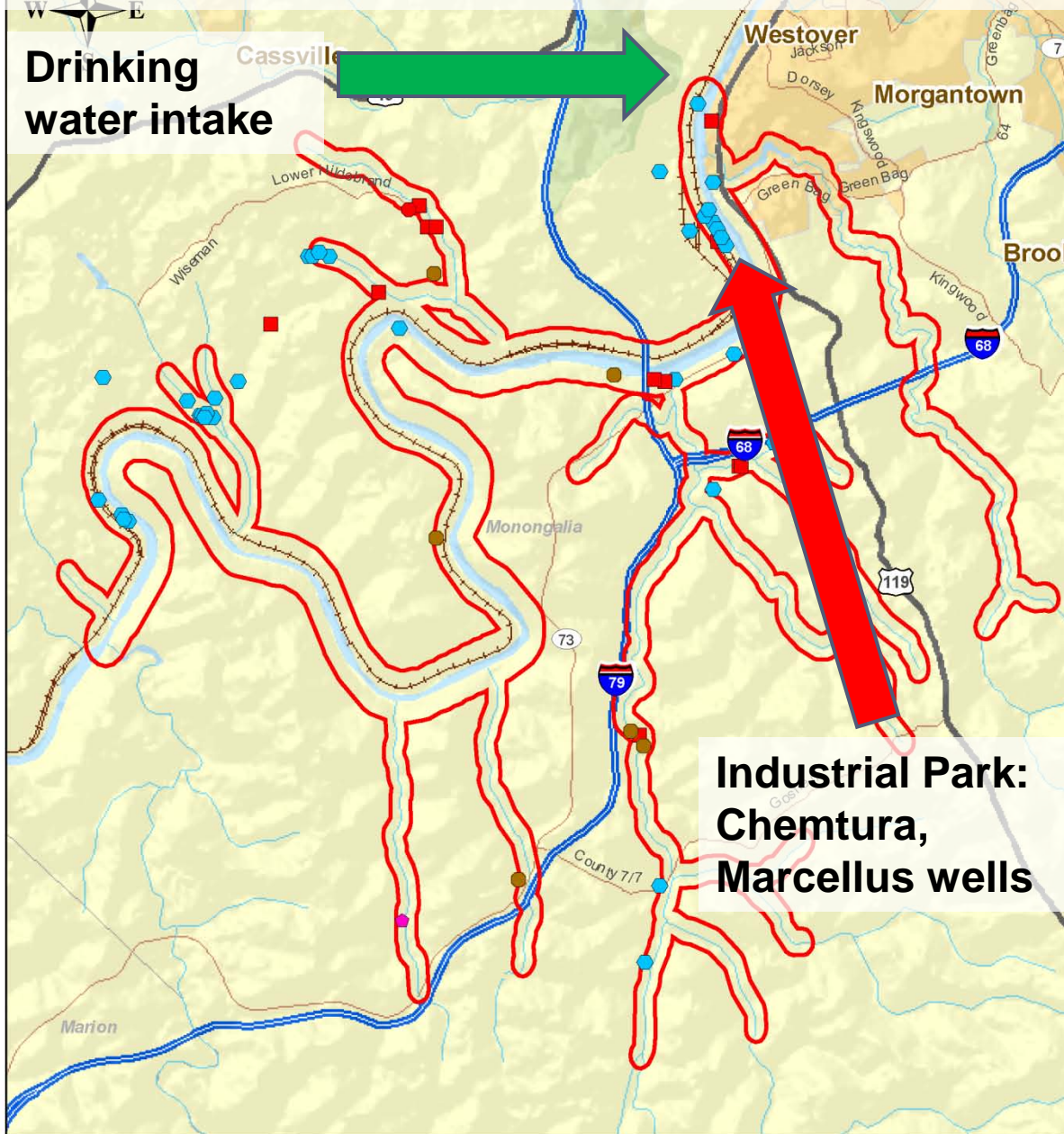


This map is provided as a public service by the West Virginia Bureau for Public Health. The Bureau makes NO representation regarding completeness or accuracy of the data hereon. Efforts are made to verify and update the data used to generate this map. However, with data sets of this size and nature, eliminating all errors is difficult. Thus, the user assumes total responsibility for verification.

Map Key		PCS		WVA
ZCC	Agriculture			Zone
Highway	Commercial			
Local road	Industrial			
Access road	Municipal			1:60
Water body				

0.2 0 0.2 0.4 Miles

# Zone of Critical Concern, Morgantown



## Map Key

### Potential Contaminant Sources

- ◆ Agriculture
  - Commercial
  - Industrial
  - Municipal
  - Residential
- Source Water Protection Area

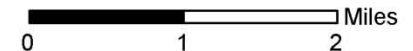


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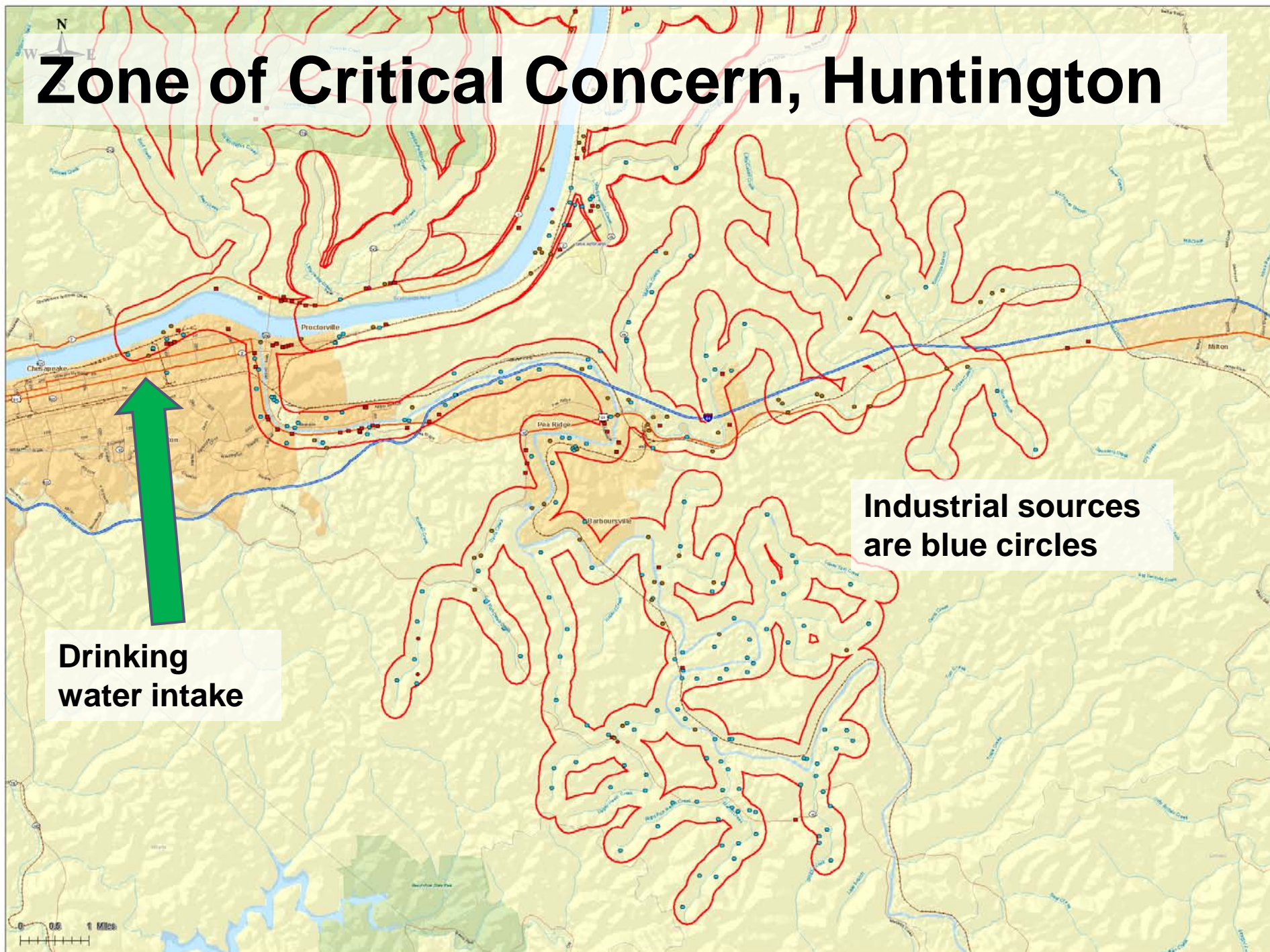
Source locations not included for reasons of security.

**Morgantown Utility Board**  
**WV3303111**  
**Monongalia County**

Scale: 1:70,000  
 Drawn By: JEM  
 05/11/06



# Zone of Critical Concern, Huntington



**Drinking  
water intake**

**Industrial sources  
are blue circles**

# Potential significant contaminant sources within ZCCs

	Industrial	Other	Total
Charleston	7	44	51
Morgantown	34	21	55
Huntington	206	218	424

Other sources: residential, commercial, municipal, agriculture

# Our report focus on three key laws

1. Clean Water Act
  2. Safe Drinking Water Act
  3. Emergency Planning and Community Right-to-Know Act
- ◎ Other
    - CERCLA
    - Toxic Substances Control Act
    - Oil Pollution Act
    - Chemical Safety Board recommendations

# Clean Water Act

- Freedom Industries holds NPDES permit
- Registration under the state's general multi-sector industrial stormwater permit
- DEP issues and enforces these permits
- Includes many items related to spills
- Requires immediate reporting of noncompliance that may endanger health or the environment

# CWA recommendations

- ⦿ Require that DEP inspect all NPDES-permitted sites, and immediately inspect the most critical sites
- ⦿ Prohibit coverage under the general industrial stormwater permit for facilities in zones of critical concern
- ⦿ Require additional permit conditions for facilities such as the Freedom Industries site
- ⦿ Increase funding and staffing for DEP's NPDES and environmental enforcement programs

# Safe Drinking Water Act

- Source Water Assessment Report written in 2002
- The system is highly susceptible to contamination
- Delineates a zone of critical concern
- ~50 potential significant contaminant sources are in this zone, including Freedom Industries
- No Protection Plan appears to have been written



# SDWA recommendations

- Update Charleston's SWAR, and all SWARs across the state
- Mandate Protection Plans and provide for funding to write them
- Provide for state-specific protective standards for chemicals used in large quantities in West Virginia
- Local emergency planning committees should carefully review SWARs and take all necessary actions

# Protection Plans in Ohio

- Ohio EPA lists 5 example Protection Plans
- Upper Ohio River Protection Plan
  - Initiated by OEPA
  - Included 6 communities between Follansbee, WV and East Liverpool, OH
  - Held 6 meetings
  - Weirton, Follansbee, Arcelor-Mittal Steel Plating, and WVDHHR invited to participate

# Emergency Planning and Community Right-to-Know Act

- Requires hazardous chemical emergency planning
- Requires industry to report on the storage of hazardous chemicals
- Freedom Industries filed Tier Two Emergency and Hazardous Chemical Industry forms
- Specifically listed MCHM along with 16 other chemicals since 2007
- List MCHM as “immediate (acute) physical and health hazard”
- Quantity of MCHM stored onsite: 100,000-999,999 pounds

Chemical	2007	2008	2009	2010	2011	2012
Ammonium lignosulfonate	✓	✓	✓	✓	✓	✓
Calcium chloride					✓	✓
Calcium chloride solution	✓	✓	✓	✓	✓	✓
FFC-10	✓	✓				
Glycerin		✓	✓			
Crude glycerin, recovered			✓	✓	✓	✓
Glycerin rework	✓					
Fatty acids, recovered			✓	✓	✓	
Magnafloc 156		✓	✓	✓	✓	✓
Magnafloc 368	✓	✓	✓	✓	✓	✓
Magnafloc 455						✓
Magnasol CN2	✓					
MCHM	✓	✓	✓	✓	✓	✓
PDO concentrate			✓			
RDC-777					✓	✓
Soda ash			✓	✓	✓	✓
Zetag 7645		✓	✓	✓	✓	

# EPCRA recommendations

- Support local emergency planning committees and local governments in their planning efforts
- Local emergency planning committees should utilize the information submitted on Tier Two forms to minimize risk

# Local emergency planning committees

- ◎ Division of Homeland Security and Emergency Management maintains list
- ◎ One for each county except:
  - Cabell/Wayne
  - Kanawha/Putnam
  - Lewis/Upshur
  - Marshall/Wetzel
  - Wood/Wirt

# Proposals on the table

- Senate Bill 373
- Governor's recommendations
- Our recommendations

# Senate Bill 373

- Focuses on ASTs
- Does not recognize authorities under existing NPDES permit
- Does not mandate Protection Plans



# Governor's recommendations

- ⦿ Does not recognize value of clean water to economic prosperity, human health
- ⦿ Focuses on ASTs (with numerous loopholes)
- ⦿ Does not recognize authorities under existing NPDES permit
- ⦿ Requires Protection Plans within 90 days, but does not provide funding

# Our recommendations

- ◎ Take advantage of existing NPDES authorities:
  - Require INDIVIDUAL permits for industrial facilities in ZCCs
  - Require DEP inspections
  - Require additional permit conditions
  - Increase funding and staffing at DEP

# Our recommendations

- ◎ Support the rapid development of sound Protection Plans
  - Mandate them, but recognize that planning process takes time to develop community support
  - Provide funding

# Our recommendations

- Provide for state-specific protective standards for chemicals used in large quantities in West Virginia

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