

Proposed Dominion Gas Pipeline Concerns



Dominion Meeting
Verona, VA
September 15, 2014

General Categories

- Construction Activity
- Crossing existing ACSA pipelines
- Dominion restrictions in ROW
- Disturbance to natural groundwater recharge pathways - contamination
- Restrictions on future groundwater development
- Catastrophic events

Construction Activity

- **Blasting** across existing and potential groundwater and spring recharge areas, particularly in our karst geology
 - *Affect existing volumes of flow*
 - *Introduce new sources of contamination through use of blasting chemicals*
- Existing Authority Pipelines
 - *Dominion construction methods?*
 - *Requirements imposed on Authority?*

Dominion ROW restrictions

From Dominion documents

- No excavation w/o permission
 - No heavy equipment w/o permission
 - No blasting within 1,000 feet
-
1. Impact on ACSA repair and maintenance?
 2. Safety issues for our crews?
 3. Restrictions on future ACSA lines for growth?

Impact on Water Supplies?

Existing – most water sources are in karst

- Many water sources are already “under the influence of surface water”
- Further ground disturbance over a large area could open new pathways of contamination
- Gas migration through Karst?
 - Unknown pathways
- **Route is near the largest ACSA well (Lyndhurst) and our major wellfield (Stuarts Draft)**
- **Proposed route crosses numerous adopted Wellhead Protection Areas (Lyndhurst, Hurdis, Hershey, and Ridgeview)**

Augusta County
 Dominion Gas Pipeline
 Initial Study Corridor
 Lyndhurst & Stuarts Draft Areas
 09/12/2014



Hurdis, Hershey,
 & Ridgeview Wells
 Source Water
 Protection Area

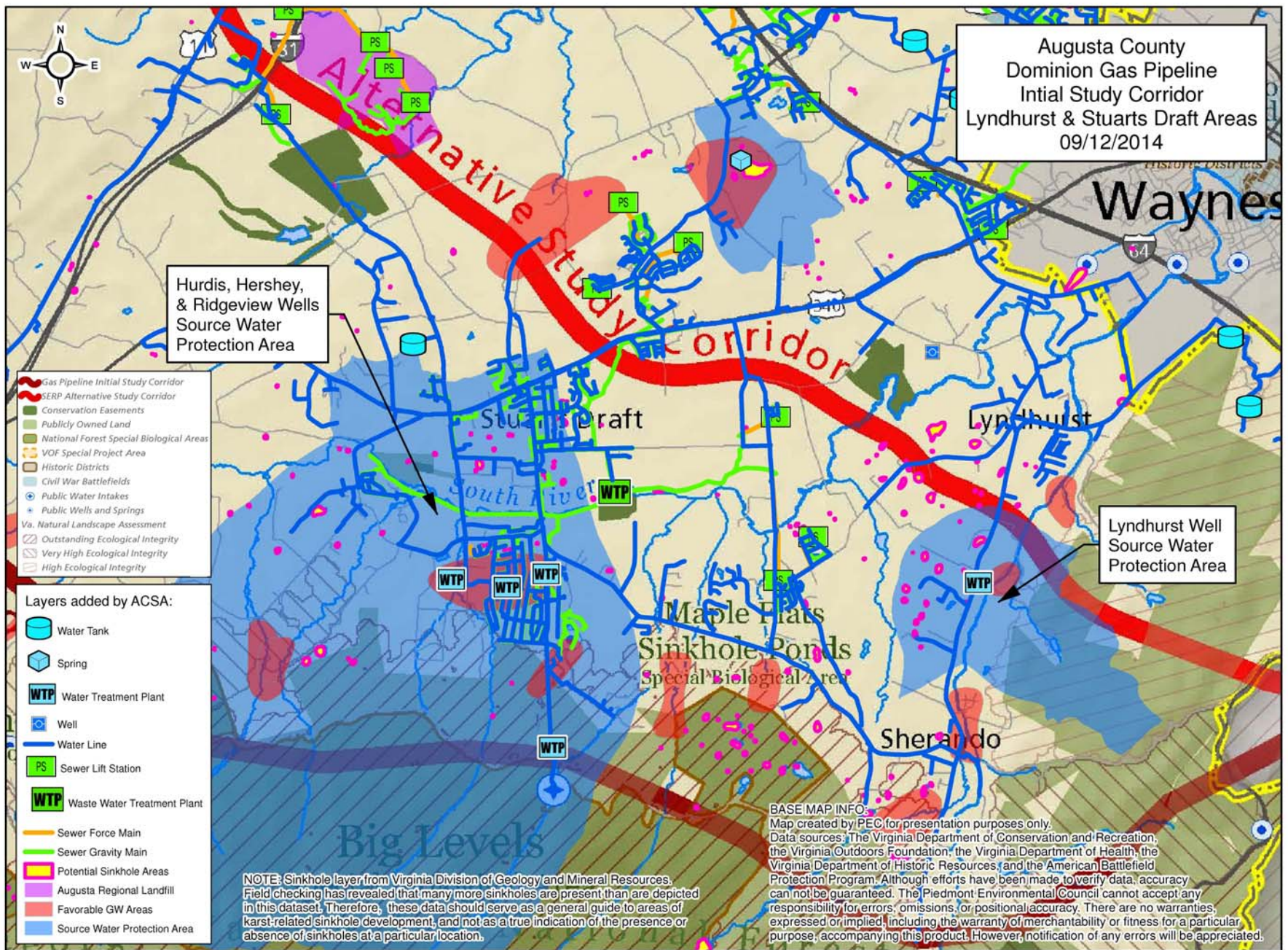
Lyndhurst Well
 Source Water
 Protection Area

- Gas Pipeline Initial Study Corridor
- SERP Alternative Study Corridor
- Conservation Easements
- Publicly Owned Land
- National Forest Special Biological Areas
- VOF Special Project Area
- Historic Districts
- Civil War Battlefields
- Public Water Intakes
- Public Wells and Springs
- Va. Natural Landscape Assessment
- Outstanding Ecological Integrity
- Very High Ecological Integrity
- High Ecological Integrity

- Layers added by ACSA:
- Water Tank
 - Spring
 - Water Treatment Plant
 - Well
 - Water Line
 - Sewer Lift Station
 - Waste Water Treatment Plant
 - Sewer Force Main
 - Sewer Gravity Main
 - Potential Sinkhole Areas
 - Augusta Regional Landfill
 - Favorable GW Areas
 - Source Water Protection Area

NOTE: Sinkhole layer from Virginia Division of Geology and Mineral Resources. Field checking has revealed that many more sinkholes are present than are depicted in this dataset. Therefore, these data should serve as a general guide to areas of karst-related sinkhole development, and not as a true indication of the presence or absence of sinkholes at a particular location.

BASE MAP INFO:
 Map created by PEC for presentation purposes only.
 Data sources: The Virginia Department of Conservation and Recreation, the Virginia Outdoors Foundation, the Virginia Department of Health, the Virginia Department of Historic Resources, and the American Battlefield Protection Program. Although efforts have been made to verify data, accuracy can not be guaranteed. The Piedmont Environmental Council cannot accept any responsibility for errors, omissions, or positional accuracy. There are no warranties, expressed or implied, including the warranty of merchantability or fitness for a particular purpose, accompanying this product. However, notification of any errors will be appreciated.



Impact on Water Supplies?

- Future?
- Proposed route bisects our primary water supply zones, including areas we've identified for potential future sources
- Dominion pipeline and ROW restrictions could impact ability to drill new wells, extend pipelines to connect new sources

Lyndhurst SWPA

From Emery & Garrett Groundwater, Inc.

- **“Geologic setting of the Lyndhurst area is so delicate and sensitive that [ACSA] should fight hard to prevent any blasting from occurring in that WHPA zone”**
- **“Might lose the yield altogether due to siltation/turbidity/karst feature collapse”**

Concerns: construction impacts, blasting, karst feature collapse

Source Water Protection Ordinance

- Area 1 – prohibits gas pipelines
- Area 2 – requires BOS approval of Special Administrative Permit
 - related to “hazardous materials”

Catastrophic Events

Explosion

- Due to corrosion, sinkhole, earthquake
- All are common in our area
- Major disruption to existing utility infrastructure?
 - Forced relocation of existing lines?

Natural Gas Pipeline Explosion

September 14, 2008

Appomattox, Virginia



Corrosion

- ACSA pipelines are now coated for corrosion resistance
- Corrosive soils are common in this area
- Expected life expectancy of pipeline?

Landfill

- Proposed Route will cross Landfill property
- Potential conflict with landfill operations
 - Potential conflict with future SW cells
 - Potential impact on off-site landfill gas migration or groundwater migration issues
 - Potential conflict with future soil borrow area

Augusta County Service Authority

Contacts

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