

Public Health Baseline Assessment



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**GILLINGS SCHOOL OF
GLOBAL PUBLIC HEALTH**



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Natural Gas Potential of the Sanford sub-basin, Deep River Basin, North Carolina

By

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and

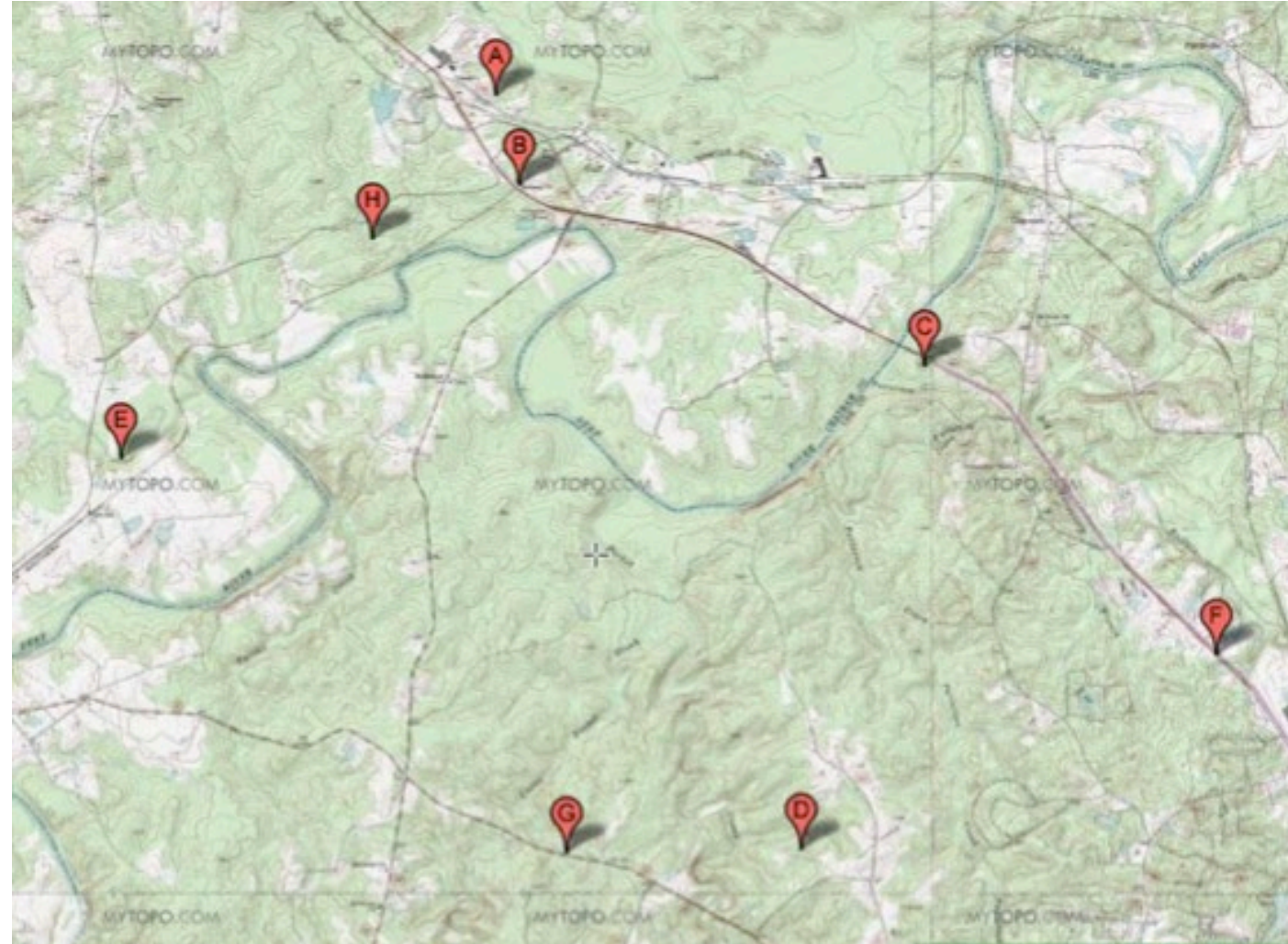
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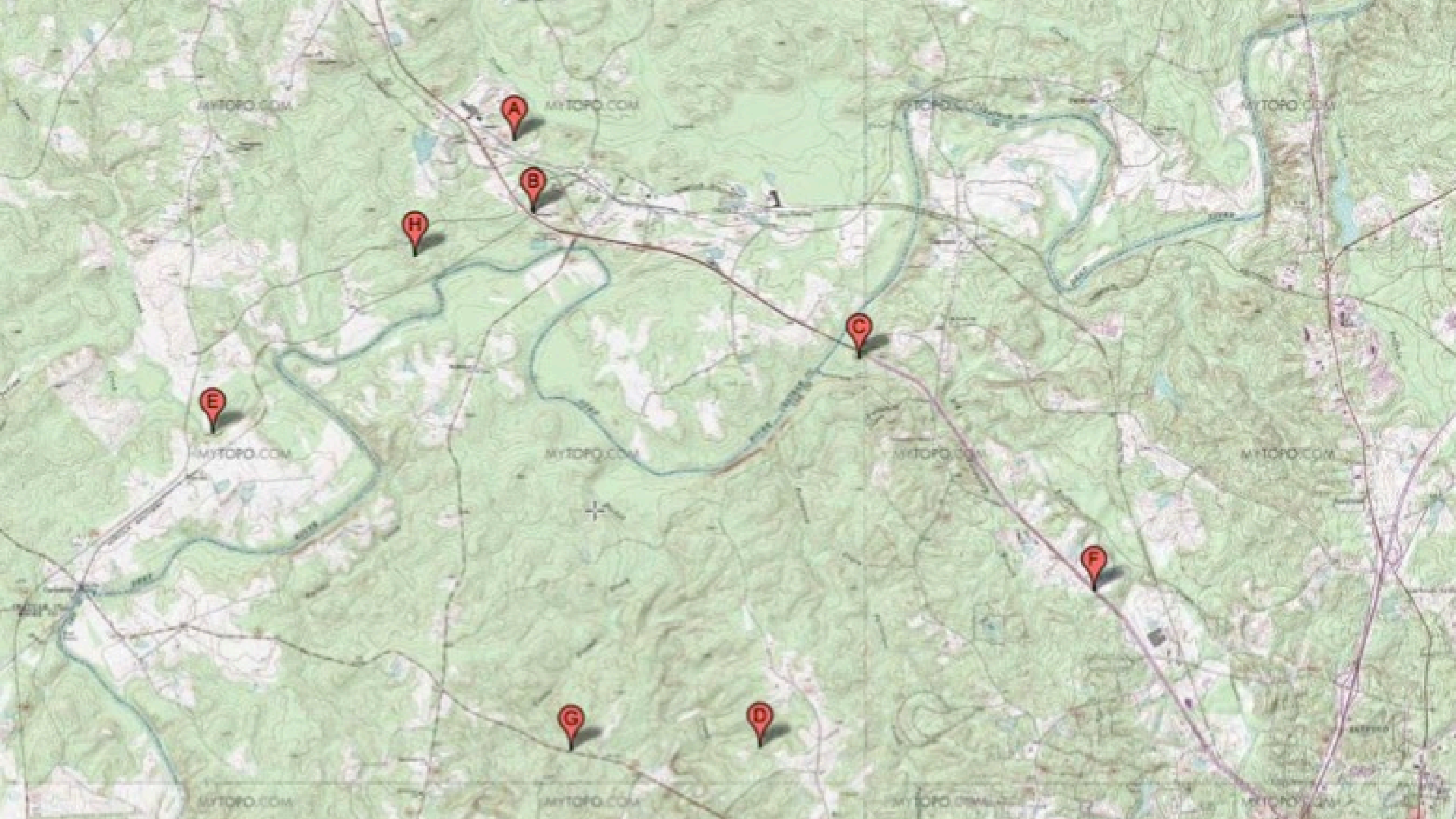
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A

B

H

E

C

F

G

D

Balloon	Stop number and name
F	Stop 1 - Core workshop – Patterson Exploration Services
A	Stop 2 – Boren Clay Products Pit – Pekin Fm., Chatham Co.
C	Stop 3 – Lunch and Butler #3 wellhead and well discussion
H	Stop 4 – Alton Creek – outcrop of Cumnock Fm., Chatham Co.
B	Stop 4A – Bethany Church, Outcrop of the Cumnock Fm., Chatham Co. (Alternate stop)
E	Stop 4B – Black Diamond Mine, Outcrop of the Cumnock Fm., Chatham Co. (Alternate stop)
G	Stop 5 – Sanford Fm., NC Highway 42, Lee Co.
D	Stop 5A – Simpson #1 well and discussion (Alternate stop), Lee Co.

Figure 21. Field trip route showing stops. Base from Acme Mapper.

Stop 3– Butler #3 wellhead

Location: 35.543617°N, -79.250778°W

Synopsis: One of two shut-in natural gas wells in North Carolina.



Phase 1: Use of Existing Public Health Data



- Statewide syndromic surveillance system
- Mandatory reporting of all emergency department visits (Since 2004)
- All emergency department visits for all hospitals in or around the area of likely hydraulic fracturing
- Successfully used in environmental epidemiologic studies
- Only captures medical encounters occurring in emergency departments (i.e., no visits to urgent care or to physician's offices)

Phase 1: Use of Existing Public Health Data



SCHOOL OF MEDICINE

North Carolina Translational and Clinical Sciences Institute

Carolina Data Warehouse for Health

- Central repository for clinical, research, and administrative data from the UNC Health Care System
- ~3.5 million residents across the state, with some data going back to 2004.
- Data on patient demographics, healthcare encounters, diagnoses, procedures, medications, and labs.
- Provides more detailed data for a wider range of healthcare encounters than NC DETECT
- Only available for populations served by the UNC Health Care System

Phase 2: Generate New Public Health Data

- Health survey administered to a random sample of residents in communities
- Door-to-door, telephone, and/or by mail.
- Each of these approaches entails different costs and limitations
- Allows capture and characterization of health issues for which community members may choose not to, or lack the resources to, seek healthcare.
- Provides the opportunity to enroll/consent these residents in a longitudinal health study

Next Steps

- Develop concept and present to Commissioners
- Continued discussions with two data warehouses for detailed meta-data information
- Completing a scope of work with detailed costs estimates for two phases
- Source of funding?