FracTracker

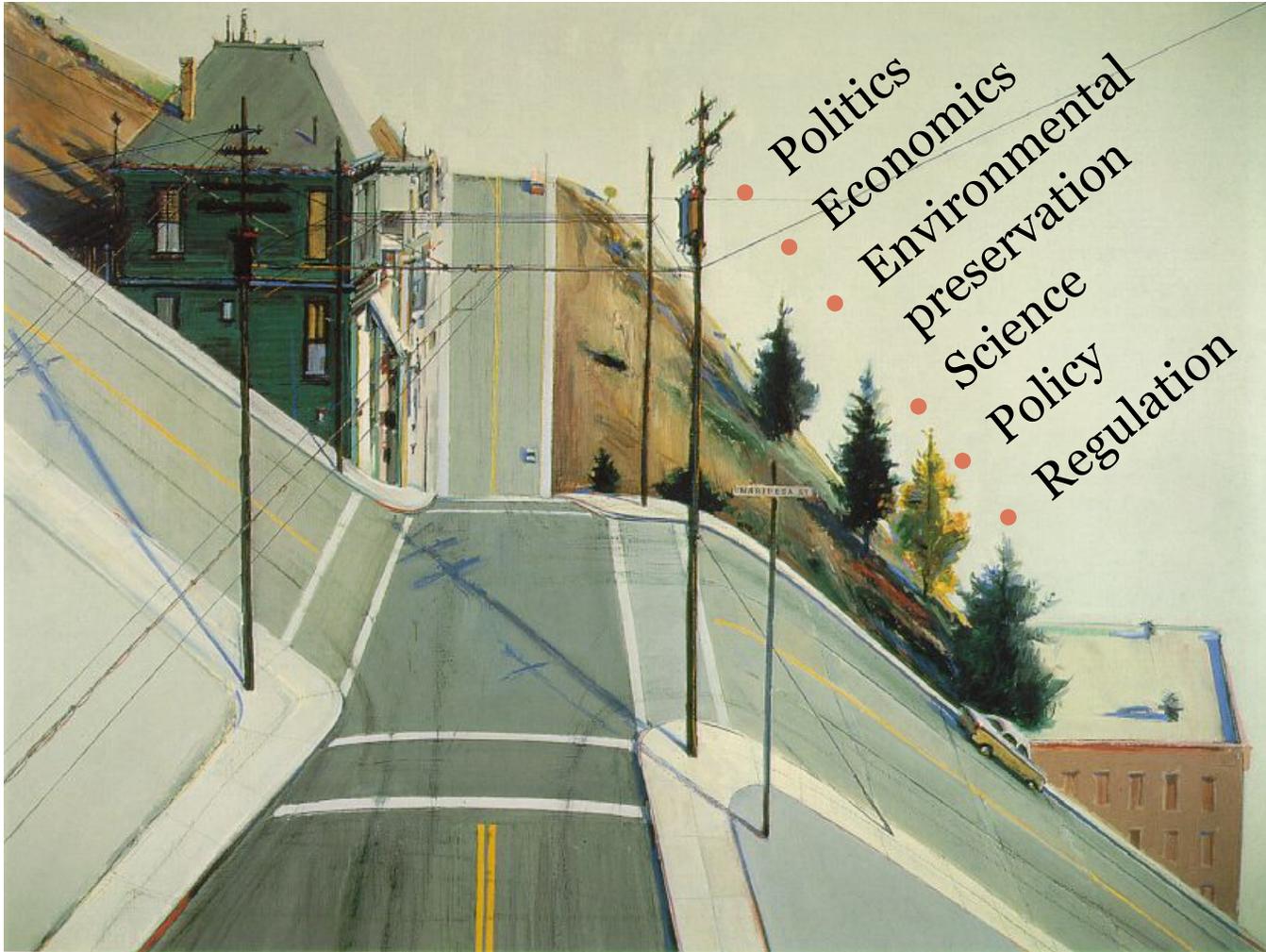**BLOG AND DATA TOOL FOR TRACKING IMPACTS OF SHALE GAS EXTRACTION**

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Center for Healthy Environments & Communities
University of Pittsburgh Graduate School of Public Health

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November 20, 2010

Shale Gas Drilling Represents an Intersection of:

- Politics
- Economics
- Environmental preservation
- Science
- Policy
- Regulation

Concerns with Marcellus Shale Development

- A great deal of data and information but no way to access it with ease

- A need for many different stories to be told about the impacts of this shale play.

- Dissemination of information is critical because the industry has owned a good deal of the information market for a long time.
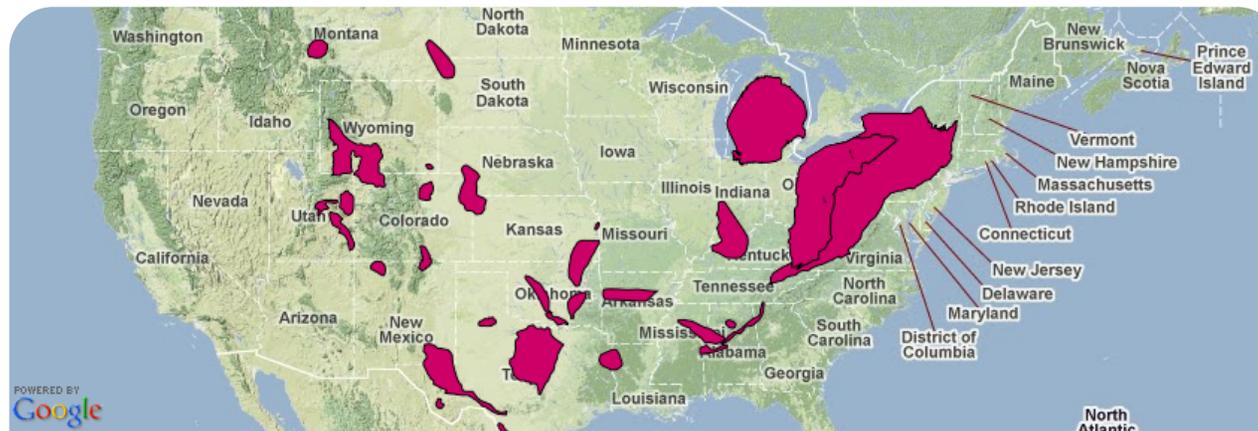
Major Data Gaps!

FracTracker - The Purpose

Manage Various Geo-located Datasets

- Environmental
- Environmental health
- Social & Behavioral Health

- Emergency preparedness
- Community & Public health
- Land use

Applications for All Shale Plays throughout U.S. & World

Shale Gas Plays in the Continental USA

Center for Healthy Environments & Communities
University of Pittsburgh | Graduate School of Public Health

http://data.fractracker.org/cbi/snapshot/page?concept=~017807b0de9e4411dfb75fdfabe0275b52

Created by Conrad Volz on Aug 2, 2010

POWERED BY Google

The Theory behind FracTracker

CROWDSOURCING

USING THE MASSES TO MAKE SOMETHING
BETTER THAN YOU COULD BUILD ALONE

Blog Features

Pages – About Us, Marcellus Resources, How FracTracker Works, DataTool, Events Calendar

Share It (Twitter, etc)

RSS Feeds – Most recent datasets from DataTool, CHEC documentary project videos, PA DEP News, Citizens' Photos

Links

Search Button

Archive

Blog Followers & Contributors

Labels/Tags from Posts

Blog | Register | Explore | Upload | Visualize | Snapshot | Present

The Blog – http://fractracker.org

FRACTRACKER - MARCELLUS SHALE DATA TRACKING
TRACKING THE IMPACTS OF MARCELLUS SHALE GAS EXTRACTION

Blog   About Us   Marcellus Resources   How FracTracker Works   DataTool   Calendar

TUESDAY, AUGUST 24, 2010

Potential Shale Gas Extraction Air Pollution Impacts

How Organic Compounds Contained in the Shale Layer Can Volatilize Into Air, Become Hazardous Air Pollutants and Cause Ozone Formation

By: Conrad Dan Volz, DrPH, MPH; Drew Michanowicz, MPH, CPH; Charles Christen, DrPH, MEd; Samantha Malone, MPH, CPH; Kyle Ferrer, MPH - Center for Healthy Environments and Communities (CHEC), University of Pittsburgh, GSPH, EOH department

The Center for Healthy Environments and Communities has received numerous requests for information on how Marcellus shale gas extraction operations might contribute to air quality problems throughout the PA-NY-WV region, how air quality problems might develop in other shale plays around the country, and the potential human exposure to specific air contaminants generated in these processes. We are addressing this question in a very thorough academic fashion now by looking at the industrial processes involved from site clearance, to well drilling and hydrofracturing, to gas processing and methane and byproduct transport; we are developing conceptual site models of human exposure to contaminants generated by this very complicated industry with many sub-operations.

A conceptual site model is a written and/or pictorial representation of an environmental system and the biological, physical and chemical processes that determine the transport and fate of contaminants from a source, through environmental media (air, groundwater, surface water, sediment, soils, and food) to environmental receptors (humans, aquatic and terrestrial organisms can all be environmental receptors) and their most likely exposure modes (ASTM, 2008). Again, because there are many sources and types of contaminants to understand and uncover within each gas

WELCOME!

FracTracker's Blog & DataTool, (hosted by the Foundation for PA Watersheds & funded by the Heinz Endowments), provide citizens with a common place to share their Marcellus Shale drilling experiences & data. Both the Blog & DataTool are managed by CHEC.

SHARE IT

Share this on Facebook
Tweet this
This has been shared **68** times.
Get this for your site

MOST RECENT FRACTRACKER DATASETS

Community Impacts of

Register

Splash page (screen shot right)

Free & automated using Rhiza tools (software developer)

Provide name and email address to encourage data accuracy

Can view datasets and take a tour without registering, but cannot upload or download data

DataTool – http://data.fractracker.org

My Home & Explore Pages

My Home

Your profile – name, contact info, & a summary of your activity

Library of datasets uploaded, snapshots created

Everything is public.

- - - - - - - - - - - - - - -

Explore

Dashboard / summary of site's recent activity

Search / sort by datasets, snapshots, users, geographic area

Blog | Register | Explore | Upload | Visualize | Snapshot | Present

Center for Healthy Environments & Communities
University of Pittsburgh | Graduate School of Public Health

MY HOME   IMPORT   EXPLORE

PROFILE + LIBRARY
Samantha Malone   ACTIONS

<< More details and comments about Samantha Malone

About Samantha Malone

NAME	Samantha Malone	MEMBER SINCE	19 May 2010
EMAIL	slm75 at pitt dot edu	DISCUSSION	0 Comments
WORKGROUPS	CHEC	CREATED	0 Collections
Position Title	Communications Specialist	UPLOADED	2 Datasets
Organization	Center for Healthy Environments & Communities	CREATED	10 Snapshots

EMAIL NOTIFICATIONS   ON   Toggle this to turn off email notifications for comments on your items, as well as workgroup membership changes and snapshots created using your datasets.

RATING   Rate this item

LINKS   Center for Healthy ... nments & Communities

Show All   Library

16 Items   SORT BY: Most Recent

PA Oil and Gas Wastewater Facilities and Water Areas   ★★★★★ 0 Comments   Author: Samantha Malone   Created: Aug 14, 2010   ACTIONS

PA Facilities Approved to Receive Oil and Gas Wastewater   ☆☆☆☆☆ 0 Comments   Author: Samantha Malone   Created: Aug 14, 2010   ACTIONS

My Home

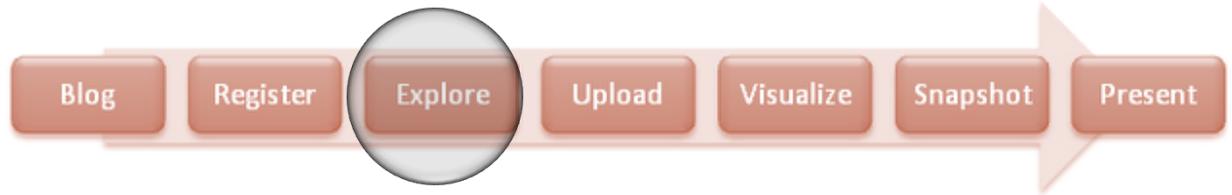Your profile – name, contact info, & a summary of your activity

Library of datasets uploaded, snapshots created

Everything is public.

- - - - - - - - - - - - - - - -

Explore

Dashboard / summary of site's recent activity

Search / sort by datasets, snapshots, users, geographic area

My Home & Explore Pages

Upload

Accepts ESRI shape files, GeoTIFF raster imagery, KML, CSV, or GPX

Upload from URL or computer – Can be a new, part of a series, or replacement dataset

Provide metadata

- - - - - - - - - - - - - - - -

View Dataset

Preview page (shown right) – Uploader info

Visualize data, comment or rate the dataset, or download the data

Metadata

Upload & View Dataset

Blog | Register | Explore | Upload | Visualize | Snapshot | Present

National Gas Transmission Pipeline Incidents 2010 to Present   ACTIONS

<< More details and comments about National Gas Transmission Pipeline Incidents 2010 to Present

▼ About This Dataset

NAME	National Gas Transmission Pipeline Incidents 2010 to Present
UPLOADED BY	Drew Michanowicz
DESCRIPTION	Data pertaining to gas transmission and gas gathering incident data. Incidents data includes: significance, operator name, location, commodity released, causes, injuries, site descriptions, minimum value for property damage, value or volume of product lost and criterion for fire and/or explosion, etc. The 2010 to present PHMSA flagged data set reports 38 total incidents across the country. Thirty Three (33) or about 87% of these incidents were reported as significant incidents.
CLASSIFICATIONS	Infrastructure

CREATED	23 Aug 2010
DISCUSSION	0 Comments
SAVED IN	0 Collections
DOWNLOADED	0 Times
USED IN	1 Snapshot
RATING	Rate this item

VISUALIZE   DOWNLOAD

▼ Metadata

Description

TITLE
National Gas Transmission Pipeline Incidents 2010 to Present

ABSTRACT
In the United States the Department of Transportation's (DOT) Pipeline and Hazardous Material Safety Administration (PHMSA), acting through the Office of Pipeline Safety (OPS), administers a regulatory program to assure the safe transportation of natural gas, petroleum, and other hazardous materials by pipeline. OPS develops regulations and other approaches to risk management to assure safety in design, construction, testing, operation, maintenance, and

AUTHOR/ORIGINATOR
USDOT - PHMSA

PRIMARY CONTACT PERSON

Email Address

Main Address

Visualize = Map the data

This is why latitude and longitude are critical

Define what you want to show on the map

Adjust the screen to zoom in on an area

Learn more about an individual record

Save session for later or create a snapshot

Visualize Data

Just like a snapshot you take with a camera, except this one can update automatically!

Provides information on how the snapshot is being used & what datasets were used to create it

Create a new visualization based on the snapshot

Download it

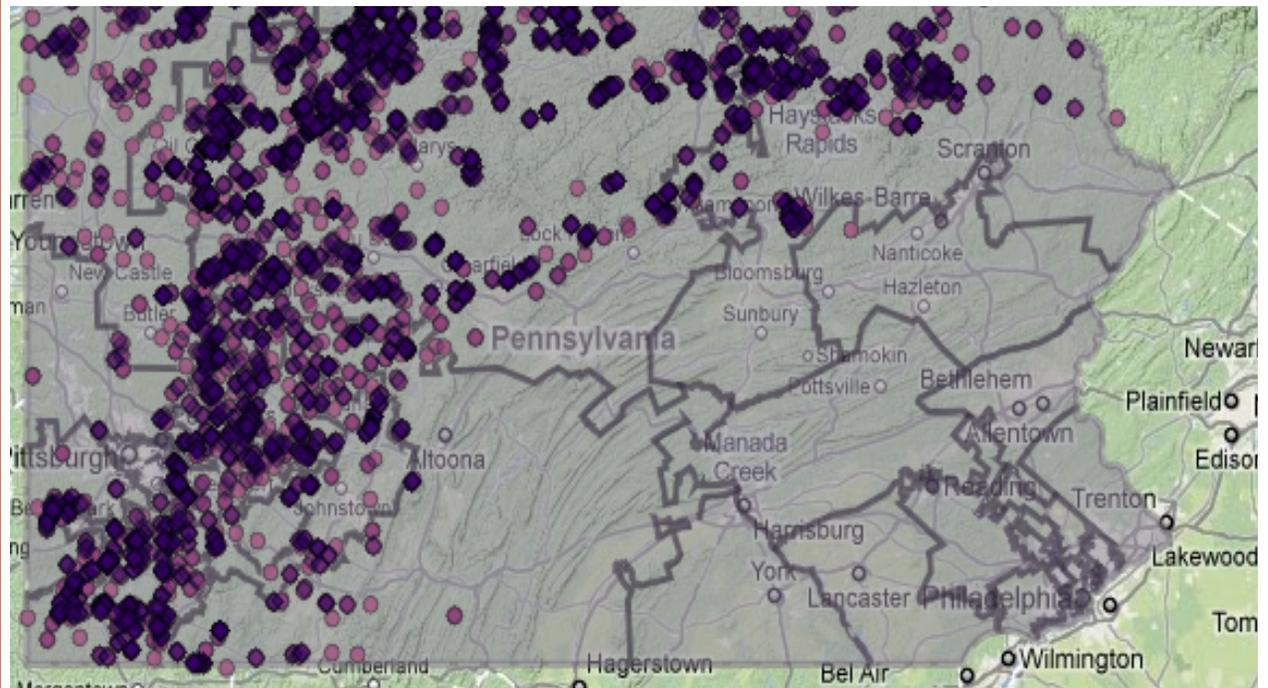Or share it online (in pop up box to the right)

Snapshots

Can layer various datasets to tell stories, identify gaps, and make connections.

Can keep the snapshot "live" so that it updates automatically when the dataset(s) that created it are updated.

Snapshots can be used in presentations both online and offline.

| Blog | Register | Explore | Upload | Visualize | Snapshot | Present |

Snapshots

Horizontal well violations, drilled horizontal wells, and congressional districts

Comprehensive Picture of Marcellus Shale Development

Data.Fractraker.org

Private Citizens

Local and State Govenment

Regulatory Agencies

Public Safety

Media Relations

Health Care Institutions

Policy

Industry

Academic and Research Institutions

Environmental Agencies

Foundations

Public Health