



ANNUAL REPORT 2014

FRACTRACKER ALLIANCE

The FracTracker Alliance shares maps, data, & analyses to communicate impacts of the global oil & gas industry & informs actions that positively shape our energy future.

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Executive Director Letter

Dear Friends,

In September 2014, I attended the People's Climate March in New York City & was awestruck by the experience & the turnout – 400,000 people mobilizing to fight for the future of our planetary home. Climate & energy are paramount issues facing humanity. We must aggressively curb greenhouse gas emissions, transition to renewable forms of energy, & adopt more efficient technologies & lifestyles. These are big challenges but they can be met if we coalesce in common purpose. We've proven time & again that we're a tenacious species!

Human resilience is manifested daily in gas & oil fields near & far where communities endure insidious risks to air, water, & well-being from the resource-intensive activities of the unconventional oil & gas industry. To address the expanding nodes of extraction, FracTracker has grown-up quickly & the past year was a most memorable one in its short benevolent life. Nearly 100 maps & articles were posted on a redesigned website, partnerships flourished, a mobile app was born. Truck traffic was counted, oil trains studied, problems

documented. Hundreds of thousands of people visited our website & thousands more connected through social media or via the stories of journalists sharing our work. At venues across the country, staff reached out to volunteers, activists, academicians, & concerned citizens. Minds were enlightened & many eyes opened!

The voluminous work wouldn't happen without a staff full of exceptional talents & generous hearts. The team is extraordinary & complemented by a tremendous board of directors; committed funders; & numerous donors, supporters, & partners who are a constant inspiration despite the seriousness – even somberness – of the daily grind. Thanks to all of them!

And thank YOU for taking the time to explore this encapsulation of a year in the life of our organization. I hope the pages that follow provide an affirming glimpse of our success & energy for the work that remains.



Brook Lenker
EXECUTIVE DIRECTOR



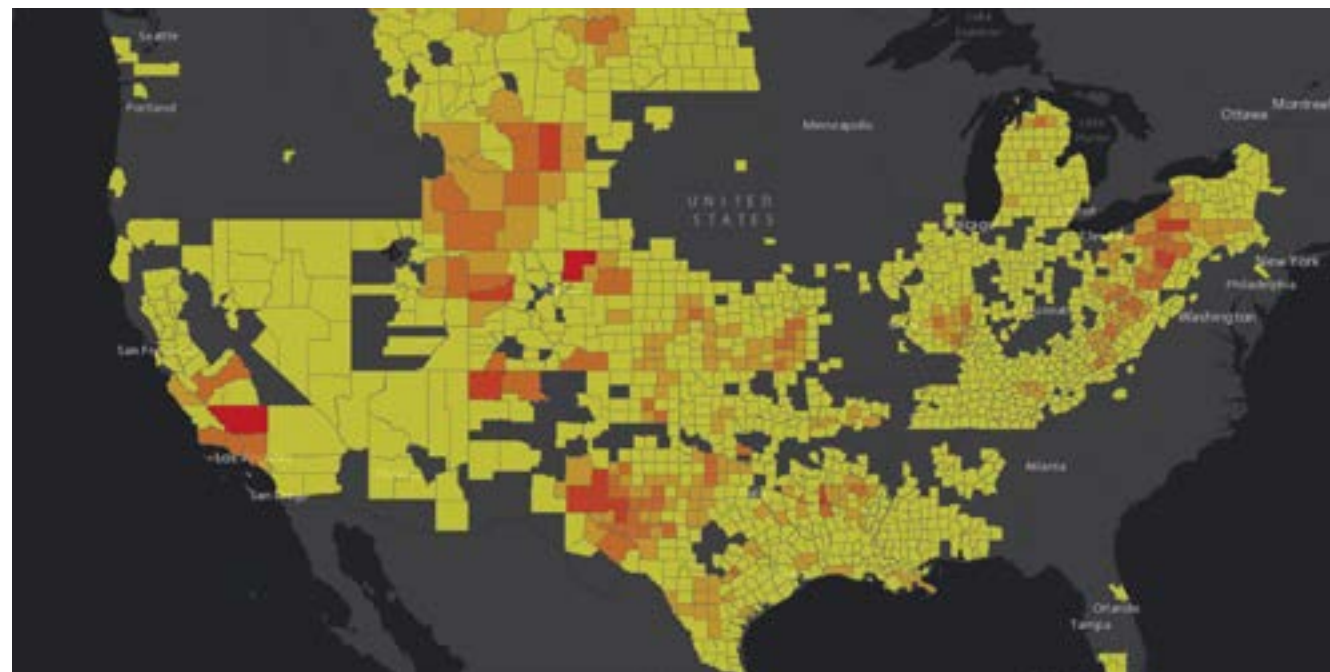
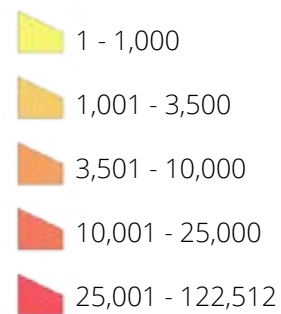
Ongoing Innovation

2014 was a year of innovation for FracTracker Alliance. We developed our first national map showing the locations of oil & gas wells (below). We developed a mobile app that shows people where those wells can be found near them & allows users to submit reports & photos about this activity. We even experimented with a crowdfunding campaign in collaboration with Ecologic Institute & Earthworks – with some success. These new tools & technologies are moving our work forward.

1.1 Million Wells

In March 2014 we launched our first version of a national oil & gas wells map. This map took a lot of effort to put together, but uncovered some incredible statistics in the end; we found that there are over 1.1 million active oil & gas wells in the United States. Some counties have densities of 25,000 wells or more! In 2015, we will be providing an update to the map: fractracker.org/map/national/us-oil-gas

Legend: Wells per County



Oil & gas well density by county in the U.S.

Mobile App Launch

In the fall of 2014 we released our first mobile app designed to collect & share experiences related to oil & gas drilling across the United States. As unconventional drilling or “fracking” intensifies, so too do the innovative ways in which citizens can track, monitor, & report potential issues from their smart phones - through both iPhone & Android platforms.

Several organizations & community groups helped to test & improve the app during its development. Many thanks to Mountain Watershed Association, Audubon PA, Responsible Drilling Alliance, PA Forest Coalition, Southwest PA Environmental Health Project, & Save Our Streams PA, and the National Parks Conservation Association (NPCA) who used it to support their education campaign on drilling in & near national parks. The app was developed in collaboration with Viable Industries, L.L.C.

Learn more: fractracker.org/apps

App Features



Check the Map

See oil & gas wells near you on a national map maintained by FracTracker (the 1.1 million wells map). Details include API number, date drilled, operator, & more!



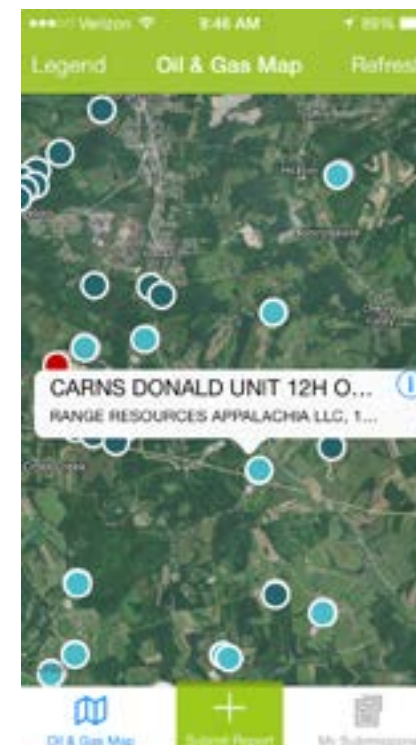
Report an Issue

Submit reports about nearby activity & issues such as air pollution or water contamination concerns. You can see information from other users once we vet their reports.



Share a Shot

Upload your oil & gas photos to share with others on the map. To-date we have received over 100 user-submitted photos & reports from across the country.



Innovation Continued

Fundraising & Crowdfunding

In addition to the technological innovation that we worked on in 2014, we also explored additional funding path-roads by way of three small fundraisers in PA, CA, & OH, & a national crowdfunding campaign. From a site in San Francisco overlooking the Pacific to a budding distillery in Pittsburgh's Strip District, friends & colleagues came together to show their support for our work & their concern about the effects of unconventional drilling. If you were able to join us for these events – whatever the motivation – we appreciated your collective, deliberate act of kindness.



Supporters during our Pittsburgh fundraiser at Wiggle Whiskey

In January of 2014 we launched our online donation system, which has allowed people from across the world to contribute to our work. And finally, we ran a month-long Indiegogo crowdfunding campaign with Earthworks & Ecologic Institute in summer 2014. The goal of this campaign was to raise enough funds to send a few representatives from our organizations to South America, where citizens of Argentina & Uruguay are concerned about fracking & its potential impacts & have asked for our guidance.

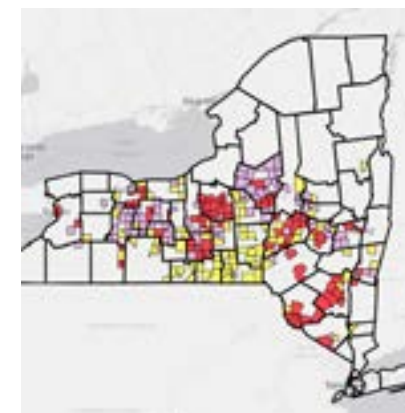
While we did not reach our desired financial goal with the crowdfunding campaign alone, we combined the funds that were donated with an additional grant so that we could keep our promise to our South American hosts. These workshops & more will be held in 2015.

Learn more about this initiative through Our Energy Solutions: ourenergysolutions.org



Featured Articles

Sharing data, writing articles, & creating maps remain important parts of FracTracker's activities. The following articles were the most visited posts or pages on our site in 2014.



Fracking Bans & Moratoria in NY State

On December 17, 2014, Governor Cuomo & his Commissioners of Environmental Conservation & Health announced high volume hydraulic fracturing would not be allowed in New York State. See why this map & list of areas where gas drilling bans & moratoria have been enacted was helpful in demonstrating public opinion regarding fracking over time, & also why it was resource in the decision-making process. - *Karen Edelstein*

fractracker.org/new-york/moratoria



North American Pipeline Proposals

With the Keystone XL Pipeline extension on people's minds, this map is our attempt at keeping up with the ever-changing landscape of pipelines & pipeline proposals in North America. Explore existing & potential pipeline tracks, from the Alliance West Coast Alaska Highway Pipeline Proposal to the Gulf Stream Pipeline Proposal, & everywhere in between. We will update this map as proposals change & pipelines are built. - *Ted Auch*

fractracker.org/proposed-pipelines



Knowing Our Waters - A Digital Storytelling Project

As part of a new FracTracker effort utilizing rich-media storytelling to communicate the impacts of oil & gas extraction, "Knowing Our Waters" focuses on the efforts of community-based water monitoring programs in the Marcellus Shale region of the United State in order to highlight the important work that these groups do in bringing attention to the risks that extraction industries pose to our watersheds. - *Kirk Jalbert*

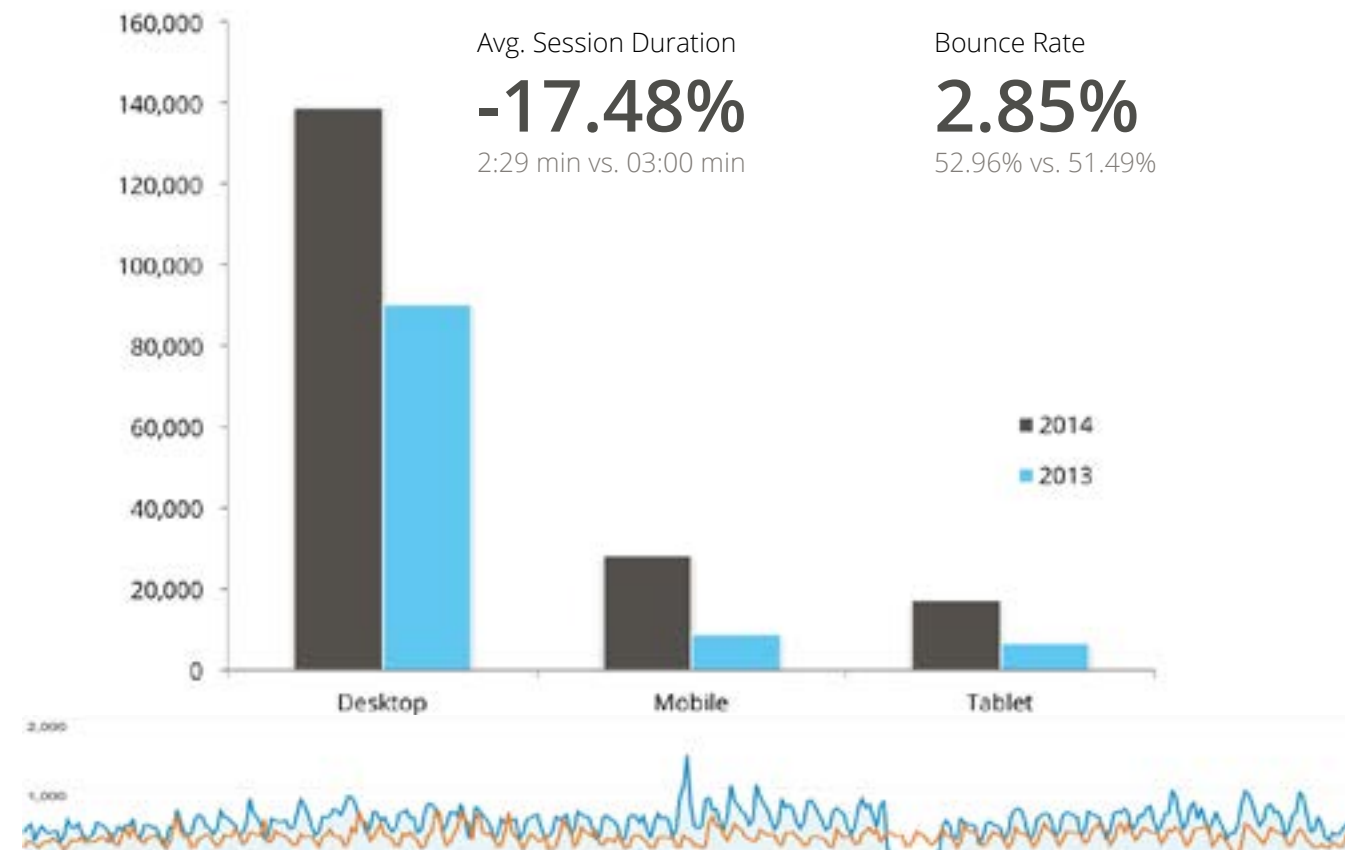
fractracker.org/water-monitor

Our Reach

In 2014 we upgraded our website & online marketing campaigns to better serve a society that is increasingly relying on the Internet for information. Our new website's design focuses on the maps & images we provide, is optimized for viewing on mobile devices, & has improved navigation & dynamic features. We have also expanded our social media outlets & messaging. By upgrading our website & campaigns, we have seen a significant improvement in our visits & reach throughout our website, media coverage, & social media platforms.

Web Metrics 2014 vs. 2013

Metric	2014 vs. 2013 Change	2013 Value	2014 Value
Sessions	+74.21%	105,584	183,938
Users	+76.96%	76,997	136,257
Page Views	+22.84%	378,749	465,266



Media Coverage

Coverage in the press continues to broaden the audience that can learn from FracTracker's work. In 2014 alone, we were mentioned in over 270 media outlets, which have a combined circulation rate of over 730,000 people worldwide.



Social Media

In 2014 we managed four social media outlets: Facebook, Twitter, LinkedIn, & Google+ & added an Instagram account. At year's end, we logged 1,426 Facebook & 1,811 Twitter followers - growth rates from 2013 to 2014 of 59% for Facebook & 51% for Twitter. We're still working on engaging users via Google+, LinkedIn, & Instagram, as well.



Our Collaborations

The FracTracker Alliance values the partnerships we are building with academic institutions, non-profit organizations, citizens, & regulatory bodies across the country. Almost every project & task that we do at FracTracker relies on collaborations & partnerships. Here are a few prominent examples in 2014:

The Alliance Map

Previously the *Community Resources* map, the Alliance Map is a collaborative effort between FracTracker & Netcentric to collect & visualize organizations across the globe that are working on oil & gas issues.

FracTracker.org & HaltTheHarm.net visitors can submit their groups' contact information to be added to The Alliance Map using an online form. In conjunction with the launch of the Halt The Harm Network, this project provides resources for people

living in regions affected by the oil & gas industry by illuminating ways to connect with nearby groups, identifying environmental monitoring equipment & testing, providing networking opportunities & webinars, as well as other resources.

As of the end of 2014 there were 293 entities - grassroots groups, academic institutions, non-profits, etc. - showcased on the dynamic map.

Learn more at: fractracker.org/the-alliance-map



On Shaky Ground Report

In support of research by Earthworks, Center for Biological Diversity, & Clean Water Action about the earthquake risk posed by California's oil & gas activity, FracTracker developed an interactive map showing the injection wells & hydraulic fracturing sites near CA's fault zones (above). It shows that thousands of actively fracked wells (red stars), & wastewater injection wells (yellow diamonds), are located very near seismic faults. For example, the map highlights areas where wells are located near faults in densely populated areas like Inglewood, a few miles from downtown LA. shakyground.org

Public Health Training with Southwest PA Environmental Health Project

In March SWPA-EHP's Jill Kriesky & FracTracker's Sam Malone presented at a half-day training for public health professionals hosted by Pitt's Center for Public Health Practice & the Mid-Atlantic Center for Children's Health & the Environment. The training focused on oil & gas' impacts on health, the environment, economy, & social systems.

Train & Truck Counting

Sometimes you need to get out in the field & collect data to truly see what is going on in the oil & gas world.

Communities impacted by fracking-related activities often report concerns related to the significant increase in the volume of truck traffic on their roads. To address & highlight this problem, we worked with volunteers to assess the scope of the increased truck traffic & its impacts on communities through a series of ongoing truck counts. Across 4 states & 14 counts, some areas saw over 90 trucks each hour. In one community we identified 116 trucks in an hour.

With the exponential increase in oil train traffic & incidents like the Lac-Mégantic disaster, citizens want to know how many oil trains are going through their neighborhoods. In collaboration with CMU's CREATE Lab, we developed & tested an oil train counting protocol that will be used by additional partners in 2015 to highlight the risks posed by oil transport by train in the U.S. Stay tuned!



Community Outreach

Polish delegation & Brook Lenker in Camp Hill, PA



Educational fundraiser in Pittsburgh



Gwen Lehman with inquisitive students



From community events to major national conferences to social media, FracTracker Alliance was active in sharing our work with expanding audience in diverse ways.

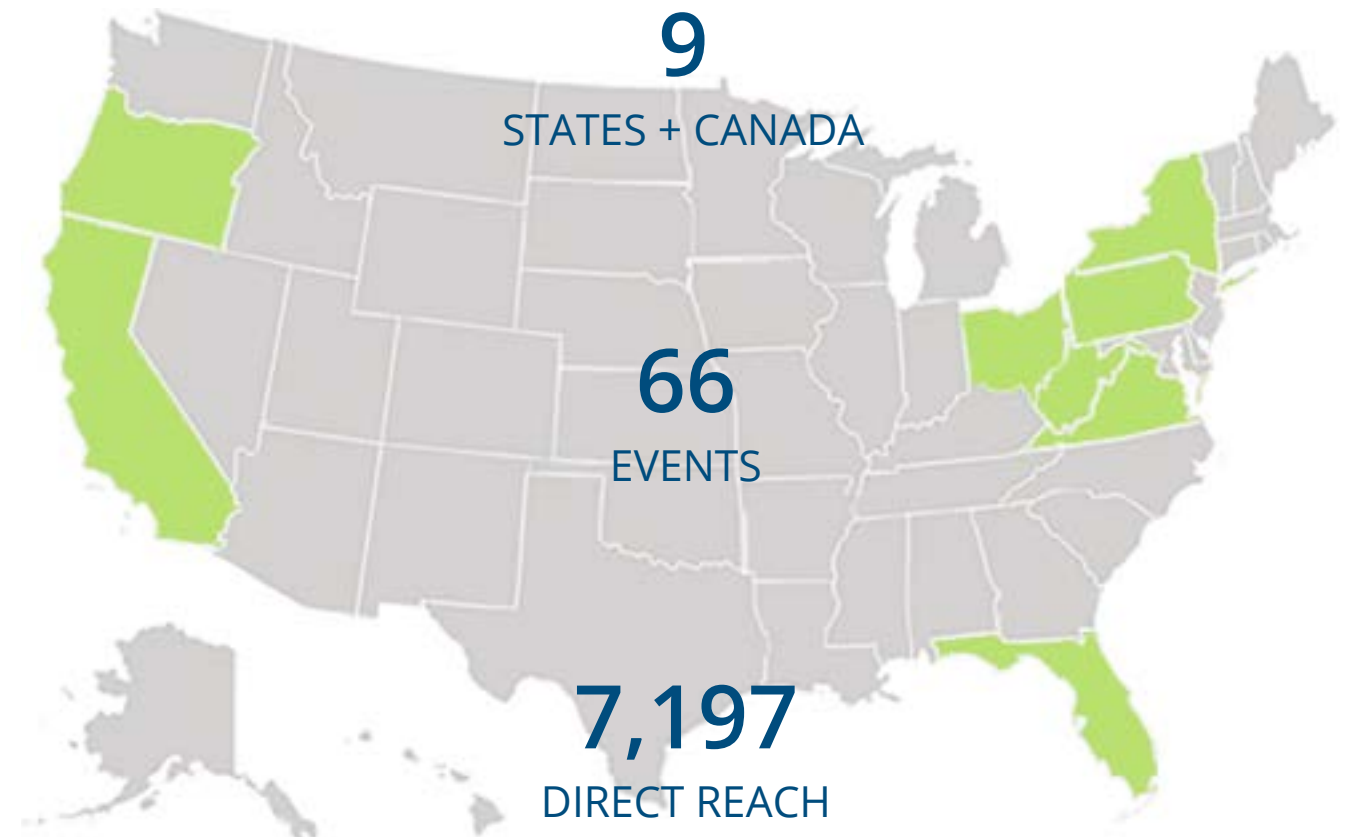
Communications Planning

As part of our commitment to increase the reach & impact of our work, FracTracker developed a strategic communications plan in 2014 with the help of consultants. The action plan that resulted focuses on growing our social media following & website statistics, expanding our video content, & increasing our newsletter sign-ups & frequency. Related to this plan, we have adopted & subscribed to a system called Hootsuite to create efficiencies in our social media posting. We have also added two new newsletter subscription services in addition to our existing monthly e-newsletter: "As It Happens" - a newsletter that is sent out as exciting, new content is added to our site, & a "Media Matters" subscription designed with journalists in mind. Sign up today: fractracker.org/e-newsletters

Oil & Gas Drilling 101 Section

Drilling terms & processes may be second nature to those of us who regularly work on these issues, but the field can be quite confusing for members of the general public. To improve FracTracker's online reach with diverse groups of people, we launched an Oil & Gas Drilling 101 section, which will eventually contain drilling terminology, descriptions of the various processes, & photo documentation.

Take a tour: fractracker.org/oil-and-gas-101



Outreach Events

FracTracker staff members reached over 7,000 people directly in 2014, & many more through marketing & social media. Our staff participated in a diverse array of events, from academic conferences to intimate educational forums. Audiences included members of religious groups, the oil & gas industry, NGOs, policy makers, academia, for-profits, community groups, media, students, & concerned citizens. FracTracker staff also spoke with international visitors from Poland, Germany, & France.

In 2015, we have many more great outlets planned, including the National Environmental Monitoring Conference, an oil trains safety presentation for the PA State Association of Boroughs, a training webinar on using our new mobile app to track fracking, & the 2015 Annual Meeting of the Society for Applied Anthropology. We are also planning a series of Our Energy Solutions workshops in Florida, North Carolina, Argentina, Uruguay, England, Belgium, Germany, & the Netherlands. Keep up with all of our planned activities online: fractracker.org/calendar

In the Pipeline

Be on the lookout for these exciting projects from FracTracker Alliance in 2015.



The Footprint of Frac Sand Mining

Sand is used as a proppant in unconventional oil & gas drilling, but the sand mining process is causing significant changes to the landscape in the upper Midwest U.S. This GIS analysis project kicking off in 2015 will quantify land use / land cover change - & its impacts on forest productivity, watershed resilience, wildlife habitat fragmentation, & ecosystem productivity - associated with frac sand mining in West Central Wisconsin. The project will culminate in community workshops in November 2015, as well as the dissemination of findings online, in the news, & through social media.

Violations Data Review with NRDC

In 2015, Natural Resources Defense Council (NRDC) will be releasing a report in conjunction with data compiled by FracTracker.

We launched this investigation in 2014 to determine what information about oil & gas company violations is publicly available on the Internet, how accessible it is, & whether it provides an adequate

understanding about the practices of different companies. The final report will highlight gaps in what is shared regarding the frequency & nature of oil & gas company violations - including an in-depth analysis of violations data available from Pennsylvania, Colorado, & West Virginia.

Collaborative Data Collection & Mapping

FracTracker has many other exciting projects in the works, including ones with the following partners:

- Dakota Resource Council - whose members use grassroots actions to influence public opinion & shape public policy to protect agriculture, natural resources, livelihoods & community well-being
- Environment America - a federation of state-based, citizen-funded environmental advocacy organizations
- PSE Healthy Energy - a multidisciplinary research & policy institute focused on the adoption of evidence-based energy policy
- Public Labs - a community where you can learn how to investigate environmental concerns
- ShaleTest - a non-profit that collects environmental data & provides testing to families & communities impacted by oil & gas extraction
- Southwest PA Environmental Health Project (EHP) - a non-profit, environmental health organization created to assist & support people impacted by natural gas drilling activities

Staff Bios



Brook Lenker, Executive Director

Brook focuses on improving the capabilities of the FracTracker website; creating partnerships that increase the data & information available on the site; encouraging use of FracTracker by various stakeholders & the public; & building a strong organizational structure that services the expanding geographies impacted by oil & gas activity. He holds MA & BS degrees in geography & environmental planning from Towson University.



Matt Kelso, Manager of Data & Technology

Matt believes that if we ask the right questions, data can tell us a lot about situations that we are not able to observe directly. In the past, he has used this skill as a casino auditor & an archaeologist, reconstructing events based on a few scraps of data. With FracTracker he uses these processes to examine the oil & gas industry. Matt earned his BA degree in Anthropology in 2003 from Humboldt State University in Arcata, CA.



Sam Malone, Manager of Science & Communications

Sam has worked with FracTracker since its inception in 2010 as a project at the University of Pittsburgh. With FracTracker, she provides user & partner support, coordinates internal & external communications, & conducts & translates environmental health research for the website. Additionally, Sam is a doctoral candidate within the University of Pittsburgh Graduate School of Public Health.

Cont: Staff Bios



Kyle Ferrar, CA Program Coordinator

Kyle is the Program Coordinator in FracTracker's California office. In Pittsburgh, he spent five years conducting exposure & risk assessments using community based participatory research methods at the University of Pittsburgh Graduate School of Public Health, where he is also currently pursuing a doctorate in public health. Kyle's work in California analyzes environmental health risks & other key issues.



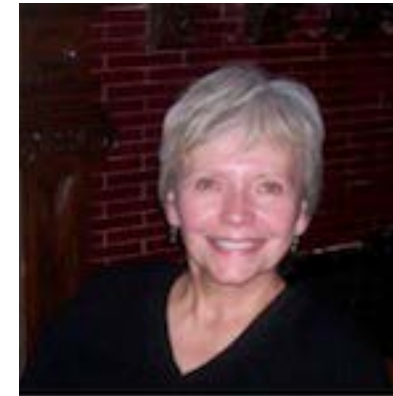
Ted Auch, OH Program Coordinator

Ted is a scientist with a passionate interest in policy & how the former shapes the latter to the extent that it can/does. With FracTracker, Ted conducts mapping & data analysis in Ohio, with a special interest on water issues & landscape change. Ted has a PhD from the University of Vermont in Ecosystem Biogeochemistry.



Karen Edelstein, NY Program Coordinator

Since the late 1980s, Karen has worked as a science educator, & has authored several curriculum guides on natural history & water quality. For the past 12 years, she has also been using GIS as a tool for land conservation. With FracTracker, Karen performs mapping & analysis as the Northeast prepares for the downstream impacts of oil & gas extraction.



Mary Ellen Cassidy, Community Outreach Coordinator

Mary Ellen joined FracTracker in November 2013. As the Community Outreach Coordinator, she developed, coordinated, & promoted FracTracker's national outreach & education initiatives. Her academic background includes a Bachelor in Science in Chemistry & Mathematics & a Masters in Science & Mathematics Education, along with a Woodrow Wilson Fellowship.



Bill Hughes, WV Community Liaison

A graduate from Wheeling Jesuit College, Bill Hughes is the chairman of the Wetzel County Solid Waste Authority & a member of the Wetzel County Action Group. Bill joined FracTracker in July 2014 to serve as a local resource & guide for media, students, researchers, & others who are interested in the drilling-related impacts observable in Wetzel Co. & the surrounding vicinity.



Gwen Lehman, Manager of Operations

Before serving as FracTracker's Manager of Operations, Gwen was active in the conservation field, having worked for Chesapeake Bay Foundation as a grassroots organizer & then with Audubon PA in project development & management. She is currently pursuing a degree in Health Sciences at Harrisburg Area Community College.



Kirk Jalbert, Visiting Researcher

Kirk is a PhD candidate in Science & Technology Studies at Rensselaer Polytechnic Institute. He joined FracTracker in 2013 as a visiting researcher for one year. Kirk was then was hired by FracTracker part-time in 2014 after we received a grant to highlight the efforts of volunteer water monitoring groups dealing with shale gas issues in PA & NY.

Funding Updates

FracTracker appreciates the support of foundations from across the country. Their contributions are critical to sustaining & expanding our operations.



Dewhurst site dehydration fumes, West Virginia

2014 Funders

- Heinz Endowments
- 11th Hour Project
- George Gund Foundation
- Park Foundation
- V. Kann Rasmussen
- Colcom Foundation
- Hoover Foundation via Univ. of Mount Union
- Save the Hills Alliance
- Congregations of St. Joseph
- Patagonia, Inc. / Buenos Aires store
- Donations - [Learn more](#)

Updates

FracTracker Alliance is primarily funded by foundation & grant support. Supplemental income is obtained through fee-for-service projects with other organizations, by way of small donations, & through fundraising events.

Additionally, a fundraising plan is being coordinated for 2015 to identify ways to diversify & secure new income.

2014 Interns

This special thank you goes out to all of our hard-working 2014 interns. Their help is always appreciated!

Daniel Berghoff, OH GIS Intern

Ohio State University, GIS & Spatial Analysis
Columbus, Ohio

Gianna Calisto, Communications Intern

University of Pittsburgh, Political Science & Environmental Studies
Pittsburgh, Pennsylvania

Robert Christie, PA GIS Intern

McGill University, Environmental Studies
Montreal, Quebec

Max Cutler, CA GIS Intern

San Francisco State University, Geography
San Francisco, California

Rima Jurjus, OH GIS Intern

Denison University, McPhail Center for Environmental Studies
Granville, Ohio

Katie Mattern, Communications Intern

Dickinson College, Environmental Science & Earth Science
Carlisle, Pennsylvania

Liz Monk, PA GIS Intern

University of Pittsburgh, GIS & Remote Sensing
Pittsburgh, Pennsylvania

Maria Rose, Communications Intern

Vassar College, Environmental Studies
Poughkeepsie, New York

Racquel Segall, Communications Intern

University of Pittsburgh, Graduate School of Public Health
Pittsburgh, Pennsylvania

Nicolette Slagle, Remote GIS Intern

Michigan Tech, Environmental Engineering Science
Houghton, Michigan

Matt Unger, PA GIS Intern

Duquesne University, Bayer School of Natural & Environmental Sciences
Pittsburgh, Pennsylvania



Contact us to learn more about our internship opportunities:
info@fractracker.org

Financial Report

FracTracker Alliance funds for FY2014

NET ASSETS, BEGINNING OF YEAR	(\$3,460.29)
<hr/>	
SUPPORT AND REVENUE	
Contributions, Pledges, & Grants Income	\$193,831.37
Miscellaneous Income	\$11,752.00
Deferred Gifts/Grants Released	\$496,689.46
Total Support & Revenue	\$702,272.83
<hr/>	
EXPENSES	
Salaries & Benefits	\$478,478.66
Special Projects Expenses	\$192,504.61
Other Expenses	\$22,186.68
Total Expenses	\$693,169.96
<hr/>	
NET CHANGE IN ASSETS	\$9,102.88
NET ASSETS, END OF YEAR	\$12,563.17



TOTAL SUPPORT & REVENUE
\$702,272

Board of Directors

The insight & contributions from our board members are invaluable. Thank you for all of your hard work in guiding FracTracker's vision for the future.

R. John Dawes, President

Executive Director, Foundation for Pennsylvania Watersheds, Alexandria, PA

As Executive Director of the FPW since 1994, Dawes has supervised small grants to over 150 environmental & watershed associations throughout Pennsylvania.

Benjamin M. Stout III, PhD, Secretary

Professor of Biology, Wheeling Jesuit University, Wheeling, WV

A practicing stream ecologist with 30 years of experience, Stout's current fieldwork focuses on impacts from valley fills, longwall mining subsidence, & Marcellus Shale extraction.

Mike Kane, Treasurer

President & Executive Director, Community Foundation for the Alleghenies, Johnstown, PA

Kane is responsible for the oversight of all operations at CFA, including managing a portfolio of loans & investments in excess of \$8 million.

Sara Wylie, PhD, Member

Sr. Research Scientist, Northeastern University, Boston, MA

Wylie is well-known for her work in the development & application of tools for community-based science. Wylie completed her PhD in 2011 at MIT.

Brian Segee, JD, Member

Staff Attorney, Environmental Defense Center, Ventura, CA

Segee has lobbied on conservation policy & legislative matters before the U.S. Congress, & coordinates EDC's monitoring & advocacy efforts in the California legislature.

Ken Paulman, MA, Member

Internet Media Specialist, Fresh Energy St. Paul, MN

Ken is the founding editor of Midwest Energy News, a non-profit news service published by Fresh Energy that covers the heartland's transition to a clean-energy economy.



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Photo by Robert Donnan, 2014



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