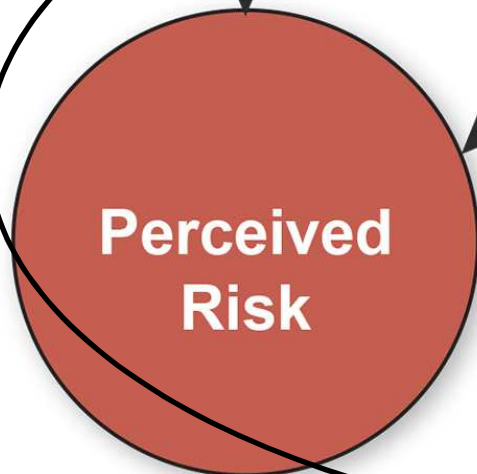
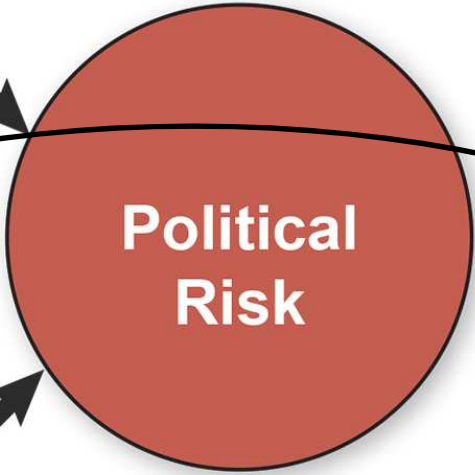




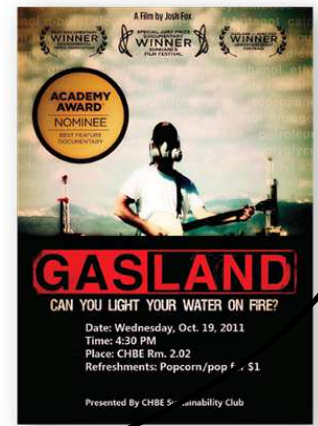
The Role of Media in Shaping Public Perception and Policy Towards Hydraulic Fracturing

**Megan Schwartz
Dan Tormey, Ph.D.
Molly Middaugh
ENVIRON International Corporation
Los Angeles, California
October 17, 2014**



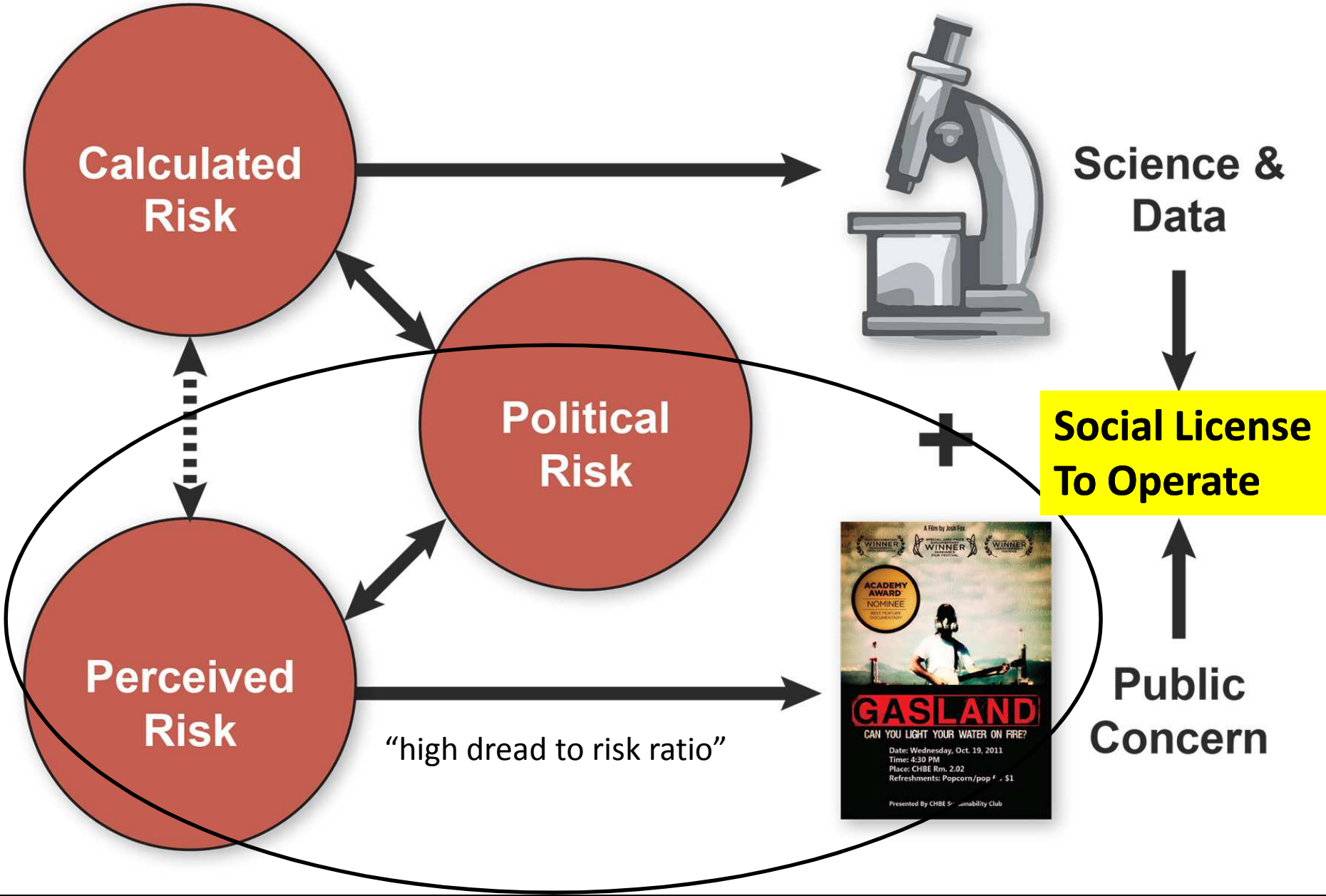
Science & Data

Social License To Operate

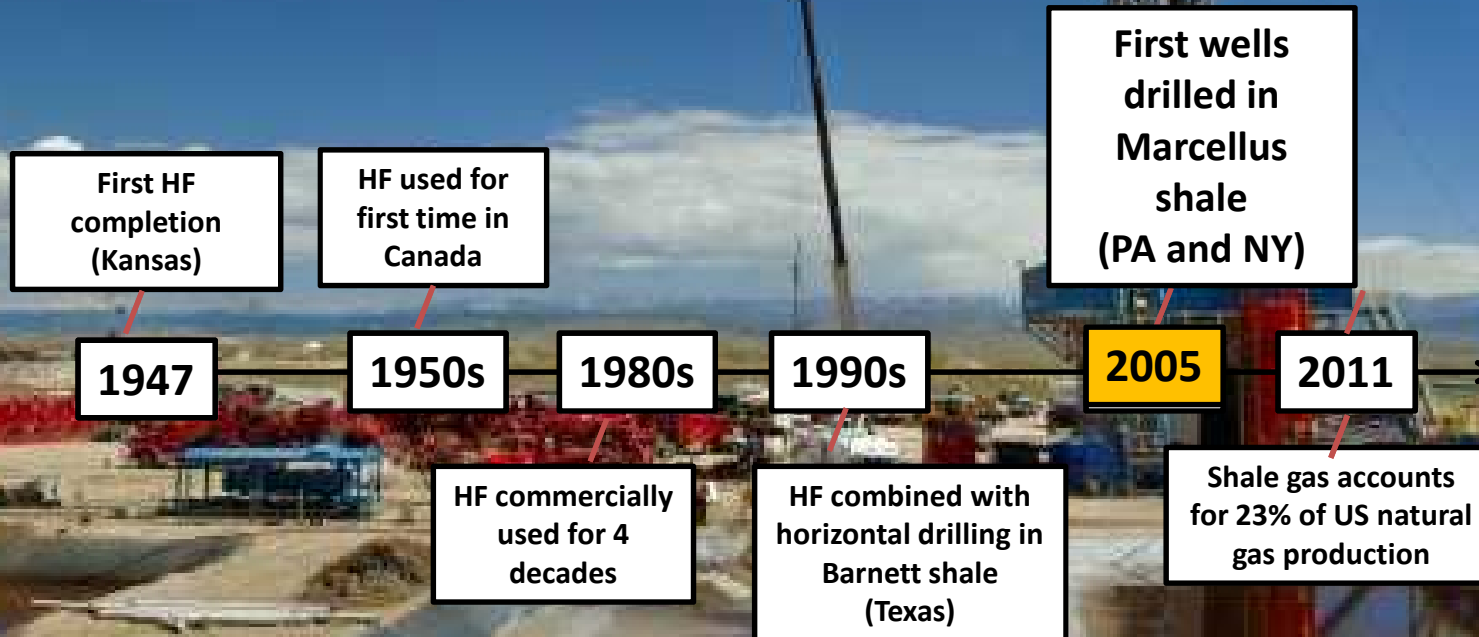


Public Concern

"high dread to risk ratio"

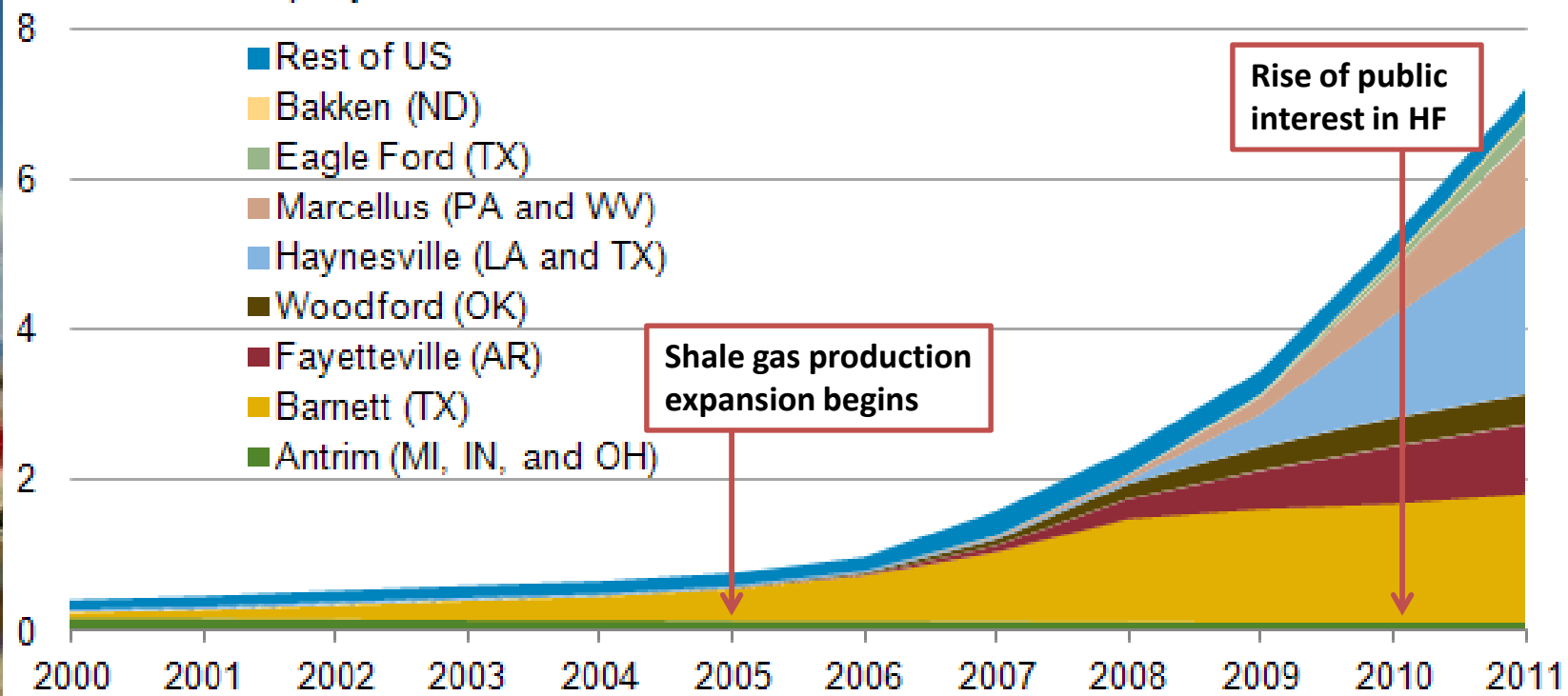


Relevant Timelines



Relevant Timelines

Estimated annual U.S. dry shale natural gas production, 2000-2011
trillion cubic feet per year



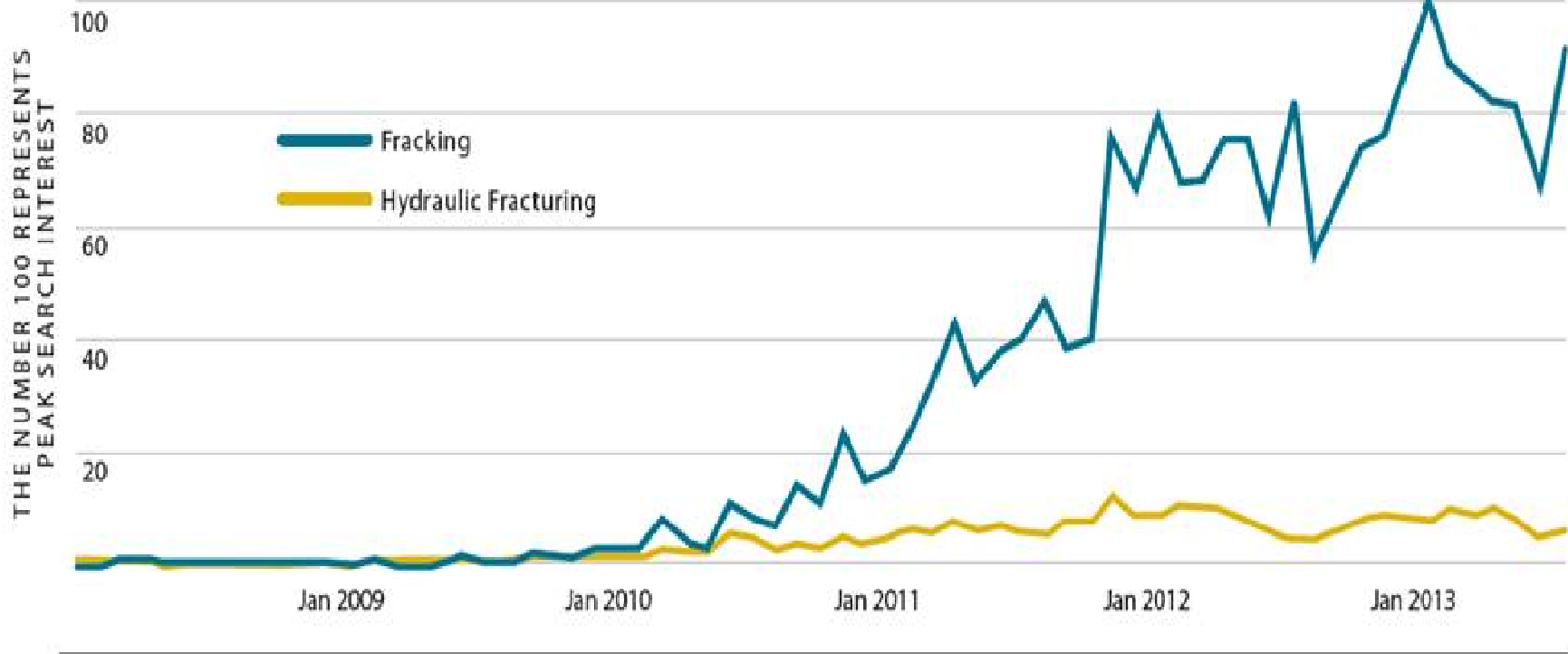
What's Considered Media

- Newspapers and television news
- Magazines
- Documentary films
- Feature films and television shows
- Charismatic celebrity speakers
- Internet blogs



Photo credit: CBS.com

Google Searches for Key Words



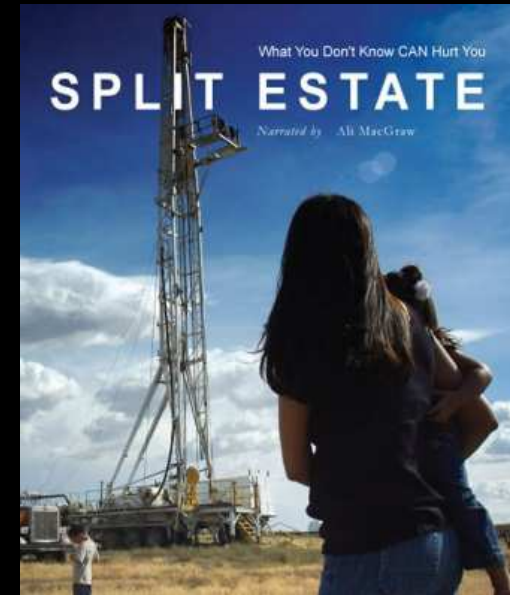
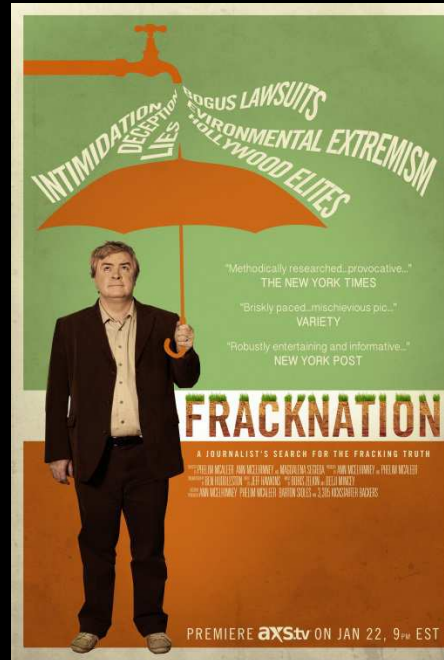
Ability to Influence Public Perception

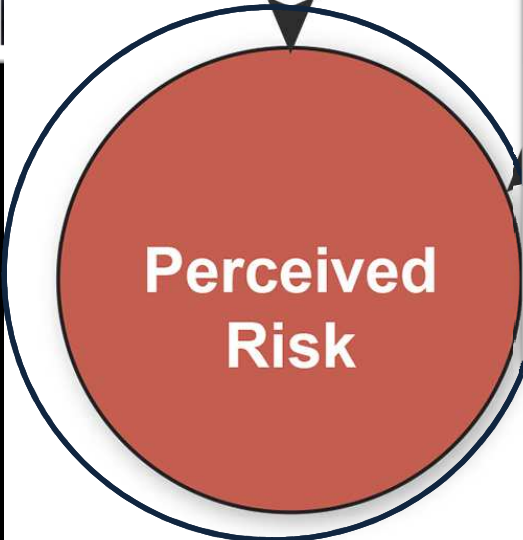
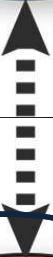


...these are your data, Gasland is our data!

GASLAND
THEMOVIE.COM

Ability to Influence Public Perception





Date: Wednesday, Oct. 19, 2011
Time: 4:30 PM
Place: CHBE Rm. 2.02
Refreshments: Popcorn/pop for \$1
Presented by CHBE Sustainability Club

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c
concern

2011 Environmental Issue of the Year



“That pronouncement comes despite the fact that **climate disruption** is causing more frequent freakish weather and in 2011 alone broke almost 3,000 U.S. weather records, including **11 separate weather disasters that cost over a billion dollars each in damage.** That’s on top of \$14 billion in climate disruption-related damage in the last decade.”

John Quigley, former Secretary
Pennsylvania DNR

Fairness Bias in Traditional News Media

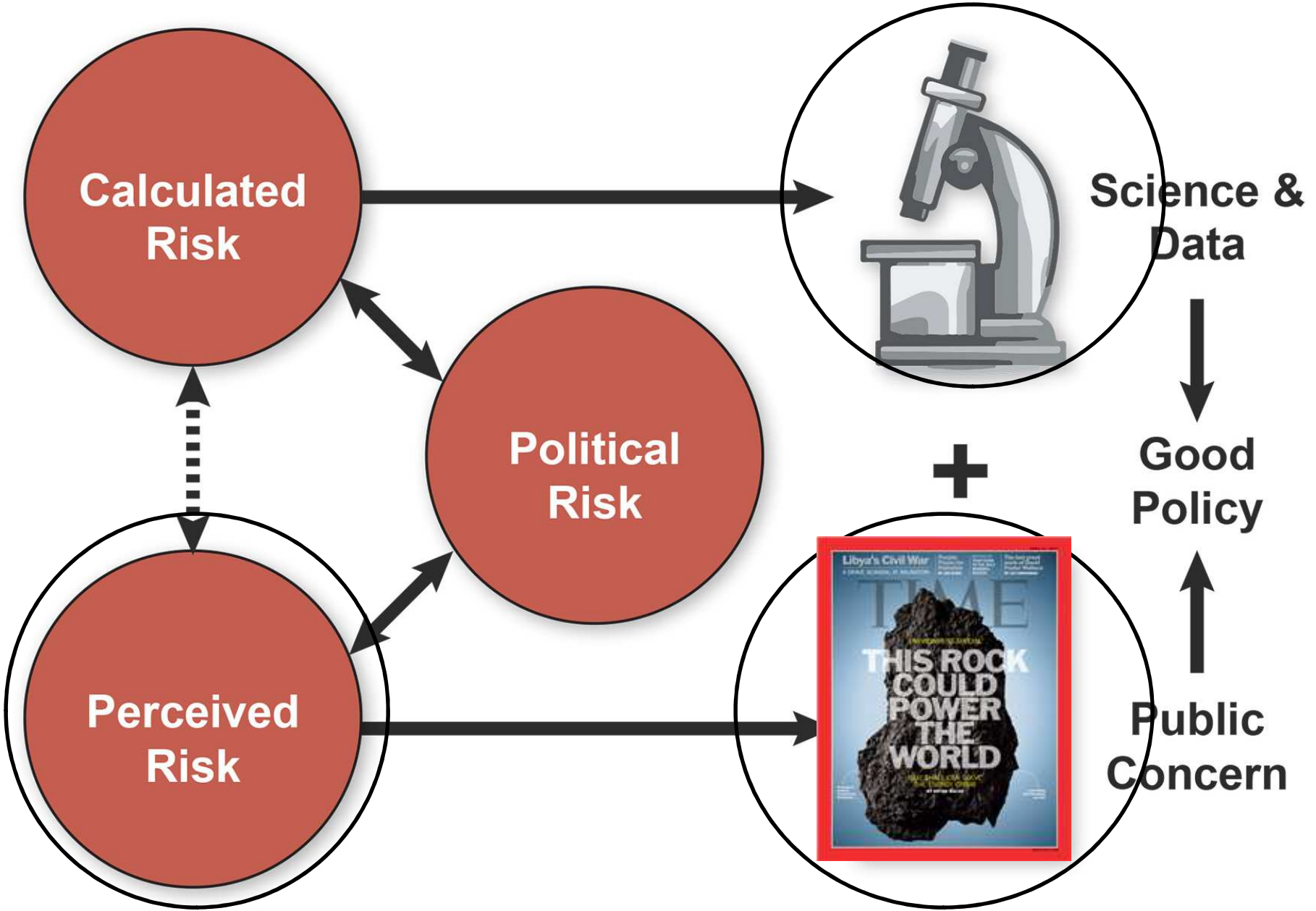
The need to give equal weight to both sides of a story:

“The industry says it is impossible for fracturing chemicals to leak upward through millions of tons of impermeable rock. But some environmentalists say they could, given the relatively ancient ‘fractured’ rock formations under Pennsylvania”

Illustrating the Fairness Bias at Work

Los Angeles Times Headline Regarding the Inglewood Oil Field Hydraulic Fracturing Study:

But people living around the field oppose the idea. Researcher says their properties have been damaged by mysterious land shifts, which has increased their fears about fracking harm from the methods movements may be related to ... drilling operations. But the actual cause is unclear; the area sits atop the Newport-Inglewood Fault.



Public Concern → Public Policy

Percent

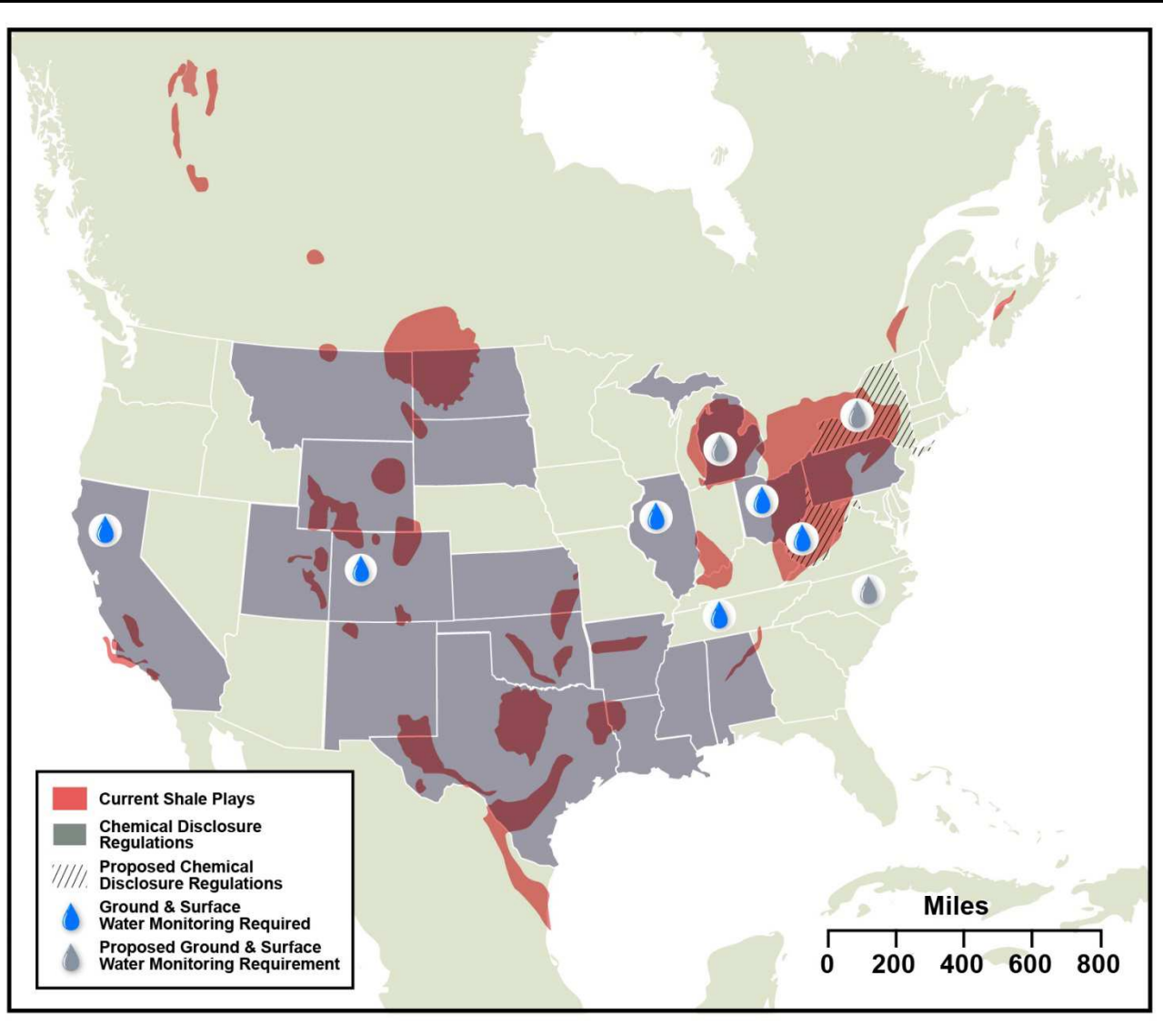
1. Un

g

2. C

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4. C



Percent

1. Un

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Miles

0 200 400 600 800

Public Concern → Public Policy

Counties Where HF has Occurred

Municipalities with Proposed or Adopted HF Bans



Science & Data → Public Policy

Study

Policy Decision

Inglewood Oil Field Study



LA County – no additional protections required

California Center for Science and Technology Studies



Results will inform BLM Resource Management Plan, CA State regulations, and CA Coastal Commission regulations

Kern County Environmental Impact Report



Results will inform Kern County's allowable land use practices

