



# Hydraulic Fracturing in Michigan Integrated Assessment

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# Hydraulic Fracturing in Michigan Integrated Assessment

Draft Report Release Webinar  
February 26, 2015

<http://graham.umich.edu/knowledge/ia/hydraulic-fracturing>



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# Before We Begin

- Sound check
- Submit questions or comments at any time
- Webinar will be recorded and available online

# Agenda

12:32-12:42PM

Welcome, introductions, project overview and guidelines for submitting comments for the Integrated Assessment (IA)

12:42-1:00PM

Questions and discussion with project staff and report authors

1:00PM

Conclusion of webinar

# Work to date with the Integrated Assessment

Timeline	Action
<b>Summer 2012</b>	Development of an Advisory Committee with representatives from corporate, government, and non-governmental organizations
<b>Fall 2012</b>	Development of Guiding Question – <i>Hydraulic Fracturing in Michigan</i>
<b>2012 - 2013</b>	Development of Technical Report Teams: <i>Technology, Geology, Ecology, Health, Law, Economics, Public Perception</i>
<b>Fall 2013</b>	Release of Technical Reports and Solicitation of Public Comments for the Integrated Assessment Report
<b>2014</b>	Scoping and Drafting of the Integrated Assessment Report – <i>An analysis of policy options for Michigan</i>

# Hydraulic Fracturing in Michigan – Key Points

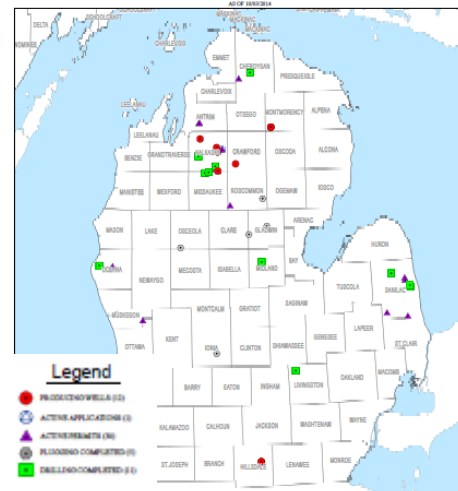
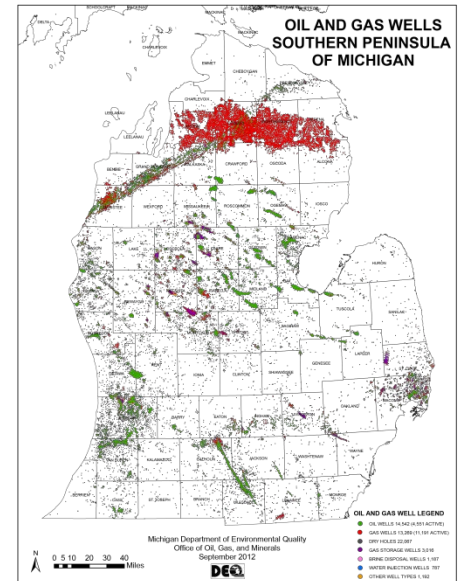
Hydraulic Fracturing (HF) has been used in thousands of wells in Michigan for decades

2003 State Review of Oil and Natural Gas Environmental Regulations (not HF specific) – “MDEQ has a well-managed oil and gas environmental regulatory program”

Integrated Assessment developed to focus on High Volume Hydraulic Fracturing (HVHF) but data and analyses cover a range of activity depending on topic or issue

Limited HVHF activity in Michigan at present

Broad range of perspectives on benefits/problems of expanded natural gas use



# Hydraulic Fracturing in Michigan – Key Points

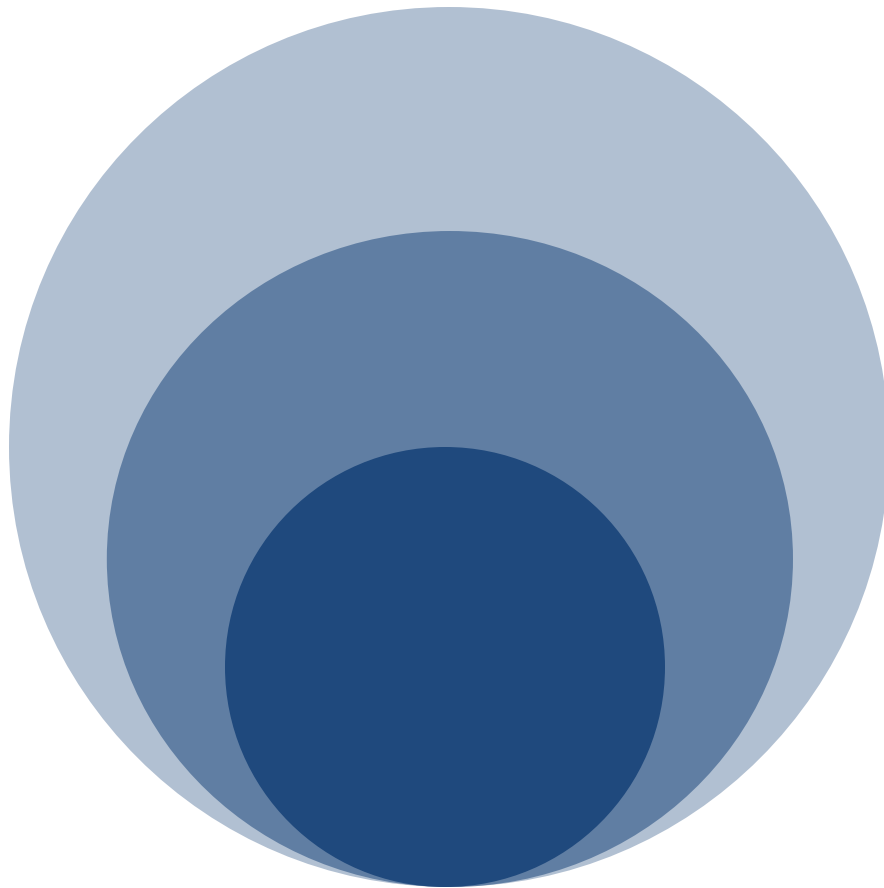
## Michigan DEQ Proposed HVHF Rule Revisions

1. Water withdrawal assessment and monitoring
2. Water quality sampling
3. Monitoring and reporting
4. Chemical additive disclosure

[http://www.michigan.gov/deq/0,4561,7-135-3306\\_57064---,00.html](http://www.michigan.gov/deq/0,4561,7-135-3306_57064---,00.html)

# Integrated Assessment Draft Report Content

## Three Levels of Analysis



**Broader Context**

- International or national scope
- Beyond IA question

**Additional Issues**

- Relevant to MI & IA question
- Not specific to HVHF
- Identified in technical reports, comments

**Options Analysis**

- **Relevant to MI**
- **Specific to HVHF**
- **Prioritized pathways from technical reports**



# Integrated Assessment Draft Report Content

## 1.) Options Analysis

- Focus on three key areas:
  - Public participation
  - Chemical use
  - Water resources
- Brief overview of the issue
- Description of current Michigan policy (including DEQ proposed rules)
- Identification of a range of approaches from other states and novel approaches
- Analysis of the strengths and weaknesses

# Integrated Assessment Draft Report Content

## Some of the options discussed in the report include:

- More extensive requirements for information about chemical use and water quality, possibly including the full disclosure to state officials of all chemicals used in the hydraulic fracturing process—even substances considered to be trade secrets.
- New ways to manage the disposal of wastewater from hydraulic fracturing wells in Michigan.
- Additional options for water-quality monitoring, possibly including long-term monitoring of groundwater and surface water near hydraulic fracturing wells.
- Requiring hydraulic fracturing well operators to prepare emergency response plans before drilling begins.
- Increasing public participation in decisions related to hydraulic fracturing.
- Updating the management of water withdrawals.

# Integrated Assessment Draft Report Content

## 2.) Additional Issues

- Greater breadth of topics relevant to Michigan
  - Environmental impacts
  - Air quality
  - Landowner issues & community impacts
  - Agency capacity & financing
- Scan of relevant approaches from other states and reports

# Integrated Assessment Draft Report Content

## 3.) Discussion of Broader Context

- Climate change and methane
- Renewables
- Manufacturing renaissance
- Methodological approaches to understanding and managing risk

# Timeline for the Final Integrated Assessment Report

Timeline	Action
<b>February 2015</b>	Advisory Committee and Peer Review of Draft IA Report
<b>March 2015</b>	Public Comment Period for Draft IA Report open through March 20, 2015
<b>April 2015</b>	Review of Input and Comments
<b>Spring/Summer 2015</b>	Revise, Finalize, and Release IA Report



# Questions & Answers



# Thank you!

Access the Draft Report and  
Submit Comments through March 20 at:

<http://graham.umich.edu/knowledge/ia/hydraulic-fracturing>