### Baltimore Environmental Film Series: What Lies Upstream

## Monday, October 22 at 6:30 p.m., McGuire Hall East

A Messina Good Life Event

Study Guide Prepared by Drs. Terre Ryan and Elizabeth Dahl

#### About the event:

Investigative filmmaker Cullen Hoback travels to West Virginia to study the loss of clean drinking water for over 300,000 Americans from the 2014 Elk River chemical spill. While there he uncovers a shocking failure of regulation and a political system where companies often write the laws that govern them. During his investigation, a similar water crisis strikes Flint, Michigan, suggesting that the system that we assume protects our drinking water is fundamentally broken. Which begs the question - is this an isolated event or can we expect further crises in other states moving forward.

The discussion of the film will be led by undergraduate students Beatrice Mills, Elisabeth Freer who participated in Spring Break Outreach Energy and Environment, graduate student Elizabeth Nawrocki who worked with the Appalachian Institute at Wheeling Jesuit, and Dr. Maria Brown, a pediatrician and public health expert.

### **Questions for Discussion and Reflection**

- 1. Environmental justice scholars tell us that poor and marginalized communities are disproportionately affected by environmental injustices, such as industrial contamination. Why do you think that might be the case? What might this tell us about the power structures of American society?
- 2. Shortly after the leak of MCMH into West Virginia's Elk River, *National Geographic* reported that "the lack of data on MCMH is staggering." Why would chemicals be approved for industrial use if we know so little about them?
- 3. In July 2010, the United Nations General Assembly stated that "clean drinking water and sanitation are essential to the realisation of all human rights." Yet the CDC says that "780 million people [worldwide] do not have access to an improved water source." In the United States, one study revealed that "63 million [Americans]...were exposed to unsafe water more than once in the past decade...." What does this tell us about who gets to live the good life, and why? Additional reading:
  - http://www.un.org/waterforlifedecade/human right to water.shtml
  - https://www.cdc.gov/healthywater/global/wash\_statistics.html
  - https://www.usatoday.com/story/news/2017/08/14/63-million-americans-exposed-unsafe-drinkingwater/564278001/
- 4. The Environmental Protection Agency (EPA) was established in December 1970, during the presidency of Richard M. Nixon. In 1976, Congress passed the Toxic Substances Control Act, which gave the EPA the authority to regulate use of household and industrial chemicals. However, TSCA didn't require testing of any of the "60,000...substances that were already in use...." In 2016, Congress passed a bipartisan bill, already approved by the Senate, that updated TSCA for the first time in its 40-year history, strengthening the law. Yet the EPA's ability to do its job waxes and wanes depending on who occupies the Oval Office. Given this, what can we do to make sure that the agency will continue to safeguard environmental health? Additional reading: https://www.theatlantic.com/health/archive/2016/05/toxic-substances-control-act/484280/
- 5. The Elk River chemical spill is one example of contamination of drinking water in West Virginia. Drinking water is contaminated in West Virginia all the time, but do not hear all of them. Is water pollution only a crisis when in impacts a large number of people? How do you think the industries that cause the pollution should be held responsible for the contamination they cause? Additional reading:

- <a href="https://www.wvgazettemail.com/business/strip-mine-pollution-impaired-streams-judge-rules/article">https://www.wvgazettemail.com/business/strip-mine-pollution-impaired-streams-judge-rules/article</a> 8a4ecb44-1946-56fe-a6df-0b7017f077df.html
- <a href="https://cfpub.epa.gov/si/si">https://cfpub.epa.gov/si/si</a> public record report.cfm?Lab=NERL&dirEntryId=238504
- http://www.appalmad.org/slider/west-virginias-streams-are-in-trouble/

# **Resources for Further Study:**

Hersher, R., Settlement Deal Reached In 2014 West Virginia Chemical Spill, NPR, October 26, 2016 <a href="https://www.npr.org/sections/thetwo-way/2016/10/26/499307717/settlement-deal-reached-in-2014-west-virginia-chemical-spill">https://www.npr.org/sections/thetwo-way/2016/10/26/499307717/settlement-deal-reached-in-2014-west-virginia-chemical-spill</a>

Thomasson, E.D. et al. Acute Health Effects After the Elk River Chemical Spill, West Virginia, January 2014, *Public Health Reports*, 2017 Mar-Apr; 132(2): 196–202. doi: 10.1177/0033354917691257