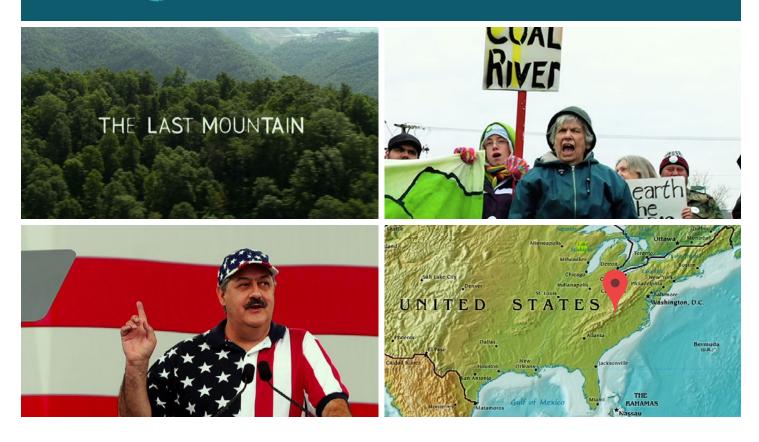


Global Environmental Justice Documentaries

TEACHER'S GUIDE



The Last Mountain

A Fight for Our Future

2011 • 95 minutes • Directed by Bill Haney • Distributed by Uncommon Productions

The Last Mountain documents the struggles of a small West Virginia community fighting to preserve Coal River Mountain from mountaintop removal (MTR) coal mining. While the film explains many of the detrimental effects that MTR mining has on local forests and streams, its true impact rests on the personal stories shared by so many residents whose health and well-being have been negatively affected by the nearby coal industry.

Ultimately, the strength of the movie lies in its ability to both highlight local efforts of resistance and contextualize the events occurring in Coal River Valley within greater national patterns of energy production and consumption. As Maria Gunnoe, a local activist, explains, "You're connected to coal whether you realize it or not. Everybody's connected to this. And everybody's causing it. And everybody's allowing it."





CURATOR: Amity Doolittle Senior Lecturer at the Yale School of Forestry and Environmental Studies

This guide was written by Caroline Scanlan with research support from Liz Felker and Elham Shabahat.

The film highlights how a small group of citizens is trying to stop big coal corporations and protect their health and environment.

WHY I SELECTED THIS FILM

This film makes an important point about the practice of mountaintop removal (MTR) and its devastating consequences on communities and the environment. The film highlights how a small group of citizens in the valleys of Appalachia is trying to stop big coal corporations from continuing the practice of MTR in order to protect their health and environment.

SUGGESTED SUBJECT AREAS

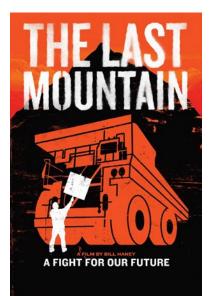
Activism American Studies Capitalism Climate Change Energy Mining Sustainability

SYNOPSIS

Aroused Coal River Valley residents—who have endured community displacement, dangerous flooding, and increased brain cancer rates due to contaminated drinking water—join passionate activists from all over the country to resist Massey Energy in an effort to keep Coal River Mountain intact and preserve their community's safety and well-being. They use diverse tactics, including litigation and regulation, protests, non-violent civil disobedience, and public awareness campaigns.

THE ENVIRONMENTAL JUSTICE FOCUS OF THE FILM

People and residents living in Coal River Valley are suffering the negative consequences of the coal industry, including environmental contamination from MTR mining, high rates of asthma, brain damage, and cancer, among other health burdens. Environmental justice comes into play when residents organize against powerful coal companies through both local acts of resistance and partnering with outside activists who engage in non-violent civil disobedience. The difficulties that communities face in fighting these actors are also explored in this film, when powerful corporations (through financing campaigns and lobbying) are able to influence politics and the enforcement of environmental regulations.









FILM SEQUENCES

Part 1. Coal River Mountain (00:00-16:55)

The first section of the film introduces Coal River Mountain in the Southern Appalachian range of West Virginia. The viewer learns about mountaintop removal mining or MTR, a commonly practiced and extremely profitable method of extracting coal in the region. During this introduction, the filmmakers expose many of the detrimental impacts both environmental and human—of mountaintop removal (MTR) mining.

Part 2. Pollution and Public Uprising (16:55-39:30)

Robert F. Kennedy, Jr., speaking as an attorney and environmental activist, describes the rise of polluting industries in the United States and the public demonstrations that followed, leading to the founding of the U.S. Environmental Protection Agency (EPA), the Clean Air Act, and the Clean Water Act. We learn how George W. Bush's presidency later led to a small rewriting of the Clean Water Act, redefining the term "fill material" and legalizing MTR for the first time. In response, a people's intervention is organized to prompt the West Virginia Department of Environmental Protection to revoke its permit to the coal companies for practicing MTR in Coal River Valley. Activists meet with resistance from Massey Energy employees, who accuse environmentalists of taking coal mining jobs away. Ed Wiley, a resident of Coal River Valley and former Massey Energy contractor, is an exception. He helps to organize his community against Massey Energy when he realizes that a nearby coal sludge impoundment is making people at his granddaughter's school sick.

Part 3. Coal and Labor (39:30-44:05)

This section explores the relationship between MTR and coal labor in West Virginia. The filmmakers track the rise of Massey Energy's investment in strip mining and the subsequent loss of unionized labor. A deadly methane gas explosion at Massey's Upper Big Branch mine also reveals the prevalence of safety violations in the mining industry.

Part 4. Non-violent Civil Disobedience and Friends of Coal (44:05-1:07:20)

This section captures footage of both local activists and "outside" activists with Climate Ground Zero, an organization that has launched a national campaign to stop MTR in Coal River Valley through acts of non-violent civil disobedience. As local activist Bo Webb explains, "It takes people from outside the coal fields to come in and stop this insanity because the only job ever has been a coal job, and you do **56** You're connected to coal whether you realize it or not. Everybody's connected to this.

—Maria Gunnoe







what the coal man says, or you don't have a job. So outsiders have to come in to stop this." In addition to highlighting acts of non-violent civil disobedience, this section explores the ability of corporations, via campaign financing and corporate lobbying, to influence political activity and environmental regulation enforcement (or lack thereof).

Part 5. Coal-Burning Power Plants and Airborne Pollutants (1:07:20-1:13:07)

A short visit to the Bruce Mansfield Power Plant in Pennsylvania uncovers some of the detrimental health effects of heavy metal emissions from coal-fired power plants, including increased local rates of asthma, brain damage, and cancer.

Part 6. Alternatives to Coal (1:13:07-end)

The film's conclusion follows the continued efforts of Climate Ground Zero protesters to stop Massey Energy activity at Coal River Mountain. It also introduces the Coal River Wind project—a proposed wind farm that would serve as a local alternative to coal and provide renewable energy as well as sustainable jobs. After a discussion about the "true cost of energy production," the film wraps up by highlighting early Obamaera regulatory efforts to slow MTR in Appalachia.

PEOPLE FEATURED IN THE FILM

Maria Gunnoe – Coal River Valley resident, daughter of a coal miner, and community activist

Bo Webb – Coal River Valley resident, son of a coal miner, and community activist

Robert F. Kennedy, Jr. - attorney and environmental activist

Jennifer Hall-Massey – resident of Prenter, West Virginia, where six neighbors have died of brain tumors due to groundwater contamination

Bill Raney – president of the West Virginia Coal Association

Don Blankenship - former CEO of Massey Energy

Ed Wiley - former Massey Energy contractor and community activist

Lorelei Scarbro – Coal River Valley resident, daughter and widow of coal miners, and proponent of wind farming on Coal River Mountain









DISCUSSION QUESTIONS

- What are some of the environmental impacts of MTR mining described in the film? How do they affect people's lives in the Coal River Valley? What groups of people are affected the most?
- 2. What do we learn about the origins of the Clean Water Act? What was the role of public demonstration in pushing for this important environmental regulation?
- 3. Who are the different players fighting to end MTR in Coal River Valley? What are the different roles played by "insiders" (Coal River Valley residents) and "outsiders?" Is one role more effective than the other, or does the movement need both to make meaningful change?
- 4. How does a community's entanglement with a dominant industry like coal change the way it can respond to environmental injustices inflicted by that industry?
- 5. What is the role of civil disobedience in the campaign to save Coal River Valley? What other social movements have employed non-violent civil disobedience tactics to achieve justice?
- 6. What is lobbying? How has corporate lobbying participated in the perpetuation of mountaintop coal removal in Southern Appalachia?
- 7. What is the connection between access to information and environmental justice? Where do you see these connections made clear in the film? Does better access to information necessarily lead to better environmental health outcomes for people in West Virginia?
- 8. Considering all the "externalities" (negative impacts) of coal production (greenhouse gas emissions, economic impacts, environmental degradation, human health costs), how would you calculate the true cost of coal electricity production? Do the benefits outweigh the costs? Who experiences the majority of the benefits from coal electricity production? Who carries the majority of the costs?
- 9. At the end of the film, Maria Gunnoe tells the viewer: "You're connected to coal whether you realize it or not. Everybody's connected to this. And everybody's causing it. And everybody's allowing it." What do you understand as your own personal connection to coal? Has it evolved after having watched *The Last Mountain*? Are there other industries that you can think of that may have similar hidden negative impacts, or externalities? What is the extent of those impacts? Whom do they affect the most?







- 10. Does the film end on a hopeful note? Why or why not?
- 11. What is the bias of the filmmaker? Do you think that the documentary did a good job of representing multiple perspectives? Are there perspectives you think were missing from the discussion?

SELECTED EXCERPT

If time is short, view a **short selection from the film about contaminated well water** (14:20–16:55). In this selection, Jennifer Hall-Massey, a resident of Prenter, West Virginia, explains the tragic consequences of groundwater contamination due to nearby coal mining activity. Six people in her small town alone, including Hall-Massey's 29-year-old brother, were lost to brain tumors. The national average for Americans with brain tumors is 1/100,000. When trying to explain the high prevalence of brain cancer in her small community, Hall-Massey notes that "the only thing we have in common is the fact that we all have well water."

Students can also listen to an interview with Hall-Massey: "<u>Coal Country Wrestles with Hazardous Water in West Virginia</u>" (Amber Hall, 2016, *The Takeaway*).

QUESTIONS RELATING TO THE EXCERPT

- 1. What does it take for a community to prove that a nearby industry is causing negative human health impacts? Do you think that the burden should be on the community to prove there is a direct impact from industry activity, or should the industry have to prove there is no direct impact on the community?
- 2. What counts as sound evidence in such cases? What kind of data needs to be collected for a community to be listened to? At what point are policymakers ready to listen and enact meaningful change?
- 3. Historically, how has the size and/or socioeconomic demographic of the affected community impacted whether policymakers have been willing to pay attention to the evidence?

66 Mountaintop coal mining is threatening the water supply of tens of millions of people.

⁻Dr. Allen Hershkowitz, Natural Resources Defense Council



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ACTIVITIES

- Listen to "Mountain Song" by Holly Nears (<u>music</u> and <u>lyrics</u> here), a protest song about strip coal mining in Appalachian communities. Discuss the role that protest music has played in social justice movements in American history.
- 2. How can you <u>save energy at home</u>? What role do you think individuals have in lowering the U.S.'s demand on coal energy? Do you think that strategies for reducing coal energy consumption are more effective when they target consumers, industry, lawmakers, or a combination?
- 3. Research the source(s) of electric power production for your school. Where does the energy come from? What are some of the human and environmental costs of producing energy this way?
- 4. Visit the World Bank CO2 emissions by country visualization tool <u>here</u>. Explore the relationship between CO2 emissions and country population and gross domestic product. What do these relationships tell you about the way energy is consumed and produced globally? Is energy produced and consumed equitably across the world?
- 5. Visit the <u>Environmental Justice Atlas</u> and explore different environmental conflicts related to coal. Be sure to check out the two highlighted MTR mining conflicts in West Virginia. Create a similar profile for the updated conflict in Coal River Valley.
- 6. Choose another industry or commodity (you can find a good list of commodities relevant to environmental justice under "Browse Maps" at <u>ejatlas.org</u>) and research some of its human and environmental impacts. Make sure you consider questions like: Where is this industry based? What are the local and/or global environmental impacts of this industry? What are the local and/or global human health and socioeconomic impacts of this industry? Who bears the cost of these impacts? Are there any relevant environmental justice issues? Have there been resistance and mobilization against any harmful impacts? How are these issues similar to or different from the issues that have been raised in *The Last Mountain*?













SUPPLEMENTARY MATERIAL

Discussion Guide

See also the Discussion Guide produced by the Center for Ecoliteracy.

Websites

<u>Surface Coal Mining in Appalachia</u> (U.S. EPA) – informational website compiled by the U.S. EPA

<u>Mountaintop Removal 101</u> (Appalachian Voices) – informational website compiled by a grassroots policy advocacy organization in Southern Appalachia

<u>World of Change: Mountaintop Mining, West Virginia</u> (Earth Observatory) – time-lapse aerial imagery documenting the growth of the Hobet Mine in Southern Appalachia from 1984 to 2015

<u>Mountaintop Removal</u> (SourceWatch) – comprehensive, open-source informational website that includes extensive information about MTR protest campaigns and relevant legislation

<u>Health Impacts of Mountaintop Removal Coal Mining</u> (Kentuckians for the Commonwealth) – informational website and resource list compiled by a grassroots policy advocacy organization in Kentucky

Videos

<u>Environmental Justice Explained</u> (2016, *Grist*) – a short introduction to the principles of environmental justice

<u>A Brief History of Environmental Justice</u> (2017, ProPublica) – a short introduction to the principles of environmental justice

<u>The Land of Mountaintop Removal</u> (Smithsonian Channel) – an overview of MTR mining techniques in Southern Appalachia

Leveling Appalachia: The Legacy of Mountaintop Removal Mining (MediaStorm and Yale Environment 360) – an overview of the legacy of MTR mining in Southern Appalachia with beautiful footage and storytelling

How Mountaintop Mining Affects Life and Landscape in West Virginia (Miles O'Brien, *PBS Newshour*) – an overview of the negative environmental impacts and health consequences of MTR mining

Podcasts

<u>Professor Hendryx v. Big Coal</u> (Stephen J. Dubner, *Freakonomics*) – an interview with public health researcher Dr. Michael Hendryx, who has studied the negative health impacts of coal mining in Southern Appalachia







Peer-Reviewed Research and Literature

Mountaintop Mining Consequences (Palmer et al, 2010, Science)

The Role of Information in Environmental Justice (David W. Case, 2012, *Mississippi Law Journal*)

Sacrifice Along the Energy Continuum: A Call for Energy Justice (Diana Hernández, 2015, Environmental Justice)

Written Media

<u>Clean Water Laws Are Neglected, at a Cost in Suffering</u> (Charles Duhigg, 2009, *The New York Times*)

In West Virginia, a Battle Over Mountaintop Mining (Sophia Yan, 2010, *TIME*)

Mountaintop Removal Mining: Digging Into Community Health Concerns (David C. Holzman, 2011, *Environmental Health Perspectives*)

<u>The Poverty of Mountaintop Removal Mining</u> (Neil Gormley, 2013, *Earthjustice*)

The Dirty Effects of Mountaintop Removal Mining (Editorial Board, 2014, *The Washington Post*)

<u>After coal: Appalachia to wind farm proposal: It is insulting, really</u> (Jenna Portnoy, 2015, *The Washington Post*)

<u>A Troubling Look at the Human Toll of Mountaintop Removal Mining</u> (Richard Schiffman, 2017, *Yale Environment* 360)

The 100-year capitalist experiment that keeps Appalachia poor, sick, and stuck on coal (Gwynn Guilford, 2017, *Quartz*)

56 The center of environmental problems is climate change, and at the core of that problem is coal.

> -Gus Speth, Co-founder, World Resources Institute