

# THE LAST MOUNTAIN

OFFICIAL SELECTION  
2011  
SUNDANCE  
FILM FESTIVAL

OFFICIAL SELECTION  
full frame  
documentary film series  
2011



A FILM BY BILL HANEY

## A FIGHT FOR OUR FUTURE

UNCOMMON PRODUCTIONS PRESENTS "THE LAST MOUNTAIN" CO-WRITTEN BY PETER RHODES ORIGINAL MUSIC BY CLAUDIO RAGAZZI PRINCIPAL CINEMATOGRAPHY BY JERRY RISIUS STEPHEN McGARTHY TIM HOTCHNER  
EXECUTIVE PRODUCERS BY TIM DISNEY SARAH JOHNSON REOLICH TIM ROCKWOOD PRODUCED BY CLARA GINGHAM ERIC BRONERBAUM BILL HANEY

PG PARENTAL GUIDANCE SUGGESTED  
SOME MATERIAL MAY BE OFFENSIVE FOR CHILDREN  
Some Theatrical Material And Brief Language

WRITTEN BY BILL HANEY & PETER RHODES DIRECTED BY BILL HANEY  
[thelastmountainmovie.com](http://thelastmountainmovie.com)

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Productions

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# DISCUSSION GUIDE

Developed by the Center for Ecoliteracy

# CONTENTS



- 2 About the Film
- 2 About Uncommon Productions
- 2 About the Center for Ecoliteracy
- 3 How to Use This Guide
- 4 What Is Mountaintop Removal?
- 5 Theme One: Everyone Is Connected to Coal
- 7 Theme Two: Private Rights vs. The Common Good
- 9 Theme Three: Democracy in the Balance
- 11 Theme Four: The Value of a Mountain
- 13 Selected Resources
- 15 Vocabulary
- 16 Credits and Acknowledgments

## ABOUT THE FILM

The mining and burning of coal are at the core of America's struggle to balance its energy needs with environmental concerns. Nowhere are those concerns greater than in Coal River Valley, West Virginia, where a small group of ordinary citizens is trying to stop the devastating practice of mountaintop removal coal mining.

Centered on the controversy over Coal River Mountain, *THE LAST MOUNTAIN* shines a light on the environmental, health, social, and economic effects of using coal to meet America's energy needs. *THE LAST MOUNTAIN* honors the power of ordinary Americans fighting for what they believe in, and shows how the fight for Coal River Mountain affects us all.

Written, directed, and produced by award-winning documentary filmmaker Bill Haney, *THE LAST MOUNTAIN* was co-written and edited by Peter Rhodes, and produced by Clara Bingham and Eric Grunebaum. Learn more about the film at:

[www.thelastmountainmovie.com](http://www.thelastmountainmovie.com)

## ABOUT UNCOMMON PRODUCTIONS

Founded in 2000 by Tim Disney and Bill Haney, Uncommon Productions produces documentary and feature films that inspire, enlighten, and engage. Its award-winning films include *AMERICAN VIOLET*, based on a true story and starring Alfre Woodard, Tim Blake Nelson, and Will Patton; and the human rights documentary *THE PRICE OF SUGAR*, which was short-listed for an Oscar. Learn more at:

[www.uncommonproductions.com](http://www.uncommonproductions.com)

## ABOUT THE CENTER FOR ECOLITERACY

The Center for Ecoliteracy is dedicated to education for sustainable living. Through its initiative Smart by Nature™, the Center offers expertise, inspiration, and resources to the sustainability movement in K-12 education, including the book *Smart by Nature: Schooling for Sustainability*, which showcases inspiring stories about school communities across the nation.

The Center offers a seminar program, consulting services, curriculum development, and a publishing imprint that produces *Big Ideas: Linking Food, Culture, Health, and the Environment*, a conceptual framework for integrated learning, and the RETHINKING SCHOOL LUNCH GUIDE, a downloadable planning framework that offers creative solutions. Learn more at:

[www.ecoliteracy.org](http://www.ecoliteracy.org)

## HOW TO USE THIS GUIDE

THE LAST MOUNTAIN is a 95-minute film that examines the issue of mountaintop removal coal mining in West Virginia—particularly on Coal River Mountain—and provides a catalyst for discussion and exploration around this and other related topics.

This Discussion Guide is designed to help your students or participants get the most out of the film. It may be used in a variety of **high school courses** (such as economics, environmental science, and government) and **undergraduate college courses** (such as energy and resources, environmental studies, geography, political science, and interdisciplinary courses). It may also be used in a number of community settings, including public screenings and neighborhood gatherings.

The Discussion Guide explores four different themes suggested by the film:

- Everyone Is Connected to Coal
- Private Rights vs. The Common Good
- Democracy in the Balance
- The Value of a Mountain

We recommend that you choose the theme best suited to your setting and goals, and use it as a lens for thoughtfully examining the film.



## TIPS FOR FACILITATION

For each theme, we offer a suggestion for **Introducing the Theme** prior to showing the film. Use this brief activity to prepare participants for viewing the film with the theme in mind, and to help them get more out of the discussion.

After showing the film, use the **Discussion Questions** to explore the theme more deeply. You may use all or some of the questions as time allows in whole group or small group discussions. For more meaningful discussions, give participants a chance to think about each question before opening it up for comment.

Depending on your objectives and time available, you may also follow the suggestion for **Taking Action** provided for each theme. This activity will enable your participants to find out more or to apply what they have learned by getting involved in the issues depicted in the film. Discover more ways to get involved at:

[www.thelastmountainmovie.com](http://www.thelastmountainmovie.com)

# WHAT IS MOUNTAINTOP REMOVAL?

THE LAST MOUNTAIN describes the controversy over mountaintop removal coal mining, a practice that is changing large areas of Appalachia, especially in West Virginia. With this type of mining, coal companies literally remove the tops of mountains in order to reach the layers of coal below. To date, mountaintop removal has leveled over 500,000 acres in West Virginia alone.

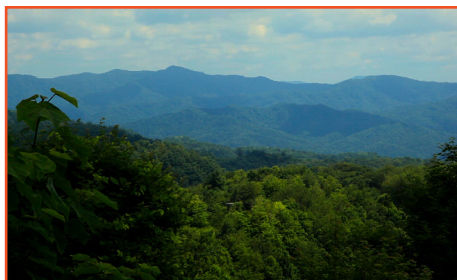
For coal companies, mountaintop removal is more economical than underground mining, producing two to three times more coal per miner. It is also safer for the miners themselves. But mountaintop removal causes enormous environmental damage, threatens the health and welfare of local residents, and destroys communities.

The process of mountaintop removal begins with clear-cutting the hardwood forest that blankets the mountain. The top portion of the mountain is then blasted by explosives to loosen the “overburden,” the soil and rock covering the coal seams. Huge earthmoving draglines expose the coal by pushing the overburden into neighboring valleys, creating valley fills that can be up to 800 feet high and cover more than a mile of streambed. The coal is then removed and washed to remove impurities, generating huge volumes of toxic liquid waste that is stored in sludge impoundments.

Mountaintop removal affects neighboring communities in many different ways. For example, as the film shows, it covers homes with hazardous silica dust, worsens flash flooding during heavy rains, introduces toxic heavy metals to streams and well water, and endangers residents with toxic coal sludge.

Since the late 1990s, environmental groups and coalfield residents have sued coal operators and regulatory agencies over mountaintop removal, arguing that using streams as a landfill for mining waste is illegal under the Clean Water Act. In 2002, the Army Corps of Engineers changed its definition of fill materials—from those that had the *primary purpose* of replacing an aquatic area with dry land, to those that had the *effect* of replacing an aquatic area with dry land. This minor definition change opened the door to more mountaintop removal, as it enabled coal companies to fill streambeds with overburden.

Despite the negative effects of coal mining, a significant proportion of West Virginia residents rely on it for their livelihood, as their families have for generations. Mountaintop removal remains a bitter controversy in West Virginia and throughout Appalachia.





# THEME ONE: EVERYONE IS CONNECTED TO COAL

## THE THEME

The film explores how everyone in the United States is connected to coal production, whether they live in coal mining regions or not. Coal is the United States' most common means of generating electricity, and pollutants from burning coal are found in air and water throughout the country and around the world.

## INTRODUCING THE THEME

Before showing the film, ask participants to pair up and list ways that they might be connected to coal mining and use. If they can't think of any connections, have them jot down where they think coal comes from and how it is mined.

## DISCUSSION QUESTIONS

After showing the film, lead a discussion that focuses on how we are all connected to coal, asking questions such as:

- Toward the end of the film, activist Maria Gunnoe says, "You're connected to coal, whether you realize it or not. Everybody's connected to this." What are the ways identified in the film that everyone is connected to coal? (List these on the board.) Which of these connections are personal? Which are economic? Which are environmental? Which are health-related? In what other ways might we be connected to coal?
- Bill Raney, president of the West Virginia Coal Association, says in the film, "I don't think people understand where electricity comes from. I think most people feel like it's an entitlement...and we don't need to worry about where it comes from because every time [we] flip the switch, it comes on." Do you agree that we are entitled or have a right to electricity? Why or why not? Whether or not we are entitled to it, what responsibilities do you think should come along with using electricity?
- There are 600 coal-fired power plants all over the country that release heavy metals, radioactivity, and other pollutants causing brain damage, asthma, and premature deaths. As the film points out, these pollutants "don't need passports," and they travel from place to place in water and air. What are some of the costs to health, to society, and to the environment of mining and using coal? How much should people be concerned about these costs of producing electricity?
- Looking at a map showing the eastern United States, can you locate Appalachia? What major rivers flow from this region? What downstream areas are or could be affected by water pollution stemming from mountaintop removal in Appalachia?
- Burning coal is the number one source of greenhouse gases worldwide. Global climate change is attributed to an increase in greenhouse gases in Earth's atmosphere. With this in mind, how does using coal affect even those who do not work with coal or use coal-fired power?

- Ron Burris, who lives next to the Bruce Mansfield Power Plant in Shippingport, Pennsylvania, says in the film that he has had his car repainted every year because the pollution from the power plant burns through the paint down to the metal. Why should we be concerned about what happens to Burris’s car? How might his car be like the proverbial “canary in the coal mine”?
- Protestor David Aaron Smith in the film says that “corporations like Massey don’t have any boundaries” and that it is “time for us to stand up as a national community and address these issues.” What do you think he means by a national community? How might thinking of a national community—as compared to local communities—affect how you view an issue like coal?

### TAKING ACTION

Visit the [ilovemountains.org](http://ilovemountains.org) website, type in your area code, and learn whether you are connected to mountaintop removal coal mining through the production of your electricity. Using information from the website, trace coal back to its origin—either the coal used at a power plant that makes your electricity, or from another power plant in your state or region. Write a letter to your local utility about your findings, expressing your opinion about what you learned.



## THEME TWO: PRIVATE RIGHTS VS. THE COMMON GOOD

### THE THEME

The film explores how the private rights of individuals or corporations are sometimes at odds with the common good for all. In the case of mountaintop removal, coal companies have the legal right to mine coal, even though it may negatively affect local communities.

### INTRODUCING THE THEME

Before showing the film, have participants work with a partner to draw a T-chart like the one below. Based on what they already know about coal, have them list possible benefits and problems of using coal as an energy source.

POSSIBLE BENEFITS OF COAL	POSSIBLE PROBLEMS WITH COAL

For each benefit or problem, ask participants to identify whether they think it affects individuals or companies, or society at large.

### DISCUSSION QUESTIONS

After showing the film, lead a discussion on the tension between private rights and the common good, asking questions such as:

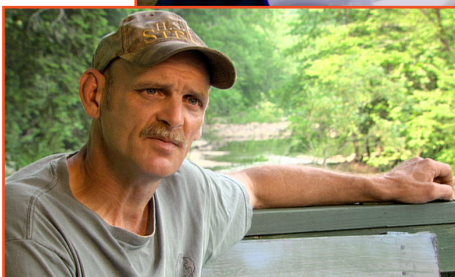
- What do we mean by “the common good”? In what ways does the issue of Coal River Mountain reflect a conflict between private rights and the common good?
- Why do coal companies use mountaintop removal? What are the advantages to the company of this method of coal mining? How does it affect the common good?
- The film lists many government subsidies that benefit the coal industry, such as tax credits and breaks, and funding for research and development. Why might the government provide these subsidies? How do they benefit the people of the United States or the common good? How do they benefit the companies?
- Robert Kennedy Jr. explains in the film that when his father was fighting strip mines in the 1960s, he said, “They’re not just destroying the environment, they’re impoverishing the community.” Do you believe companies should be responsible for more than their own profits and the bottom line? Should we require company practices to also be good for workers and communities?
- Who owns the air and water around Coal River Mountain that would be affected by mountaintop removal? Who should be responsible for keeping them clean and pollutant-free?



- In the film, Kennedy describes how prior to the Industrial Revolution, “If somebody built a factory near your home, and smoke from that factory got into your house as little as one day a year, you had an absolute right to shut down that factory. Because that was a violation of your property rights and of the commons.” Those laws were eventually relaxed, as people wanted industry to flourish. What do you think we have gained as a society by relaxing those laws? What do you think we have lost?
- Many companies and individuals are interested in making as much money as possible in the shortest amount of time. How does that compare with society’s long-term interests? Is there a way to strike a balance between the two?

### TAKING ACTION

Explore organizations that are working on the issue of mountaintop removal. Start with those listed in the resources section of this Guide. You may also search the Internet using the term “mountaintop removal organization.” For the organizations you examine, determine which are working in behalf of private rights, and which in behalf of the common good. Choose one organization whose work you support and find out how to join.



## THEME THREE: DEMOCRACY IN THE BALANCE

### THE THEME

The film makes the case that the fight over Coal River Mountain is a fight about democracy. The issue of mountaintop removal raises questions about democratic principles related to power, voice, and equal protection under the law.

### INTRODUCING THE THEME

Before showing the film, have participants work in pairs to list words or phrases that describe their vision of democracy, such as “freedom,” or “everyone has an equal voice.” After giving them a couple of minutes, ask them to put a star next to their three or four most important words or phrases. Have a few volunteers share their top responses.

### DISCUSSION QUESTIONS

After showing the film, lead a discussion about how the issue of democracy is explored in the film, asking such questions as:

- Which aspects of democracy that we identified in Introducing the Theme seem to be challenged or highlighted in the Coal River Mountain controversy? In what ways is the fight over Coal River Mountain a fight about democracy?
- The questions of power and voice are central in a democracy. Who do you think has more power in the Coal River Mountain controversy or in the United States in general—individuals, communities, or corporations? What evidence from the film supports your view? Who do you think should have more power? Who should have a voice in decisions about mountaintop removal or other similar issues? How can we make sure that these voices are heard? Should the “voices” of other living things be taken into account?
- The film points out that when George W. Bush was elected president, he said it was a “coal-fired” victory, and he filled many top positions of his administration with industry lobbyists. How does corporate campaign financing affect the democratic process? What aspects of democracy (from Introducing the Theme) might it weaken or threaten? What aspects might it strengthen?
- What is civil disobedience? What examples of it are shown in the film? What role does civil disobedience have in a democracy? Under what circumstances is civil disobedience appropriate? When might it not be appropriate?
- The film describes how changing the interpretation of one word in the Clean Water Act opened the door to mountaintop removal mining. (See “What Is Mountaintop Removal?” on page 4 for more information.) What do you think about something as cataclysmic as blowing up mountains hinging on one word of the law? What does this say about our system of laws in the United States? What recourse do individual citizens have if they do not agree with a law or how it is interpreted or enforced?

- As described in the film, almost all of the Massey Coal mines used to be unionized, but now virtually none are. What is the role of unions in a democracy? How might coal workers being unionized or not affect society at large?
- In the film, Robert F. Kennedy Jr. says, “Corporations do not want democracy. They want profits.” What evidence does he cite? Do you agree or disagree with this view? Is it possible to maintain democratic values and an emphasis on profits at the same time?
- Environmental laws, like the Clean Water Act, were designed to protect the environment as well as people and their health. Yet, according the film, Massey Coal committed more than 60,000 environmental violations between 2000 and 2006 with little consequence. Who is harmed by these violations? Brainstorm a list of laws that guide our everyday lives, such as traffic laws, rules for public behavior, or laws related to drugs. What if people regularly violated these laws with minimal enforcement? How would that impact society?

### TAKING ACTION

Research the U.S. Supreme Court case known as **Citizens United vs. Federal Elections Commission**, in which the Court ruled that the U.S. government may not limit or ban political campaign contributions from corporations. Supporters of the ruling say that it upholds the doctrine of free speech, while critics say that it gives corporations a much greater voice than ordinary citizens. Hold a debate on this ruling with different groups representing each position, or make and share a video showing different people’s perspective on the ruling.





# THEME FOUR: THE VALUE OF A MOUNTAIN

## THE THEME

The film explores the question of whether West Virginia's mountains are more than a source of coal to be exploited for human gain. Some people see mountains as a natural resource like any other, while others believe that mountains have value in their own right.

## INTRODUCING THE THEME

Before showing the film, ask participants to think of a time when they had a personal connection with a mountain, lake, stream, or other natural landform, and draw a picture or write a reflection representing their experience. Have volunteers share their drawings and stories. Ask them to imagine how they would feel if that mountain, lake, stream, or other landform was somehow destroyed.

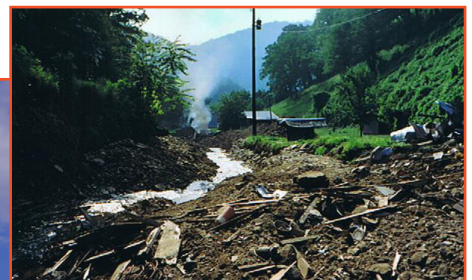
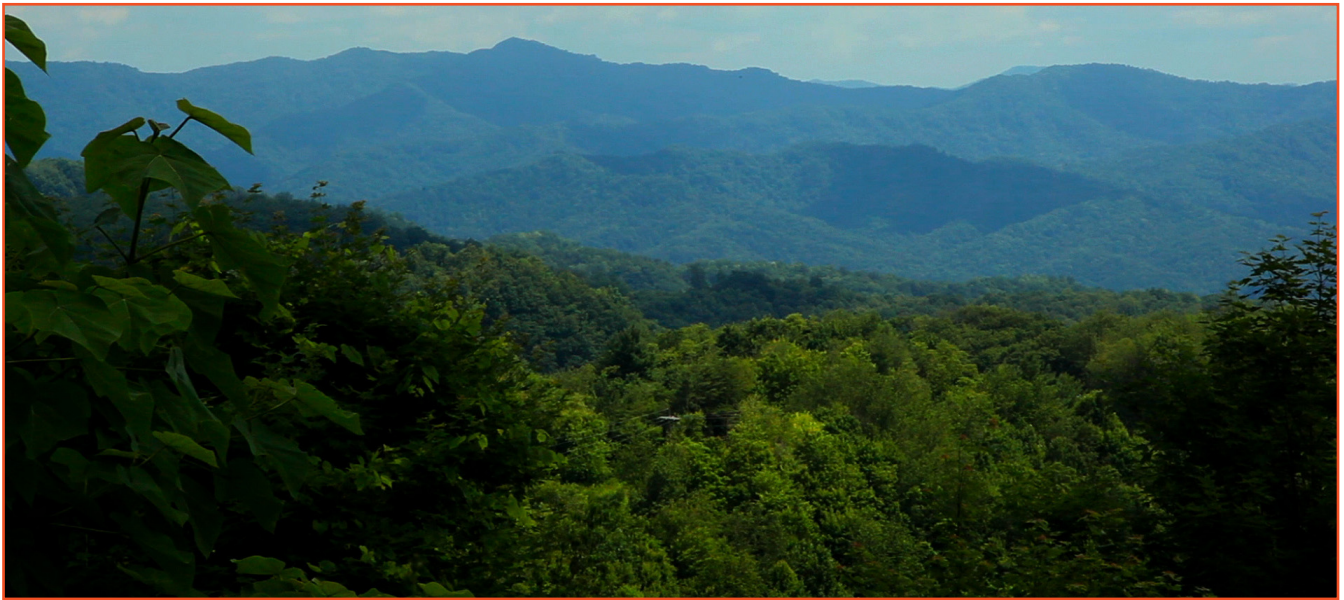
## DISCUSSION QUESTIONS

After showing the film, lead a discussion focusing on whether mountains and other natural entities have value, asking questions such as:

- What personal connections to West Virginia's mountains or to nature are depicted in the film? Think of a particular person in the film. How does that person's story or connection to place seem to affect his or her actions in the face of the mountaintop removal controversy?
- Robert Kennedy Jr. asserts in the film that people should not have the right to destroy something—like a mountain—that they cannot re-create. Do you agree or disagree? Do you believe that humans have a right to use the Earth and its resources as they see fit?
- Do you believe mountains have intrinsic value separate from humans? If so, what value do they have? If not, why not?
- As shown in the film, when companies reconstruct a mountain after blowing it up and removing the coal, it is left a barren landscape that no longer absorbs water and leads to flooding in heavy rains. What other implications or unintended consequences might there be of such a major transformation of the landscape?
- Can you think of examples outside of the film where more than money is considered in evaluating a product or service? A “triple bottom line” evaluates the worth of something not just on its economic effect, but also on its environmental and social effects. What difference would a triple bottom line approach have for the Coal River Mountain controversy? How would a triple bottom line approach affect other aspects of our society or individual lives? What might be the pluses and minuses of this approach?
- In the film, Robert F. Kennedy Jr. describes the Great Plains as the “Saudi Arabia” of wind because it has the potential to be an excellent source of wind power. What would we as a nation gain by developing wind farms in the Great Plains? What would we lose? Do the Great Plains have intrinsic value?

## TAKING ACTION

The term “rights of nature” recognizes and honors the idea that trees, oceans, animals, and mountains have rights just as human beings do, including the right to exist, persist, and maintain vital cycles. Learn more by looking at the Rights of Nature website ([www.therightsofnature.org](http://www.therightsofnature.org)). Find out what countries have included rights of nature in their constitutions and study the U.S. Constitution to determine how it views nature. Examine your school’s or organization’s mission statement and propose an amendment that might address rights of nature.





## SELECTED RESOURCES

The following selected resources may provide further information on the issue of coal and mountaintop removal. Please note that they do not necessarily support the filmmakers' viewpoint and that their listing here does not imply endorsement.

### ARTICLES AND REPORTS

Epstein, Paul R., et al. "Full Cost Accounting for the Life Cycle of Coal." *Annals of the New York Academy of Sciences*. February 2011, Vol. 1219: 73-98. Available for download at:

[http://solar.gwu.edu/index\\_files/Resources\\_files/epstein\\_full%20cost%20of%20coal.pdf](http://solar.gwu.edu/index_files/Resources_files/epstein_full%20cost%20of%20coal.pdf).

Focusing on Appalachia, researchers evaluate the effects of coal from extraction to processing to combustion, including environmental and health effects.

Lockwood, Alan, et al. "Coal's Assault on Human Health." Physicians for Social Responsibility. 2009. Available for download at: <http://www.psr.org/resources/coals-assault-on-human-health.html>.

This medical report takes a look at the impacts of coal combustion and use on the human body.

O'Leary, Sean, and Ted Boettner. "Booms and Busts: The Impact of West Virginia's Energy Economy." West Virginia Center on Budget and Policy. July 2011. Available for download at:

<http://www.wvpolicy.org/downloads/BoomsBusts072111.pdf>.

This report examines the economic impact of coal mining for West Virginians.

Palmer, M.A., et al. "Mountaintop Mining Consequences." *Science*. January 8, 2010. Available for download at: [http://palmerlab.umd.edu/palmer\\_et al\\_2010\\_mountaintop.pdf](http://palmerlab.umd.edu/palmer_et al_2010_mountaintop.pdf).

This analysis of water quality data from West Virginia streams reveals the environmental impacts of mountaintop removal.

"The Effects of Mountaintop Mines and Valley Fills on Aquatic Ecosystems of the Central Appalachian Coal-fields," U.S. Environmental Protection Agency. May 2011. Available for download at:

<http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=225743>.

Using scientific data from peer-reviewed sources, this EPA report assesses the consequences of mountaintop removal for stream ecosystems.

### WEBSITES

<http://thelastmountainmovie.com> The official website of THE LAST MOUNTAIN.

<http://blogs.wvgazette.com/coalattoo/> Charleston Gazette blog by writer Ken Ward that covers many coal-related topics with focuses on mountaintop removal, coal mine safety, and climate change.

<http://ilovemountains.org> Web resource created by local, state, and regional organizations across Appalachia that serves as an information hub about the effects of mountaintop removal on communities and ecosystems.

# SELECTED RESOURCES

## ORGANIZATIONS

**American Coal Council:** An industry trade association dedicated to advancing the development and use of coal.

**Appalachian Center for the Economy and the Environment:** A regional law and policy organization that works to clarify, analyze, and act on environmental and economic issues affecting Appalachian communities, including coal mining. Joe Lovett (depicted in the film) is a founder and Executive Director.

**Appalachian Voices:** An environmental nonprofit committed to protecting the land, air, and water of the central and southern Appalachian region, and to reducing coal's impact on the region.

**Climate Ground Zero:** An organization that practices peaceful civil disobedience to effect change, and that supports an ever-changing group of activists at the camp in the Coal River Valley.

**Coal River Mountain Watch:** A grassroots organization working to stop mountaintop removal mining. Activist Bo Webb (depicted in the film) works with this organization.

**Earthjustice:** A nonprofit public interest law firm dedicated to protecting the magnificent places, natural resources, and wildlife of this earth, and to defending the right of all people to a healthy environment.

**Friends of Coal:** A volunteer organization dedicated to informing West Virginians about the coal industry and its role in the state.

**Kentuckians for the Commonwealth:** Grassroots citizens organization working to help community leaders build effective organizations. Particularly interested in the issues of coal and energy, economic justice and voter empowerment.

**Natural Resources Defense Council (NRDC):** Works to protect wildlife and wild places and to ensure a healthy environment for all. Allen Hershkowitz (depicted in the film) is an NRDC senior scientist.

**Ohio Valley Environmental Coalition:** A nonprofit dedicated to ending mountaintop removal in West Virginia, improving enforcement of mining laws, and reforming the campaign financing system. Activists Maria Gunnoe and Chuck Nelson (depicted in the film) work here.

**Sierra Club:** Works to protect communities and natural environments. Its Beyond Coal campaign has stopped over 150 proposed coal-fired power plants and is actively working to replace outdated coal plants with renewable energy solutions.

**Waterkeeper Alliance:** Grassroots advocacy organization working to defend communities against anyone who threatens their right to clean water. Robert F. Kennedy Jr. serves as the organization's President.

**West Virginia Coal Association:** A trade association whose purpose is to represent West Virginia's coal industry and to increase emphasis on coal as a reliable energy source. Bill Raney (depicted in the film) is president of the association.

# VOCABULARY

**CAMPAIGN FINANCING SYSTEM:**

The system by which organizations fund-raise and spend money to support candidates or issues in elections.

**CIVIL DISOBEDIENCE:**

The refusal to comply with government laws or demands as a nonviolent form of political protest.

**COMMON GOOD:**

Certain general conditions that benefit everyone.

**DRAGLINE:**

A large excavator with a bucket pulled in by a wire cable.

**ENTITLED:**

Having a right or claim to something.

**GREENHOUSE GAS:**

An atmospheric gas that contributes to the warming of the Earth's atmosphere.

**INTRINSIC VALUE:**

Worth, merit, or importance of a thing derived from its essential nature.

**LABOR UNION:**

An organized association of workers formed to protect and further their rights and interests.

**LAND RECLAMATION (OR REHABILITATION):**

An engineering process that attempts to restore an area of land back to its natural state after it has been damaged from mining, oil drilling, or other human or natural disruption.

**MOUNTAINTOP REMOVAL MINING:**

A form of surface mining in which the top portion of a mountain is blasted apart and then removed to expose underlying seams of coal.

**OVERBURDEN:**

(noun) Rock or soil that lies above a mineral deposit or archaeological site.

**SUBSIDY:**

Money or tax break granted by the government to an industry or business so that the price of a commodity or service may remain low.

**TRIPLE BOTTOM LINE:**

An expansion of traditional financial reporting to take into account ecological and social performance in addition to financial performance.

**UNIONIZED:**

Belonging to or having workers belong to a labor union.

**VALUE:**

(noun) Worth, merit, or importance.

# CREDITS AND ACKNOWLEDGMENTS

## CENTER FOR ECOLITERACY

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## J2 ADVERTISING

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