

2009 • Running time 54 minutes • Directed by Matt Myers • Distributed by Bullfrog Films

Tar Creek is the story of the worst environmental disaster you've never heard of: the Tar Creek Superfund site in northeastern Oklahoma. What was once the Quapaw Tribe's reservation was taken and transformed into one of the largest lead and zinc mines on the planet. Today, Tar Creek is home to more than 40 square miles of environmental devastation: acid mine water in the creeks, dangerous sinkholes, and high levels of lead poisoning in children. Now, almost 30 years after Tar Creek was designated for federal cleanup by the Superfund program, its residents are still fighting for decontamination, environmental justice, and, ultimately, the buyout of their homes and their relocation to safer ground. The pillaged land, contaminated waterways, and toxic dust are now the sole responsibility of the Quapaw Tribe—Native Americans who never asked to be located there in the first place. —Adapted from the distributor's website at Bullfrog Films





Curator and writers
This documentary was
selected by Amity
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and Environmental
Studies.

The guide was written by Caleb Northrop and Caroline Scanlan, with research support from Elham Shabahat and Liz Felker, graduate students at the Yale School of Forestry and Environmental Studies.

WHY WE CHOSE THIS FILM

The long sweep of historical injustices against the Quapaw Tribe makes this film extremely compelling. After being evicted from their homelands in the early 1800s, the Quapaw were relocated to Tar Creek, Oklahoma, on land that appeared useless to the U.S. government. However, once lead was discovered there in the early 1900s, the Secretary of the Interior attempted to once again deprive the Quapaw of their land rights by declaring individuals who owned land with large lead deposits "incompetent" so the government could manage the access to the lead below ground. After all the valuable minerals had been extracted, the Quapaw were left with land that had no economic value. And most recently, even after the negative health impacts of lead on children's development were understood, the Environmental Protection Agency (EPA) and the U.S. government have failed to adequately remediate the land, compensate the landowners, or relocate the families who have been exposed to the lead contamination.

SUGGESTED SUBJECT AREAS

Capitalism Indigenous Studies

Environmental Justice Mining

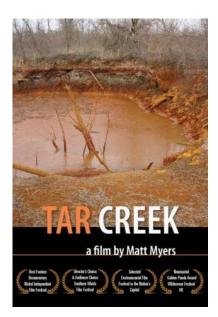
Government Native American Studies

Health and Health Care Relocation
History Toxic Chemicals

REVIEWS

"Tar Creek is amazingly clear and moving, full of many human voices and important issues of environmental justice and the interconnected nature of ecology and human lives...It highlights the history and ongoing drama of how so many people have been impacted by one of worst EPA Superfund sites in the United States." —John Calderazzo, Professor of English, Colorado State University

"Highly recommended...heartbreaking...provides a good balance of the facts and personal perspectives from local leaders, townspeople, archives, government representatives, public health officials, and tribal leaders. Many viewers could benefit from the scientific and political lessons learned as well as from hearing the passionate perspectives of the communities directly impacted. Appropriate for most high school students and adult audiences, the film should be of great interest to students and advocates interested in environmental justice, public health, policy, and environmental management issues." —Kristan Majors, Emory University, Educational Media Reviews Online





FILM SEQUENCES

- Uncovering the monster (00:00–12:00)
- History of the Tri-State Mining district (12:00–18:00)
- The worst Superfund site (18:00–28:00)
- Bad ground and hard leaving home (28:00–45:00)
- The land's fate (45:00–52:00)

SYNOPSIS

Part 1. Uncovering the monster (00:00-12:00)

The first section of the film introduces Tar Creek in northeastern Oklahoma, providing an overview of the history of lead and zinc mining and the impact of pollution from the mines on the workers, their children, and the environment in general.

Part 2. History of the Tri-State Mining District (12:00–18:00)

The film explores the history of the Quapaw Tribe and their relocation to the Tar Creek area. The subsequent discovery of lead and zinc on the reservation unleashes a wave of land grabs by mining companies, with assistance from the U.S. Department of the Interior.

Part 3: The worst Superfund site (18:00–28:00)

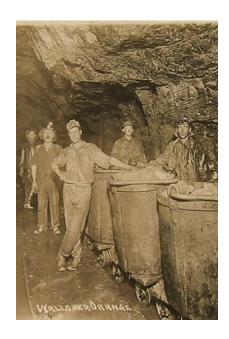
In 1980, Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act—a.k.a. the Superfund law. Tar Creek was declared a Superfund site. Some of the remediation efforts are futile, including the attempts to deal with widespread lead pollution by replacing the front yards of some residents.

Part 4: Bad ground and hard leaving home (28:00-45:00)

Residents voice their frustration and their sense that owing to the close relationship between government and industry, little has changed. They feel abandoned by authorities. Despite the obvious threats to their health, some residents resist relocation; others feel that the compensation they are offered for their property is too low.

Part 5: The land's fate (45:00-52:00)

The film concludes with the government handing back the land to the Quapaw Tribe, but the land is devastated. The Quapaw are left overseeing the cleanup of the site in cooperation with the EPA. Their culture and the land have been damaged, and they are both in need of healing. For now, the situation at Tar Creek is like Rachel Carson's nightmare: no birds, no wildlife —a silent fall.



THE ENVIRONMENTAL JUSTICE FOCUS OF THE FILM

This film highlights how environmental contamination can affect people, particularly indigenous communities, who are fighting for clean, healthy, and safe environments for their families and children. While non-Native American residents fled their homes after the attempts to clean up the Tar Creek site failed, members of the Quapaw Tribe who were forcibly relocated to the area in the first place remain, and they continue to be exposed to dangerous pollution from the lead and zinc mines. The film draws attention to the long history of marginalization and willful neglect that Native Americans have experienced at the hands of the U.S. government and corporate extractive industries—abuses that continue today.

KEY PEOPLE FEATURED

Missy Beets - Picher, Oklahoma, resident

John Berrey - chairman, Quapaw Tribe

Betty Cagle – review appraiser

Betty Cole – Picher resident

Lahoma Deily – Picher resident

John Frazier – Picher resident

James Graves – former Ottawa County commissioner

Sonya Harris – buyout operations manager

Bob Hatfield – Cardin, Oklahoma, resident

Earl Hatley – Quapaw environmental activist

Rebecca Jim – director, L.E.A.D. Agency

Rose Ann Jones – Picher resident

Tim Kent – environmental director, Quapaw Tribe

John Mott – Picher resident

Matt Myers – writer, director, narrator

Bob Nairn, Ph.D. – environmental scientist, University of Oklahoma

Mark Osborn – Miami physician and vice chairman, buyout trust

Annette Owens – Cinnabar Service Company

Bob Parmelee – Cinnabar Service Company

J.R. Mathews – vice chairman, Quapaw Tribe

Hoppy Ray – miner

John Sparkman – executive director of the Picher Housing Authority

Scott Thompson – director, Land Protection, Oklahoma Department of

Environmental Quality

Pat Waddle - miner

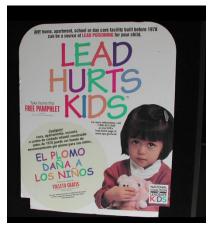
Susan Waldron – Lead Poisoning Prevention Program coordinator, Ottawa

County Health Department

Bob Walker – Picher-Cardin superintendent







DISCUSSION QUESTIONS

- 1. Environment: This film is not about a national park or an endangered species. How would you describe "the environment" that the filmmakers are documenting in *Tar Creek*?
- 2. Justice: What does it mean to have fair and equal protection from environmental hazards (or environmental "burdens," as they are sometimes called)? What about equal access to environmental benefits? Can you think of an instance in the film that illustrated unfair or unequal treatment of a person or a group of people? How about a moment when there was an attempt to correct or address an injustice? Did the correction work or seem to be fair?
- 3. Displacement: What does it mean to be displaced? Were there examples of displacement in the film? Who was displaced from where? By whom?
- 4. Contamination: What are the different contaminants discussed in the film? Why are they difficult to clean up?
- 5. Negative health impacts: How is human health impacted by the lead left over from mining? Who is most vulnerable to these impacts?
- 6. Responsibility: Who is responsible for the cleanup of the lead contamination? Do you think they have done a good job so far of addressing the contamination in *Tar Creek*? What else could be done? By whom?
- 7. How do you feel the film handled the history of the Quapaw? Was enough time and attention paid to it, and were the Quapaw people given agency? Were there any topics you wish the film had delved into more thoroughly?
- 8. Try to empathize with the experience of the Quapaw as described in this film. How would—or perhaps how has—the experience of relocation, environmental exploitation, or environmental contamination make you feel? What do you need for you to feel that justice has been served?
- 9. What do we know so far about Tar Creek and Picher, Oklahoma? What is lead? What is chat? Why is there so much lead in Picher, Oklahoma? What are the different ways that people are exposed to lead in Tar Creek? Why is lead dangerous? Who is most vulnerable to lead exposure? Why?







- 10. What do we know so far about the Quapaw people and their history? Earl Hatley says in the film, "All 39 tribes in Oklahoma have a Trail of Tears story. The Quapaw are no exception." What do you know about the Trail of Tears? What does it mean to be displaced from a land?
- 11. When did lead mining start in Tar Creek? Why do you think it was such an important industry? What were some of the challenges that the Quapaw faced once lead was discovered on their land (e.g., land leasing and land grabs)?
- 12. What are the lasting (health and non-health) impacts for residents of Picher, Oklahoma? How did we see environmental problems becoming people problems? (45:15)
- 13. If you had been in charge of the public trust, would you have acted differently? How?
- 14. How are relocation efforts for non-Native Picher residents similar to and different from those for members of the Quapaw Tribe?
- 15. If you were part of the Quapaw Tribe, from either Picher or another downstream community, what kinds of government response would satisfy you? What would be required to achieve environmental justice?

ACTIVITIES

1. Environmental justice free association activity¹

Write the words *environment* and *justice* in large letters up on the white/blackboard or on two pieces of poster paper at the front of the classroom. Ask students to share, one word at a time, what comes to mind when they hear the words *environment*, then *justice*. Their associations may reflect definitions or personal connections. Make sure to capture everything that is said, even conflicting ideas. For example, for the word *environment*, students may share words such as *national park*, *forest*, *backyard*, *climate change*, *dirty*, the river behind our school, outside the city, recycling, clean air, smog, camping trips, or not for me.

¹ Adapted from Pitzer College EJ Lesson Plan (https://www.pitzer.edu/redfordconservancy/wp-content/uploads/sites/6/2015/01/EJ-Lesson-Plan-web.pdf).



Next, ask:

- Is there anything that might be missing from the group brainstorm?
- Are there different kinds of justice that we captured in our brainstorm?
- Has anyone heard of the term environmental justice? Based on what you see on the board, what do you think it could mean?

2. Discussion, journal, or online response

Ask students to take a look at three different definitions of environmental justice. In each of these definitions, what do the authors mean when they use the word *environment* or *environmental*? What about *justice*? Is there anything else they would like to change about or add to the definitions that they see based on their own experience, the class brainstorm, or the debrief of the film?

In the case of *Tar Creek*, what are some of the environmental injustices that we've seen? Who is most impacted by them? What could it look like for the residents of *Tar Creek* to reverse these environmental injustices?

Definition 1

All people and communities have the right to equal environmental protection under the law, and the right to live, work, and play in communities that are safe, healthy, and free of life-threatening conditions.

Definition 2

Simply put, environmental justice demands that everyone (not just the people who can "vote with their feet" and move away from threats or individuals who can afford lawyers, experts, and lobbyists to fight on their behalf) is entitled to equal protection and equal enforcement of our environmental, health, housing, land use, transportation, energy, and civil rights laws and regulations.

Definition 3

Environmental justice is the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies.





Meaningful involvement means:

- People have an opportunity to participate in decisions about activities that may affect their environment and/or health.
- The public can influence the regulatory agency's decision.
- Community concerns will be considered.
- Decision-makers will seek out and facilitate the involvement of those potentially affected.

3. Researching a community

Ask students to research a community that they've called home to explore whether there are any noted cases of environmental injustice or environmental contamination. If it's in the United States, where is the closest Superfund site to this community? What are the demographics near the Superfund site, what is the history of contamination, and what is the status of remediation? What potential health effects could occur because of this environmental contamination? What industries are in the area? Are there any characteristics of the landscape that exacerbate the issue? Students can use the EPA's tool, the EJSCREEN, to gather data? Are there any government reports on the issue? What agencies are involved, and why? Have students consult the EPA's website, local news outlets, websites of environmental NGOs, etc., to explore this environmental justice issue in depth, and ask them to prepare a 5-minute report to share with the class.

SUPPLEMENTAL MATERIAL

Websites

<u>Community Involvement Plan: Tar Creek Superfund Site</u> U.S. Environmental Protection Agency. (2008).

<u>Five-Year Review: Tar Creek Superfund Site, Ottawa County, Oklahoma</u> U.S. Environmental Protection Agency. (2000).

Learn About Lead U.S. Environmental Protection Agency. (n.d.).

<u>Learn the Basics of Hazardous Waste</u> U.S. Environmental Protection Agency. (2017).

<u>Tar Creek (Ottawa County): Cleanup Activities</u> U.S. Environmental Protection Agency. (n.d.).

<u>Tribal Leadership, Historic Preservation and Green Remediation: The Catholic 40 Cleanup Project in Northeast Oklahoma</u> U.S. Environmental Protection Agency. (2015).





What is Superfund? U.S. Environmental Protection Agency. (n.d.).

Videos

Is East Chicago the Next Flint? The Atlantic. (8 min.)

The Lasting Fear of Flint's Water Crisis The New Yorker. (6 min).

Peer-Reviewed Research and Literature

Higgins-Freese, Jonna and Jeff Tomhave. "Race, Sacrifice, and Native Lands." *EarthLight Magazine*. (2002).

Hooks, Gregory and Chad L. Smith. "The Treadmill of Destruction: Sacrifice Areas and Native Americans." *American Sociological Review*. Vol. 69, 4: 558-575. (2004).

Hu, Howard, James Shine, and Robert O. Wright. "The Challenge Posed to Children's Health by Mixtures of Toxic Waste: The Tar Creek Superfund Site as a Case Study." *Pediatric Clinics of North America*. Vol. 54, 1: 155-175. (2007).

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Malcoe, L.H., R.A. Lynch, M.C. Kegler, and V.J. Skaggs. "Lead Sources, Behaviors, and Socioeconomic Factors in Relation to Blood Lead of Native American and White Children: A Community-Based Assessment of a Former Mining Area." *Environmental Health Perspectives* 110, 2: 221-231. (2002).

Nairn, Robert. <u>Remediation of the Tar Creek Superfund Site: An Update</u> *Journal of the American Society of Mining and Reclamation.* (2002).

Nairn, R., Beisel, T., Thomas, R.C., LaBar, J., Strevett, K.A., Fuller, D., Knox, R.C. (2009). Challenges in design and construction of a large multi-cell passive treatment system for ferruginous lead-zinc mine waters 26th Annual Meetings of the American Society of Mining and Reclamation and 11th Billings Land Reclamation Symposium 2009 (Vol. 2). (2009).

Neuberger, John S., Stephen C. Hu, K. David Drake, and Rebecca Jim. "Potential health impacts of heavy-metal exposure at the Tar Creek Superfund site, Ottawa County, Oklahoma." *Environmental Geochemistry and Health* 31, 1: 47-59. (2009).

The Results of Mining at Tar Creek: Environmental Case Study by NRE 492 Group 5 (2003).

Tinker, George E. "An American Indian Theological Response to Ecojustice." Journal for the Study of Religion, Nature and Culture. 2(1):85-109. (2007). Weaver, Jace, ed. Defending Mother Earth: Native American Perspectives on Environmental Justice. Orbis: Maryknoll, 166-167. (1996).

Written Media

<u>In Flint, Mich., there's so much lead in children's blood that a state of emergency is declared</u> (*The Washington Post*)

Last Residents of Picher, Oklahoma, Won't Give Up the Ghost (Town)

<u>Picher, Oklahoma: Toxic Town</u> *Green Criminology*. Lynch, Michael J. (2014).

<u>Politico got it wrong on Tar Creek</u> *The Joplin Globe*. Berrey, John. (2017).

<u>Take a Tour of America's Most Toxic Town</u> *Wired magazine.* Paynter, Ben. (2010).

<u>The Environmental Scandal in Scott Pruitt's Backyard</u> *Politico*. Brunley, M. (2017).

The "Horrifying" Consequence of Lead Poisoning (The Atlantic)

The Long, Ugly History of the Politics of Lead Poisoning (CityLab)

<u>The Tragedy of Tar Creek</u> *Time magazine*. Roosevelt, Margot. (2004).

