

The Impact of Coal on Our Lives

Acting Governor Earl Ray Tomblin has encouraged the public to “show the EPA how coal impacts our lives, and the lives of our fellow countrymen.”

The impact of coal on *our* lives includes serious negative effects on human health, blasting damage, stream contamination, increased risk of flooding, disbandment of long-standing communities, and the destruction of our cultural heritage. We have listed just *some* of these impacts just below. Below the list are resources, with links to studies, books, testimonials and more.

Impacts of Mountaintop Removal / Valley Fill Mining:

Poisoning waterways and harming human health
Blasting damage to homes
Communities driven to extinction
Deforestation
Destruction of valuable ecosystem services
Increased flooding
Loss of heritage and culture

Some Other Impacts of the Coal-Use Cycle:

Acid mine drainage and acid rain
Asthma
Coal ash (power plant waste) poisoning water and harming human health
Coal dust causing health problems for residents
Coal sludge impoundments endangering communities
Coal slurry injections poisoning water and harming human health
Dangerous traffic and roads
Decreased quality of life for children
Disillusionment of citizens with the democratic process
Loss of Wildlife Habitat
Mercury poisoning water ways and harming unborn children and human health
Subsidence of homes, farmland, streams, lakes and sometimes roads due to longwall mining
Subsidies and tax breaks costing taxpayers billions of dollars

Resources regarding impacts of mountaintop removal and the coal-use cycle

Mountaintop removal / valley fill coal mining poisoning waterways and harming human health

- Shirley Stewart Burns, *Bringing Down the Mountains: the Impact of Mountaintop Removal on Southern West Virginia Communities*, WVU Press (2007).
- Environmental Protection Agency, “Final Decision of the Environmental Protection Agency Pursuant to Section 404(c) of the Clean Water Act Concerning the Spruce No 1 Mine, Logan County, WV” <http://wvgazette.com/static/coal%20tattoo/sprucefinalveto.pdf>
- Osha, Jen, “Power-Knowledge to Move Mountains: Subaltern Discourses of MTR in Coal River Valley, WV,” Dissertation, WVU, (2010) <http://hdl.handle.net/10450/11747>

- Palmer, M., Bernhardt, E., Schlesinger, W., Eshleman, K., Foufoula-Georgius, E., Hendryx, M., Lemly, A., Likens, G., Loucks, O., Power, M., White, P., and P. Wilcock. 2010. "Mountaintop Mining Consequences." *Science* 8 January 2010: Vol. 327. no. 5962.
- "EPA Petitioned to Revoke West Virginia's Clean Water Authority," http://www.appalachian-center.org/media/2009/06_22.html

Blasting damage from mountaintop removal

- Aurora Lights. 2009. "A Community and Strip-Mining: Map," Journey Up Coal River. http://auroralights.org/map_project/theme.php?theme=crm&article=4.
- Shirley Stewart Burns, *Bringing Down the Mountains: the Impact of Mountaintop Removal on Southern West Virginia Communities*, WVU Press (2007).
- Osha, Jen, "Power-Knowledge to Move Mountains: Subaltern Discourses of MTR in Coal River Valley, WV," Dissertation, WVU, (2010) <http://hdl.handle.net/10450/11747>
- OVEC. 2004. "The Social and Cultural Effects of Mountaintop Removal / Valley Fill Coal Mining." Comments on the Draft EIS on MTR/VF.
- Carol Warren. "Like Walking onto Another Planet: Stories about the TRUE Impacts of Mountaintop Removal Coal Mining," http://www.ohvec.org/issues/mountaintop_removal/misc/ovec_mtrbooklet.pdf
- OVEC, "Mountaintops Do Not Grow Back: Stories of Living in the Midst of Mountaintop Removal Strip Mining." http://www.ohvec.org/issues/mountaintop_removal/misc/mountaintops_do_not_grow_back.pdf

Communities driven to extinction by mountaintop removal

- Aurora Lights. 2009. "A Community and Strip-Mining," Journey Up Coal River. http://auroralights.org/map_project/theme.php?theme=crm&article=4. Accessed 1/17/11.
- Shirley Stewart Burns, *Bringing Down the Mountains: the Impact of Mountaintop Removal on Southern West Virginia Communities*, WVU Press (2007).
- Hufford, Mary. "Weathering the Storm: Cultural Survival in an Appalachian Valley." In Ayers et al. *An Appalachian Tragedy: Air Pollution and Tree Death in the Eastern United States*
- Loeb, Penny. 2003. "The Coalfield Communities of Southern West Virginia." <http://www.wvcoalfield.com/>
- Osha, Jen, "Power-Knowledge to Move Mountains: Subaltern Discourses of MTR in Coal River Valley, WV," Dissertation, WVU, (2010) <http://hdl.handle.net/10450/11747>

Deforestation from mountaintop removal

- Bundy, Jennifer. 1998. "Forestry Chief Resigns Over Mining," <http://www.wvgazette.com/static/series/mining/MINE1101.html>
- Shirley Stewart Burns, *Bringing Down the Mountains: the Impact of Mountaintop Removal on Southern West Virginia Communities*, WVU Press (2007).
- Hufford, Mary. "Stalking the Mother Forest: Voices Beneath the Canopy." *Tending the Commons: Folklife and Landscape in Southern West Virginia*. <http://memory.loc.gov/ammem/collections/tending/essay3a.html>
- Loucks, O. 2005. "Mine Reclamation leaves grass but no employment," *Charleston Gazette*, April 18. http://www.ohvec.org/links/news/archive/2005/fair_use/04_18.html
- Osha, Jen, "Power-Knowledge to Move Mountains: Subaltern Discourses of MTR in Coal

- River Valley, WV,” Dissertation, WVU, (2010) <http://hdl.handle.net/10450/11747>
- Palmer, M., Bernhardt, E., Schlesinger, W., Eshleman, K., Foufoula-Georgius, E., Hendryx, M., Lemly, A., Likens, G., Loucks, O., Power, M., White, P., and P. Wilcock. 2010. “Mountaintop Mining Consequences.” *Science* 8 January 2010: Vol. 327. no. 5962.
- US EPA. “Programmatic Environmental Impact Statement on impacts of mountaintop mining and valley fills.” <http://www.epa.gov/Region3/mtntop/#eis>

Destruction of valuable ecosystem services from mountaintop removal

- Shirley Stewart Burns, *Bringing Down the Mountains: the Impact of Mountaintop Removal on Southern West Virginia Communities*, WVU Press (2007).
- Costanza et al. “The Value of the World’s Ecosystem Services and Natural Capital.” <http://www.ecy.wa.gov/PROGRAMS/wr/hq/pdf/naturepaper.pdf>
- Hufford, Mary. “Tending the Commons: Ramp Patches, Ramp Suppers and the Integrity of ‘The Mountains’” *Tending the Commons: Folklife and Landscape in Southern West Virginia* <http://memory.loc.gov/ammem/collections/tending/essay4a.html>
- Hufford, Mary. “American Ginseng and the Idea of the Commons.” *Tending the Commons: Folklife and Landscape in Southern West Virginia* <http://memory.loc.gov/ammem/collections/tending/essay1a.html>
- Meyer, J.L., D. L. Strayer, J. B. Wallace, S. L. Eggert, G. S. Helfman, and N.E. Leonard. 2007. The contribution of headwater streams to biodiversity in river networks. *K. American Water Resources Association* 43: 86-103.
- “Valuing Ecosystem Services.” <http://www.wri.org/publication/content/8381>

Increased flooding from mountaintop removal and valley fills

- Shirley Stewart Burns, *Bringing Down the Mountains: the Impact of Mountaintop Removal on Southern West Virginia Communities*, WVU Press (2007).
- Ferrari, J., Lookingbill, T., McCormick, B., Townsend, P., and K. N. Eshleman. “Surface mining and reclamation effects on flood response of watersheds in the central Appalachian Plateau region.” *Water Resources Research*, Vol. 45. W04407.
- Loeb, Penny. 2003. “The Coalfield Communities of Southern West Virginia.” <http://www.wvcoalfield.com/>
- McCormick, B. C., Eshleman, K. N., Griffith, J.L., and P. A. Townsend. 2009. “Detection of flooding responses at the river basin scale enhanced by land use change.” *Water Resources Research*, Vol 45, W08401.
- Negley, T. and K. Eshleman. 2006. “Comparison of stormflow responses of surface-mined and forested watersheds in the Appalachian Mountains, USA.” *Hydrological Processes*. Vol. 20,16, published Online: 3 Apr 2006.
- Osha, Jen, “Power-Knowledge to Move Mountains: Subaltern Discourses of MTR in Coal River Valley, WV,” Dissertation, WVU, (2010) <http://hdl.handle.net/10450/11747>

Loss of heritage / culture from mountaintop removal

- Aurora Lights. 2009. “Community Land Use in Coal River Valley,” Journey Up Coal River. http://auroralights.org/map_project/theme.php?theme=crm&article=4. Accessed 1/17/11.

- Shirley Stewart Burns, *Bringing Down the Mountains: the Impact of Mountaintop Removal on Southern West Virginia Communities*, WVU Press (2007).
- Hufford, Mary. 1998. "Weathering the Storm: Cultural Survival in an Appalachian Valley." In *An Appalachian Tragedy: Air Pollution and Tree Death in the Eastern Forests of North America*, ed. Harvard Ayers, Jenny Hager, Charles Little. San Francisco: Sierra Books.
- Hufford, Mary. 2002. "Reclaiming the Commons: Narratives of Progress, Preservation, and Ginseng." In *Culture, Environment and Conservation in the Appalachian South*, ed. Benita Howell. Urbana: University of Illinois Press.
<http://www.sas.upenn.edu/folklore/faculty/mhufford/ReclaimingtheCommons.pdf>
- Osha, Jen, "Power-Knowledge to Move Mountains: Subaltern Discourses of MTR in Coal River Valley, WV," Dissertation, WVU, (2010) <http://hdl.handle.net/10450/11747>
- OVEC. 2004. "The Social and Cultural Effects of Mountaintop Removal / Valley Fill Coal Mining." Comments on the Draft EIS on MTR/VF.
http://www.ohvec.org/issues/mountaintop_removal/articles/EIS_social_cultural.pdf
- http://www.ohvec.org/issues/mountaintop_removal/articles/EIS_mary.pdf

Some Other Impacts of the Coal-Use Cycle:

Health impacts

- Shirley Stewart Burns, *Bringing Down the Mountains: the Impact of Mountaintop Removal on Southern West Virginia Communities*, WVU Press (2007).
- Duhigg, C. "Clean Water Laws are Neglected, at a Cost in Suffering" The New York Times online (accessed 4/8/2009).
- Michael Hendryx and Melissa M. Ahern, "Mortality in Appalachian Coal Mining Regions: The Value of Statistical Life Lost," *Public Health Reports*, 124 (2009): 541-550.
- Michael Hendryx and Melissa Ahern, "Relations between health indicators and residential proximity to coal mining in West Virginia," *Am J Public Health*. 2008, 98(4):669-71. Epub 2008 Feb 28.
- Michael Hendryx, Melissa Ahern, and Timothy Nurkiewicz, "Hospitalization Patterns Associated with Appalachian Coal Mining," *Journal of Toxicology and Environmental Health*, Part A, 70 (2007): 2064–2070.
- Michael Hendryx, "Mortality Rates in Appalachian Coal Mining Counties: 24 Years Behind the Nation," *Environmental Justice*, March 2008, 1(1): 5-11.
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- Hendryx, M., Fedorko, E., and Anesetti-Rothermel, A. 2010. "A GIS Analysis of Cancer Mortality and Population Exposure to Coal Mining Activities in West Virginia." *Geospatial Health*, Volume 4 (2).
- Nathaniel P. Hitt and Michael Hendryx, "Ecological Integrity of Streams Related to Human Cancer," *EcoHealth*, 7 (2010): 91-104.
- Palmer, M., Bernhardt, E., Schlesinger, W., Eshleman, K., Foufoula-Georgius, E., Hendryx, M., Lemly, A., Likens, G., Loucks, O., Power, M., White, P., and P. Wilcock. 2010. "Mountaintop Mining Consequences." *Science* 8 January 2010: Vol. 327. no. 5962.
- "Studies Link Poor Health to Mining Practices but Little is Being Done."

[owned.org/reports/health_in_coalfields.pdf](http://www.owned.org/reports/health_in_coalfields.pdf)

Acid mine drainage

- Alan T. Herlihy, Philip R. Kaufmann, Mark E. Mitch and Douglas D. Brown. Regional estimates of acid mine drainage impact on streams in the mid-atlantic and Southeastern United States. *Water, Air, & Soil Pollution*, Volume 50, Numbers 1-2, 91-107, 1990.
<http://www.springerlink.com/content/bg2w577882921629/>
- US EPA. “Acid Mine Drainage.” http://water.epa.gov/polwaste/nps/acid_mne.cfm

Acid mine pools

- Hopye, Dan. 2003. “Crisis looms as flooded mines discharge acid water into Monongahela.”
<http://www.post-gazette.com/healthscience/20030210mineacid0210p2.asp>

Acid rain

- US EPA. “Acid Rain.” <http://www.epa.gov/acidrain/index.html>

Asthma

- Cohen et al. “Asthma and air pollution from a coal-fueled power plant.” *Am J Public Health*. 1972 September; 62(9): 1181–1188. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1530525/>
- SourceWatch. “Air pollution from coal-fired power plants.”
http://www.sourcewatch.org/index.php?title=Air_pollution_from_coal-fired_power_plants

Coal ash (power plant waste) poisoning water and harming human health

- Stant, Jeff. 2010. “In Harm’s Way: lack of Federal Coal Ash Regulations Endangers Americans and their Environment,” Environmental Integrity Project, Earthjustice and Sierra Club, August 26, 2010.
- Stant, Jeff. 2010. “Out of Control: Mounting Damages from Coal Ash Waste Sites.”
http://www.environmentalintegrity.org/news_reports/documents/OutofControl-MountingDamagesFromCoalAshWasteSites.pdf
- Dewan, Shaila. “Tennessee Ash Flood Larger Than Initial Estimate.” *The New York Times*.
<http://www.nytimes.com/2008/12/27/us/27sludge.html?>
- US EPA. 2009. “TVA Kingston Fly Ash Release, Lab Analytical Results for Surface Water Samples,” January 1, 2009.
- US EPA. 2007. “Coal Combustion Waste Damage Case Assessments”, July 9, 2007.

Coal dust causing health problems for residents

- Aneja, Viney P. 2009. “Characterization of Particulate Matter (PM10) in Roda, Virginia,” Department of Marine, Earth, and Atmospheric Sciences, North Carolina State University, Raleigh, NC.

Coal sludge impoundments endangering communities

- Shirley Stewart Burns, *Bringing Down the Mountains: the Impact of Mountaintop Removal on Southern West Virginia Communities*, WVU Press (2007).
- Osha, Jen, “Power-Knowledge to Move Mountains: Subaltern Discourses of MTR in Coal River Valley, WV,” Dissertation, WVU, (2010) <http://hdl.handle.net/10450/11747>
- SSP. “Why Worry About Sludge Impoundments?”

http://www.sludgesafety.org/what_me_worry/

Coal slurry injections poisoning water and harming human health

- Shirley Stewart Burns, *Bringing Down the Mountains: the Impact of Mountaintop Removal on Southern West Virginia Communities*, WVU Press (2007).
- The Sludge Safety Project, www.sludgesafety.org
- SSP. "What is Underground Slurry Injection?"
http://www.sludgesafety.org/coal_slurry_inj.html

Dangerous Traffic and Roads

- Shirley Stewart Burns, *Bringing Down the Mountains: the Impact of Mountaintop Removal on Southern West Virginia Communities*, WVU Press (2007).
- Osha, Jen, "Power-Knowledge to Move Mountains: Subaltern Discourses of MTR in Coal River Valley, WV," Dissertation, WVU, (2010) <http://hdl.handle.net/10450/11747>
- OVEC. Stop Overweight Coal Trucks.
http://www.ohvec.org/issues/overweight_coal_trucks/index.html

Decreased quality of life for children

Osha, Jen, "Power-Knowledge to Move Mountains: Subaltern Discourses of MTR in Coal River Valley, WV," Dissertation, WVU, (2010) <http://hdl.handle.net/10450/11747>

Disillusionment of citizens with the democratic process

- Shirley Stewart Burns, *Bringing Down the Mountains: the Impact of Mountaintop Removal on Southern West Virginia Communities*, WVU Press (2007).
- Johanna Marie Hass, 2008. "Law and Property in the Mountains: A Political Economy of Resource Land in the Appalachian Coalfields." Dissertation, The Ohio State University.
- Mary Hufford, *Waging Democracy in the Kingdom of Coal: OVEC and the Struggle for Social and Environmental Justice in the Central Appalachian Coalfields* Center for Folklore and Ethnography, University of Pennsylvania.
http://www.sas.upenn.edu/folklore/center/waging_democracy2.pdf
- Mary Hufford, 2002. "Interrupting the Monologue: Folklore, Ethnography and Critical Regionalism." *Journal of Appalachian Studies* 8: 62-78
<http://www.sas.upenn.edu/folklore/faculty/mhufford/Interrupting.pdf>
- "Studies Link Poor Health to Mining Practices but Little is Being Done." http://www.wvoter-owned.org/reports/health_in_coalfields.pdf
- OVEC. 2004. "The Social and Cultural Effects of Mountaintop Removal / Valley Fill Coal Mining." Comments on the Draft EIS on MTR/VF.
http://www.ohvec.org/issues/mountaintop_removal/articles/EIS_social_cultural.pdf

Loss of Wildlife Habitat

- Shirley Stewart Burns, *Bringing Down the Mountains: the Impact of Mountaintop Removal on Southern West Virginia Communities*, WVU Press (2007).
- Osha, Jen, "Power-Knowledge to Move Mountains: Subaltern Discourses of MTR in Coal River Valley, WV," Dissertation, WVU, (2010) <http://hdl.handle.net/10450/11747>

Mercury poisoning water ways and harming unborn children and human health

- NRDC. "Mercury Contamination in Fish."

<http://www.nrdc.org/health/effects/mercury/sources.asp>

- Clean Air Task Force. “A Clear the Air Report: Casting Doubt.” <http://www.cleartheair.org>

Premature deaths (tens of thousands) each year to coal-fired power plant pollution

- National Research Council, “Hidden Costs of Energy”, 2009:
<http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=12794>

Subsidence of homes, farmland, streams, lakes and sometimes roads due to longwall mining

- SourceWatch. “Longwall Mining.”
http://www.sourcewatch.org/index.php?title=Longwall_mining

Subsidies and tax breaks costing taxpayers billions of dollars

- Shirley Stewart Burns, *Bringing Down the Mountains: the Impact of Mountaintop Removal on Southern West Virginia Communities*, WVU Press (2007).
- McIlmoil, Rory, Evan Hansen, Ted Boettner, and Paul Miller (2010a) The Impact of Coal on the West Virginia State Budget. Downstream Strategies and West Virginia Center on Budget & Policy. Jun 22.
http://downstreamstrategies.com/Documents/reports_publication/DownstreamStrategies-coalWV.pdf
- McIlmoil, Rory, Evan Hansen, and Ted Boettner (2010b) The Impact of Coal on the Tennessee State Budget. Downstream Strategies and West Virginia Center on Budget & Policy. Jun 22.
http://downstreamstrategies.com/Documents/reports_publication/DownstreamStrategies-coalTN.pdf
- National Research Council. *Hidden Costs of Energy: Unpriced Consequences of Energy Production and Use*. http://www.nap.edu/catalog.php?record_id=12794#toc

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