

# The Effects of Mountaintop Removal On America's...

## Environment

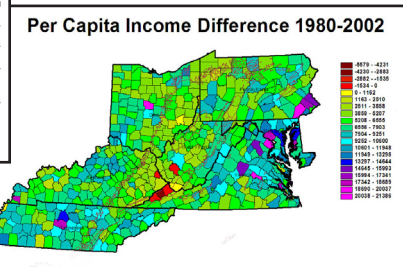
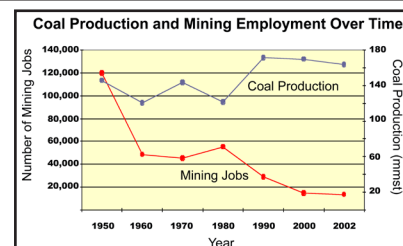
Mountaintop removal is occurring at the headwaters of some of the nation's major river systems such as the Susquehanna, Tennessee and Ohio Rivers. Millions of pounds of heavy metals are being put into the headwaters of these rivers, which provide drinking water for many major cities in the East. According to the EPA's Final Environmental Impact Statement on mountaintop removal and valley fill, more than 7 percent of Appalachian forests have been cut down and more than 1,200 miles of streams across the region have been buried or polluted between 1985 and 2001. The region where all this is happening also provides habitat for the widest variety of plants and animals of anywhere in the world outside of the tropical rainforests



## Economy

Mountaintop removal is a mining technique designed, from the very start, to take the labor force out of the mining operation. According to the bureau of labor statistics, in the early 1950's there were between 125,000 and 145,000 miners employed in West Virginia; in 2004 there were just over 16,000. During that time, coal production increased.

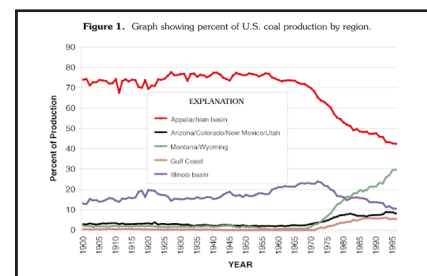
In addition, the coal-bearing counties of Appalachia are some of the poorest in the nation, despite the fact that some of the greatest wealth is being extracted from them.



## Energy Future

According to the EPA, mountaintop removal accounted for less than 5% of US coal production as of 2001. According to a report from the US Geologic Survey in 2000, the Appalachian coal basin will not continue providing coal for much longer anyway. The report states: "Sufficient high-quality, thick, bituminous resources remain in [Appalachian Basin] coal beds and coal zones to last for the next one to two decades at current production."

The report goes on to say that the major Appalachian coal beds "already have peaked in production and the remaining coal is deeper (>1,000 ft), thinner (<3.5 ft), and (or) contains environmentally less desirable medium-to-high ash yields and sulfur contents." In short, we are destroying one of America's national treasures for a small fraction of our energy supply that will last for only a few decades.



## What Can Congress Do?

The Clean Water Act was enacted by Congress to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters," and prohibited the dumping of material into waterways for the purpose of waste disposal. In 2002, the Secretary of the Army changed the definition of "fill material" in order to include mining waste. Since debris from mountaintop removal is no longer considered "waste", coal companies are dumping millions of tons of mine waste into streams.

Representatives Frank Pallone and Christopher Shays introduced a bill that reestablishes the original intent of the Clean Water Act: to protect our waterways, not give industry permission to pollute and bury them. The bill, which as of August, 2006, had 66 co-sponsors is:

### The Clean Water Protection Act (HR 2719)

Please cosponsor this important piece of legislation. For more information, please contact the office of Rep. Frank Pallone or contact Appalachian Voices at 828-262-1500.

## Where to Learn More

The organizations listed below have many resources in regard to mountaintop removal and will be happy to help answer questions upon request.

**Appalachian Voices**  
828-262-1500 [www.appvoices.org](http://www.appvoices.org)

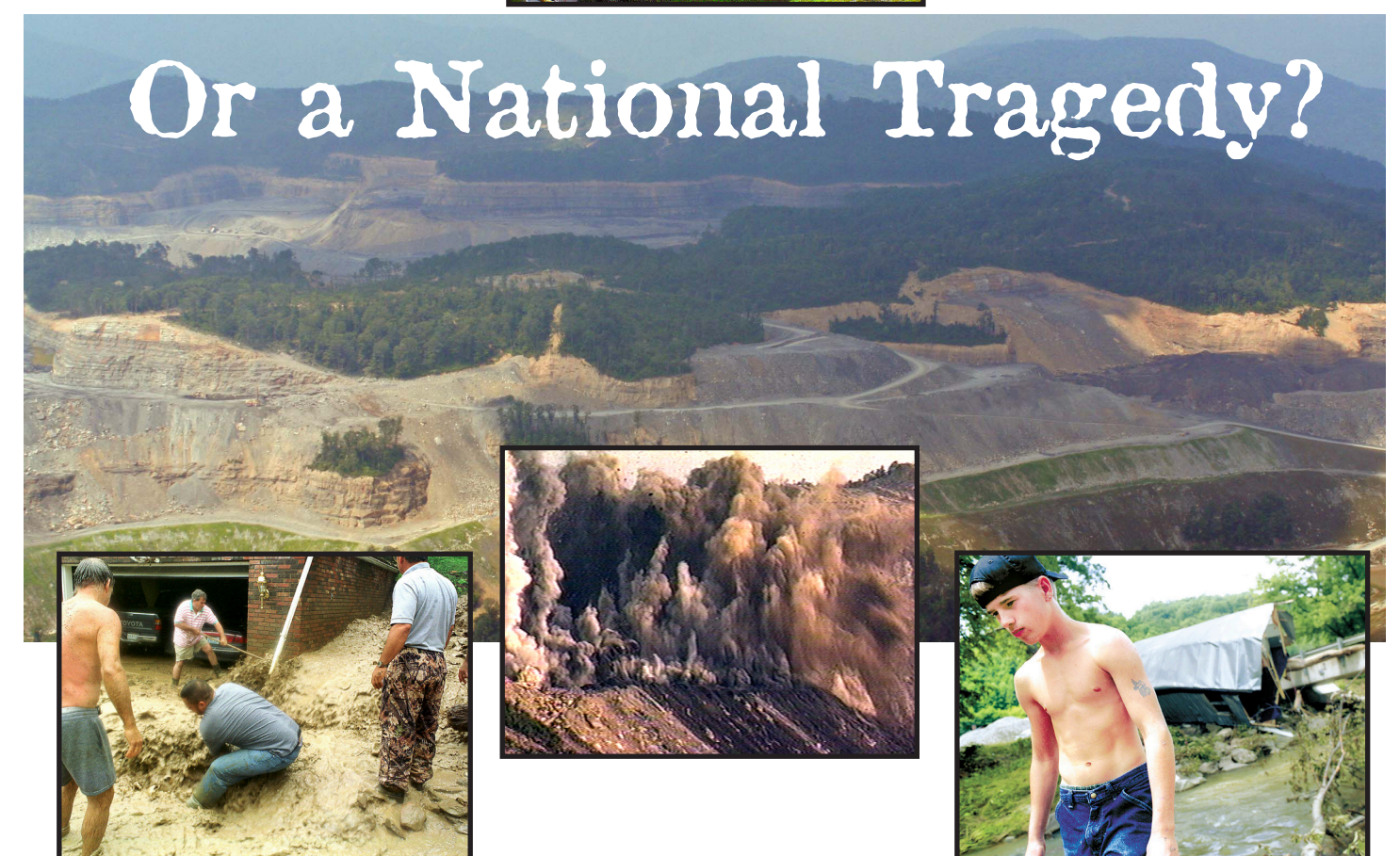
**Christians for the Mountains**  
304-799-4137 [www.christiansforthemountains.org](http://www.christiansforthemountains.org)

**Coal River Mountain Watch**  
304-854-2182 [www.crmw.net](http://www.crmw.net)

**Kentuckians for the Commonwealth**  
606-878-2161 [www.kftc.org](http://www.kftc.org)

**Ohio Valley Environmental Coalition**  
304-522-0246 [www.ohvec.org](http://www.ohvec.org)

**Save our Cumberland Mountains**  
865-426-9455 [www.socm.org](http://www.socm.org)





# What is Mountaintop Removal?



## Clearing

Before mining can begin, all topsoil and vegetation must be removed. Because coal companies frequently are responding to short-term fluctuations in the price of coal, these trees are often not even used commercially in the rush to get the coal, but instead are burned or sometimes illegally dumped into valley fills.

*“One of the greatest acts of physical destruction this country has ever wreaked upon itself.”*

- Vanity Fair, 2006.



## Blasting

Many Appalachian coal seams lie deep below the surface of the mountains. Accessing these seams through surface mining can require the removal of 500-800 feet or more of elevation. Blowing up this much mountain is accomplished by using millions of pounds of explosives.



## Digging

Coal and debris is removed by using this piece of machinery, called a dragline. A dragline stands 22 stories high and can hold 24 compact cars in its bucket. These machines can cost up to \$100 million, but are favored by coal companies because they displace the need for hundreds of jobs.

*“Breaks in coal impoundments can threaten the lives and health of area residents, destroy homes and businesses, and contaminate water supplies.”*

- Senator Robert C. Byrd



## Dumping Waste

The waste from the mining operation, also known as overburden or spoil, is dumped into nearby valleys, burying streams. According to an EPA environmental impact statement, more than 1,000 miles of Appalachian streams were permitted to be buried as of 2001.



## Washing

The coal is washed and treated before it is loaded on trains. The excess water left over from this process is called coal slurry or sludge and is stored in open coal impoundments, like this one. Coal sludge is a mix of water, coal dust, clay and toxic chemicals such as arsenic mercury, lead, copper, and chromium. Impoundments are held in place by mining debris, making them very unstable.



## Reclamation

While reclamation efforts such as stabilization and revegetation are required for mountaintop removal sites, in practice, state agencies that regulate mining are generous with granting waivers to coal companies. Most sites receive little more than a spraying of exotic grass seed.

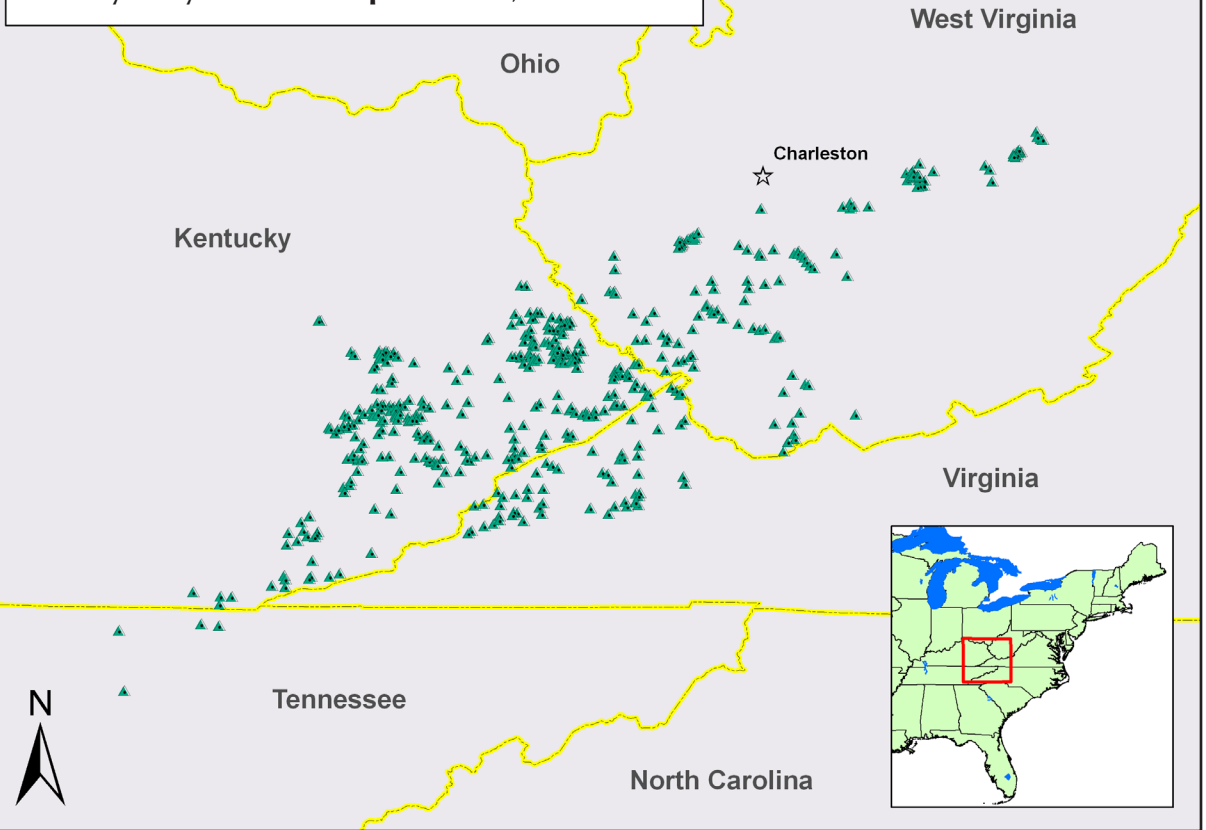
*“Reclamation is like putting lipstick on a corpse.”*

- Author Harry Caudill

# Where Is Mountaintop Removal Happening?

There are currently no federal or state agencies tracking the overall extent or cumulative impacts of mountaintop removal coal mining, and so no maps of the actual extent are currently available. Figures from the multi-agency environmental impact statement that was completed in 2003 estimated that more than 700,000 acres in West Virginia, Virginia, Kentucky and Tennessee had been impacted, but were based on permit maps provided by coal companies. Permit maps, according to studies by the West Virginia Technical Application Geographic Information System, can underestimate the extent of valley fills by as much as 40%. The map below was produced by Appalachian Voices in August of 2006, and identifies more than 450 mountains and summits in Appalachia that have been destroyed by mountaintop removal coal mining (as defined by OSM in their 1985 EIS).

Map of 457 Appalachian Mountains and Summits Destroyed by Mountaintop Removal, ca 2005.



# How Does Mountaintop Removal Affect Families and Communities?



## Flooding

Coalfield residents have long complained about drastic increases in flooding following mountaintop removal operations. The coal industry maintains such

floods are “Acts of God.” Researchers at the university of Kentucky recently concluded: “there is a clear risk of increased flooding (greater runoff production and less surface flow detention) following [mountaintop removal and valley fill] operations.”



## Blasting

Families and communities near mountaintop removal sites are forced to contend with continual blasting from mining operations that can take place up to 300 feet

from their homes and operate 24 hours a day. The impact of blasting not only makes life all but unlivable in nearby homes it also frequently cracks wells and foundations. Blasting can also send boulders flying hundreds of yards into roads and homes.



## Sludge Dams

Sludge dams represent the greatest threat to nearby communities of any of the impacts of coal mining. Impoundments are notoriously leaky, contaminating drink-

ing water supplies in many communities, and are also known to fail completely. A sludge dam breach in Martin County, KY, in 2000, sent more than 300 million gallons of toxic coal sludge into tributaries of the Big Sandy, causing what the EPA called, “The biggest environmental disaster ever east of the Mississippi.”