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Mountaintop Removal Coal Mining Destroys Communities

Mountaintop removal (MTR) coal mining is one of the world's most destructive practices for extracting fossil fuels. This extreme method of strip mining is scarring the landscape and threatening communities. All across Central Appalachia—between the hollows of West Virginia, bordering the Blue Ridge of Virginia, beyond the bluegrass of Kentucky, and above the smoky vistas of Tennessee—companies are tearing down mountains to access the coal below. In the process they are clear-cutting miles of forests, filling the rivers with coal mining waste, polluting the waters with toxic runoff, and sacrificing the safety of the people who call this region home. MTR coal mining sites, which can exceed 10 square miles, have already leveled more than 500 summits so far.

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Instead of extracting the coal from underground, methods, MTR coal mining uses very large explosive charges and machinery to remove the mountain from on top of the coal—often to get at only thin layers of coal beneath. Every day, coal companies blast 2,500 tons of explosives, equivalent to the power of a Hiroshima bomb every week, to blow away Appalachian mountaintops and reach the coal underneath.¹ The blasting damages homes, endangers residents and leaves communities covered in a layer of filthy coal dust. The leftover rubble is dumped into adjoining valleys, and the massive quantities of coal slurry—left over from coal processing

activities—has led to the creation of hundreds of coal waste impoundments littering the Central Appalachian mountains. Some of these sludge ponds contain billions of gallons of slurry, which can threaten both the environment and local communities with catastrophic spills and chronic leakage.

MTR coal mining is harmful to a state's economy as well as its environment. Counties with surface mining (including MTR) are among the poorest in the nation. In West Virginia, for example, surface mining accounts for only 1.2 percent of jobs and brings in just 2.6 percent of the state's total revenues (based on 2002 data).

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MTR Coal Mining Causes Environmental Devastation in Appalachia

In Appalachia, MTR coal mining and its “valley fills” together cause irreparable harm to surface and ground water, wildlife habitat, and natural ecosystems—including some of the most biodiverse temperate forests in the world.

- Between 1985 and 2001, 724 miles of streams across Appalachia were buried by valley fills. In just a 10-year period, 1,200 miles of headwater streams were directly impacted by mountaintop removal.
- Selenium found in coalfield streams below valley fills “can be highly toxic to aquatic life even at relatively low concentrations,” according to the Environmental Protection Agency (EPA).
- In addition to the loss of aquatic life due to valley fills, more than 240 terrestrial species are estimated to be adversely affected by MTR coal mining.

At least 380,000 acres of forests have already been lost—more than 83,000 of those acres covered by valley fills. By 2012, two decades of MTR coal mining will have flattened, stripped, and otherwise despoiled more than 800,000 acres of Appalachian forests.² Current reclamation practices commonly do not restore the land to pre-mining conditions but instead replace native forests with fields of non-native grasses. Over the past 30 years, only a fraction of disturbed land has been reclaimed to even minimum standards.

MTR Coal Mining Threatens the Cumberland Region

The remote forests and river-carved mountains of the Cumberland region, stretching from the mountains of West Virginia and western Virginia south through eastern Kentucky and Tennessee to northern Alabama, support a globally unique diversity of wildlife, including hundreds of plants and animals found nowhere else on the planet. NRDC has named the Cumberland Plateau and the nearby Southern Appalachian mountains the *Greater Cumberland Plateau BioGem*—one of the 12 most biologically outstanding and at-risk regions in the Americas. This region is threatened

by MTR coal mining, which is rapidly leveling the region’s mountain peaks, clear-cutting its forests, and burying its streams.

The lush forests and cool waters of the *Greater Cumberland Plateau BioGem* are among the densest concentrations of endangered species in North America. The region is home to at least 3,000 native plant species—including more than 165 tree species—and nearly 1,000 animal species, hundreds of which are found nowhere else on the planet.

- 231 species of fish swim in Cumberland waterways.
- Natural stands of hardwood trees, including oak, hickory, black walnut, and red maple, shelter red-shouldered hawks and migrating songbirds such as warblers and flycatchers.
- The most diverse salamander population of any temperate region in the world
- Fox, deer, and black bears populate the region.

The area’s rich diversity makes the *Greater Cumberland Plateau BioGem* one of the world’s greatest natural assets. The ecoregions affected by MTR coal mining have been identified by conservation biologists as hosting some of the most globally outstanding concentrations of terrestrial and freshwater habitat for an astoundingly diverse array of flora and fauna. The southeast forests contain more native flora and fauna than anywhere else in North America, and the ecoregion forms the central migration habitat for neotropical songbirds.

These forests also host the major freshwater drainage basins for eastern United States—all of these basins are globally or continentally rich in freshwater species. Indeed, the region hosts literally hundreds of forest and aquatic species, found nowhere else including 21 amphibians, making it one of the most globally outstanding bio-regions on Earth.

To learn how to help NRDC end the most destructive coal mining on Earth, visit www.NoMoreMountaintopRemoval.org



MTR Coal Mining by the Numbers

- **377 million** tons of coal were mined from Appalachia in 2007, about a third of the nation’s total production.
- **50 million** tons of U.S. coal were exported in 2005.

Source: Energy Information Administration.



¹ <http://planetgreen.discovery.com/travel-outdoors/mountaintop-removal-site.html>

² *Federal Programmatic Environmental Impact Statement on Mountaintop Removal Coal Mining*, October 2005.