

Economic Value of East Kentucky Surface Mining

- 6,055 surface miners mining 45.5 million tons in 24 coal counties
- \$354,629,000 in direct wages
- 23,000 trickle down or extra jobs
- \$1.9 billion in gross sales (79.5% exported out of Kentucky)
- \$1.5 billion back to east Kentucky (85 cents on the dollar stays and circulates in east Kentucky)
- \$87 million in severance taxes (\$43 million back to 24 coal counties)

include: highway construction, farming, real estate development, commercial development, and any other human activity which occurs in a stream. While similar to mining, these activities are not subject to the strict environmental safeguards mining has for sediment control.

Stream reconstruction and mitigation

During reclamation, the coal company reconstructs any stream impacted by mining. Reconstructed streams function the same way as the pre-mining streams. The biological function of reconstructed streams continues to im-



Reconstructed stream

prove with time. After many years, it is hard to tell a reconstructed stream from a natural stream.



Reconstruction of a stream

Coal companies are required to conduct mitigation for stream impacts. Mitigation may include rehabilitating an impaired stream, paying an equivalent fee to the Kentucky Department for Fish and Wildlife (so it can conduct stream restoration), or hopefully, providing sewer infrastructure to eliminate raw sewage straight pipe discharges in the coal fields. We're encouraging the Corps of Engineers to allow sewer infrastructure as mitigation.



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COAL COUNTS

Streams and Coal Mining



Reconstructed stream

Coal mining fills

Every method of mining—surface or underground—generates excess rock, which must be placed in an engineered fill.

When the earth above a coal seam is removed during surface mining, it “swells” or expands, typically around 20%. The engineering terminology for excess or left-over rock and dirt is “spoil,” “waste,” or “fill.” The “spoil” and “waste” words may imply something sinister to this left-over material, but it is nothing more than rock and dirt. While the majority of the rock and dirt can be returned to the mining site, many times the coal operator must find areas to place this excess material. These sites are called fills.

Coal companies are required by EPA and the Corps of Engineers to minimize the footprint (or size) of any fill area. Excess rock and dirt must be placed in a permitted and engineered area—typically at the head of a hollow in eastern Kentucky.



Typical valley fill

Where engineered fills impact streams, the water flow is maintained through reconstruction of the stream bed so water flows

around the side of the fills. In addition, sediment ponds are constructed below the fills. Rainwater drains into the sediment pond and the suspended dirt settles to the bottom of the pond. Once the mining is completed and the fill area has been revegetated, the sediment pond is removed as it is no longer needed.

Fills in streams

Because of the definition of a stream, it is practically impossible to have an engineered fill that doesn't impact an intermittent or ephemeral stream, even though engineering



Pre-mining stream

practices try to avoid or minimize this impact. Without the ability to have fills, it would be difficult, if not impossible, to mine coal—surface or underground.



Pre-mining stream

“Burying streams with waste.” When fills are constructed in streams, the stream is always reconstructed. Water still flows just like it did prior to mining. The inference of the stream being “buried” and thus blocking water flow is simply not true. The “waste” is only excess rock and dirt.

While coal mining draws the most attention, there are a number of other activities which have similar stream impacts. These

Did you know?

- Surface owners must give their permission before a coal company can surface mine.
- Surface owners must give their permission for the post-mining reclamation.
- Typically, the first question an operator will hear from an eastern Kentucky surface owner is, “Will you leave me some level land?”
- There is no level land outside the floodplain in Appalachia that hasn't been created by man.
- Only a small percentage, 7%, of the Appalachian coal fields will be impacted by mountaintop mining.
- Reclaimed land is more valuable than non-mined land.