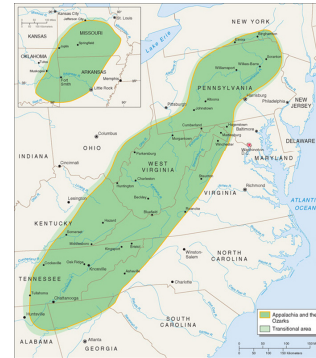


Great Smoky Mountains National Park Tennessee and North Carolina



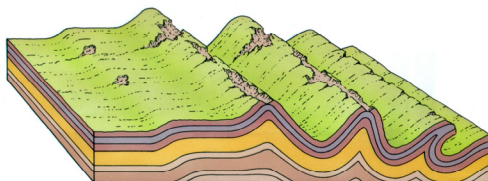
The Appalachians and Ozarks



The Appalachian Mountains

- Ancient folded mountains, once higher than the current Himalayas.
- Region of contrasts: Beauty and pollution; richness and poverty.
- A major source of coal (first revealed by erosion, road cuts and antecedent rivers).
- A landscape impacted by coal mining.
- Federally financed development (TVA and ARC).
- A growing focus on recreation, second homes, and retirement.

Appalachian Images



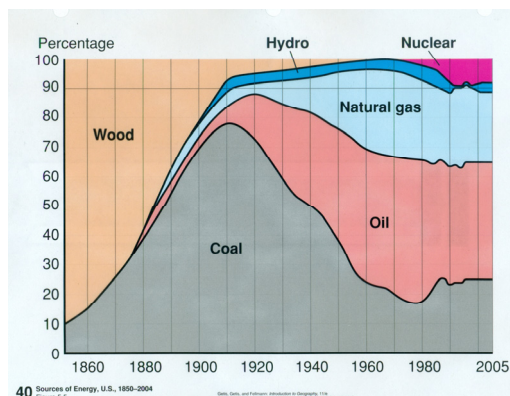
21 Types of Folding
Figure 3.9

Adapted from: Introduction to Geology, 10th Edition, © 2010
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Coal



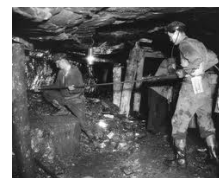
Appalachian Road Cut Western Maryland



Grade of coal

- The relative presence of carbon in a piece of coal (usually stated as a percent) versus waste material (everything else).
- The higher the percent of carbon, the higher the grade.
- The higher the grade, the hotter the coal burns, and the less is the pollution.
- Grades in order of purity (high to low):
 - Anthracite
 - Bituminous
 - Lignite
 - Peat

Coal Miners

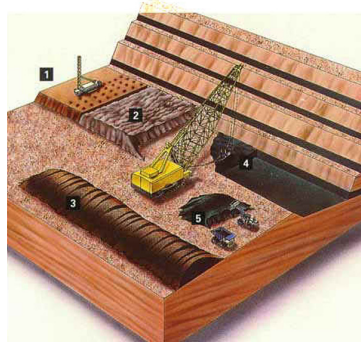


A **strip mine** is a mine at the surface that employs earth-moving machinery that removes (i.e., strips away) overburden so as to expose and provide ready access to minerals that would otherwise be underground.

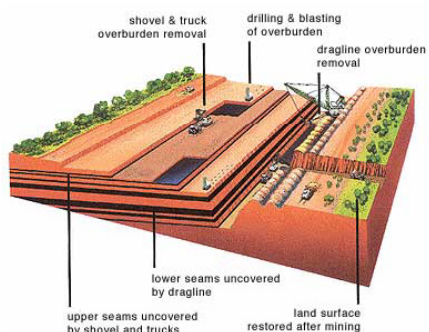
Overburden is unwanted (waste) material overlying useful geological materials.

Mountaintop removal is an extreme form of strip mining that uses extra-large earth-moving machinery capable of excavating entire mountains in order to expose useful underground materials.

Strip Mining Diagram



Strip Mining Diagram



Trends in U.S. Coal Mining 1923-2009

<u>Year</u>	<u># mines</u>	<u># miners</u>	<u>Coal*</u>
1923	9,331	704,793	565
1943	6,620	416,007	590
1963	7,940	141,646	458
1983	3,337	175,642	782
2003	1,316	71,023	1,072
2009	1,406	87,755	1,074

*Million short tons

Source: Nat'l. Mining Assoc.

Mountaintop Removal, WV



Mountaintop Removal, Appalachia



Trends in Coal Production in the U.S.

TABLE 8.1

Bituminous and Lignite Coal Production, Major Mining States, 1947–2002 (in thousands of short tons)

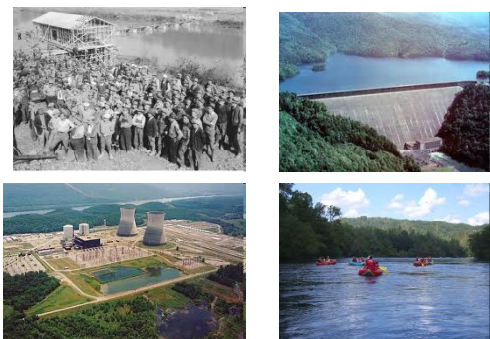
State	1947	1970	1995	2005
<i>Eastern States</i>				
Alabama	19,048	20,560	24,640	21,339
Illinois	67,680	65,119	48,180	32,014
Indiana	25,499	22,363	26,007	34,457
Kentucky	84,241	125,305	151,739	119,734
Ohio	37,548	55,531	26,118	24,718
Pennsylvania	147,079	80,491	58,893	67,494
Virginia	20,171	35,016	34,099	27,743
West Virginia	176,157	144,072	162,199	153,650
<i>Western States</i>				
Colorado	6,358	6,025	25,710	38,510
Montana	3,178	3,477	39,451	40,354
North Dakota	2,760	5,693	30,112	29,956
Texas	—	—	52,648	45,939
Wyoming	8,051	7,222	261,822	404,319
Total United States	630,624	602,932	1,032,974	1,040,227



Tennessee Valley Authority (TVA)

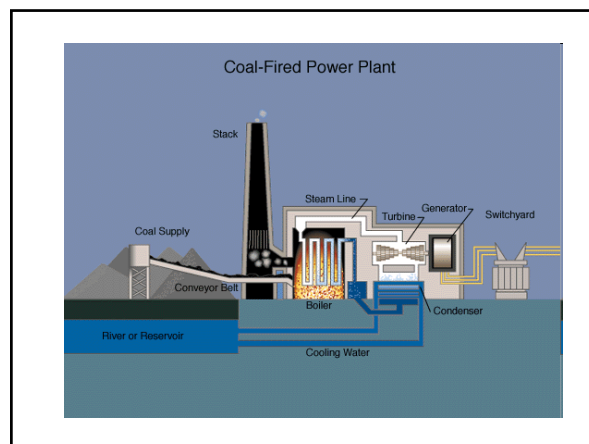
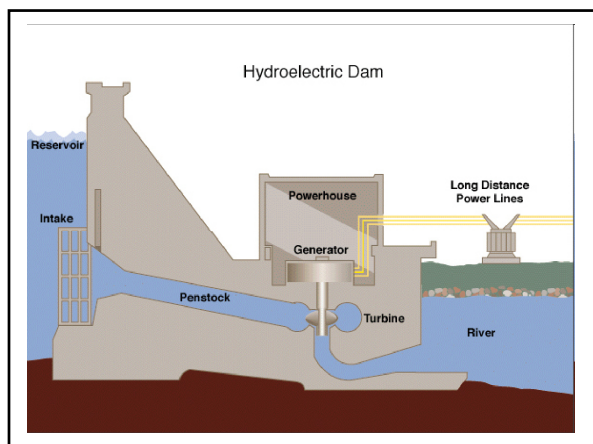
- A federally owned corporation created by congressional charter in 1933 to oversee production of electricity in a 7-state area drained by the Tennessee River and its tributaries.
- Area was particularly hard hit by the Great Depression.
- Several dams were built to facilitate hydropower, navigation, flood control, irrigation, recreation, manufacturing and general economic development.
- More recently, the dams have been complemented by coal-burning and nuclear power plants.
- The area has some of the lowest energy costs in the United States.

TVA Images



Locations of TVA Dams



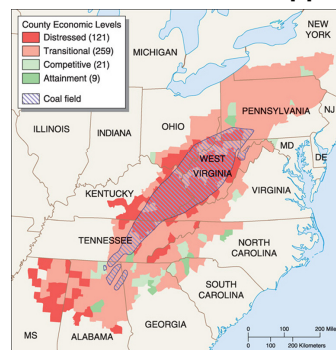


Appalachian Regional Commission

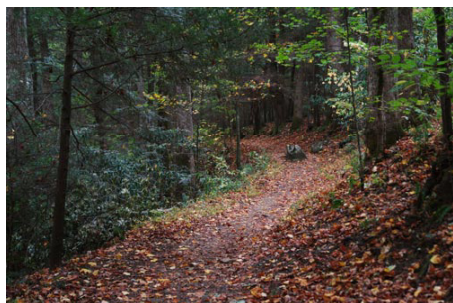


- Created in 1963.
- A federal-state partnership promoting economic development and improved quality of life.
- Pertains to 420 counties in an 8-state area that lagged significantly in income, education, health care and transportation.

Economic conditions in Appalachia



Great Smoky Mountains NP



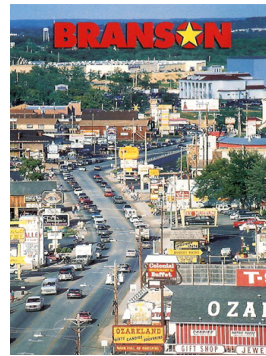
The Appalachian Trail



The Delaware Water Gap



Branson, Missouri



- A small city in SW Missouri known as “the Live Music Show Capital of the World.”
- Specializes in country music.
- Many well-known entertainers have their own theaters.
- Grew from a one-theater town in 1960 to become a major tourist destination.

Routes of Settlement and Cultural Diffusion

