

# Washington

## ONE MINE PRODUCES 95 PERCENT OF THE COAL PRODUCTION

The state of Washington has a federal program that gives the Office of Surface Mining responsibility for assuring the reclamation of lands affected by coal mining.

Most of Washington's coal-bearing regions lie west of the Cascade Mountains. The state's coal reserves are estimated at 1.4 billion tons, about 0.3 percent of the nation's total coal reserve. Steeply dipping mineable seams range from 2.5 to 25 feet in thickness.

The occurrence of coal in Washington has been documented since the early days of settlement. At one time, coal production played a significant role in the state's economy. During the late 1800's and early 1900's, coal was second only to lumber in Washington's industrial production. Coal production declined as other sources of energy were developed. By the late 1950's, annual production had dropped to 200,000 tons.

Regulation of coal mine operations in Washington is conducted by the Office of Surface Mining's Western Regional Coordinating Center and its local office in Olympia, Washington. All permit applications and abandoned mine land reclamation are completed by the Office of Surface Mining Western Regional Coordinating Center in Denver, Colorado. Inspections of mine and reclamation sites are conducted by Office of Surface Mining reclamation specialists located in Olympia.

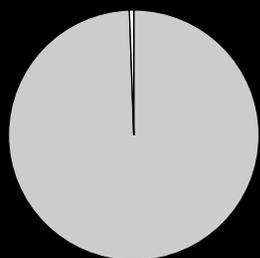
Since 1977, the Office of Surface Mining has eliminated 39 emergencies in Washington at a cost of over \$1.3 million. Subsidence and shaft closures accounted for 33 of those projects.

The Office of Surface Mining has also completed 38 non-emergency projects costing \$3.4 million. The majority of those projects involved the closure of abandoned mine shafts and portals, and subsidence stabilization.

Currently there is over \$4 million of high priority Abandoned Mine Land work on the inventory. These remaining reclamation projects include primarily portals, vertical openings, subsidence and highwall hazards.

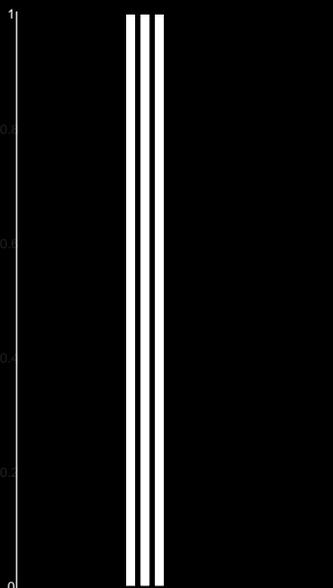
## coal production<sup>10</sup>

	1978		1997		1978-1997 Rank
	Amount	Percent U.S. Total	Amount	Percent U.S. Total	
<b>Tons Produced</b>					
Surface	3,798,450	1.5%	4,179,134	0.7%	14
Underground	0	0%	0	0%	0
Lignite	0	0%	0	0%	0
<b>Total</b>	<b>3,798,450</b>	<b>0.9%</b>	<b>4,179,134</b>	<b>0.3%</b>	<b>18</b>
<b>Number of Producing Mines</b>					
Surface (bituminous coal)	3	0.09%	2	0.08%	21
Underground	0	0%	0	0%	0
Lignite (surface)	0	0%	0	0%	0
<b>Total</b>	<b>3</b>	<b>0.05%</b>	<b>2</b>	<b>0.04%</b>	<b>24</b>
<b>Mine Production</b>					
Average	1,266,150	1,781.8%	2,089,567	794.0%	
>1,000,000 tons	1	2.0%	1	0.4%	
300,000-1,000,000 tons	0	0%	0	0%	
<300,000 tons	2	0.03%	1	0.02%	



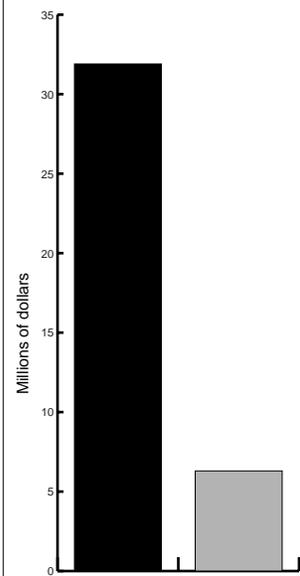
Production tonnage 1978-1997

■ U.S. Total  
■ Washington Coal Production



Number of new permits 1978-1997

■ Interim Program  
■ Permanent Program



■ Amount paid into the AML Fund<sup>11</sup>  
\$ 31,900,578  
■ Amount received for reclamation<sup>12</sup>  
\$ 0 (Federal Program State)  
■ State share balance in the Fund<sup>13</sup>  
\$ 0 (Federal Program State)  
■ Federal abandoned mine projects<sup>14</sup>  
\$ 6,368,479  
■ RAMP abandoned mine projects<sup>15</sup>  
\$ 0

# Active mining and reclamation<sup>16</sup>

	1978	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	Total
<b>Number of New Permits</b>																					
Surface Mining	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
Underground Mining	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
<b>Acreage Permitted</b>																					
Surface Mining	0	0	0	0	0	0	0	14,160	422	12	0	0	0	0	0	0	0	0	0	0	14,594
Underground Mining	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Acreage of Bond Release</b>																					
Interim Prog. (final)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	16
<b>Inspections</b>																					
Complete	MA	MA	MA	MA	2	6	35	36	34	49	50	48	33	NA	NA	NA	NA	36	14	3	346
Partial	NA	NA	NA	NA	1	19	12	2	4	3	2	4	13	NA	NA	NA	NA	0	16	14	90
Oversight	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Citations Issued</b>																					
NOV's	NA	NA	NA	NA	1	3	5	3	1	3	1	0	2	3	NA	NA	1	0	0	1	24
CO's	NA	NA	NA	NA	0	0	3	1	2	0	0	0	0	0	NA	NA	0	0	0	0	6

# Abandoned coal mine reclamation 1977-1997<sup>17</sup>

	Reclaimed Problems			Remaining Problems	
	OSM Emergency	State Emergency	Non-Emergency	Number	Estimated Cost
<b>Priority 1 &amp; 2 (Protection of Public Health, Safety, and General Welfare) and Emergency Projects</b>					
Clogged Streams (miles)	0	0	0	0.5	\$ 5,000
Clogged Stream Lands (acres)	0	0	0	5.0	8,000
Highwalls (feet)	0	0	0	15,400.0	1,100,000
Impoundments (count)	0	0	0	2.0	10,000
Piles & Embankments (acres)	0	0	3.0	2.0	4,850
Slides (acres)	.9	0	0	1.5	103,500
Gases (count)	0	0	0	1.0	50,000
Equipment & Facilities (count)	0	0	4.0	19.0	139,000
Water Bodies (count)	0	0	0	0	0
Industrial Waste (acres)	0	0	0	3.0	15,000
Portals (count)	4.0	0	24.0	44.0	384,500
Polluted Water: Agriculture & Industrial (count)	0	0	0	0	0
Polluted Water: Human Consumption (count)	0	0	0	0	0
Subsidence (acres)	1.8	0	6.3	32.3	1,567,500
Surface Burning (acres)	0	0	15.0	0	0
Underground Mine Fires (acres)	0	0	0	0	0
Vertical Openings (count)	14.0	0	56.0	74	901,250
<b>Total</b>					<b>\$ 4,288,600</b>
<b>Priority 3 (Environmental Restoration)</b>					
Bench (acres)	0	0	0	0	\$ 0
Industrial Waste (acres)	0	0	0	2.6	10,000
Equipment & Facilities (count)	0	0	0	16.0	64,500
Gob (acres)	0	0	0	8.0	21,300
Highwall (feet)	0	0	0	0	0
Haul Road (acres)	0	0	0	0	0
Mine Opening (count)	0	0	0	0	0
Pit (acres)	0	0	0	0.8	15,000
Spoil Area (acres)	0	0	0	0.5	5,000
Slurry (acres)	0	0	0	0	0
Slump (acres)	0	0	0	2.0	153,200
Water (gallons/minute)	0	0	0	80.5	6,000
<b>Total</b>					<b>\$ 275,000</b>