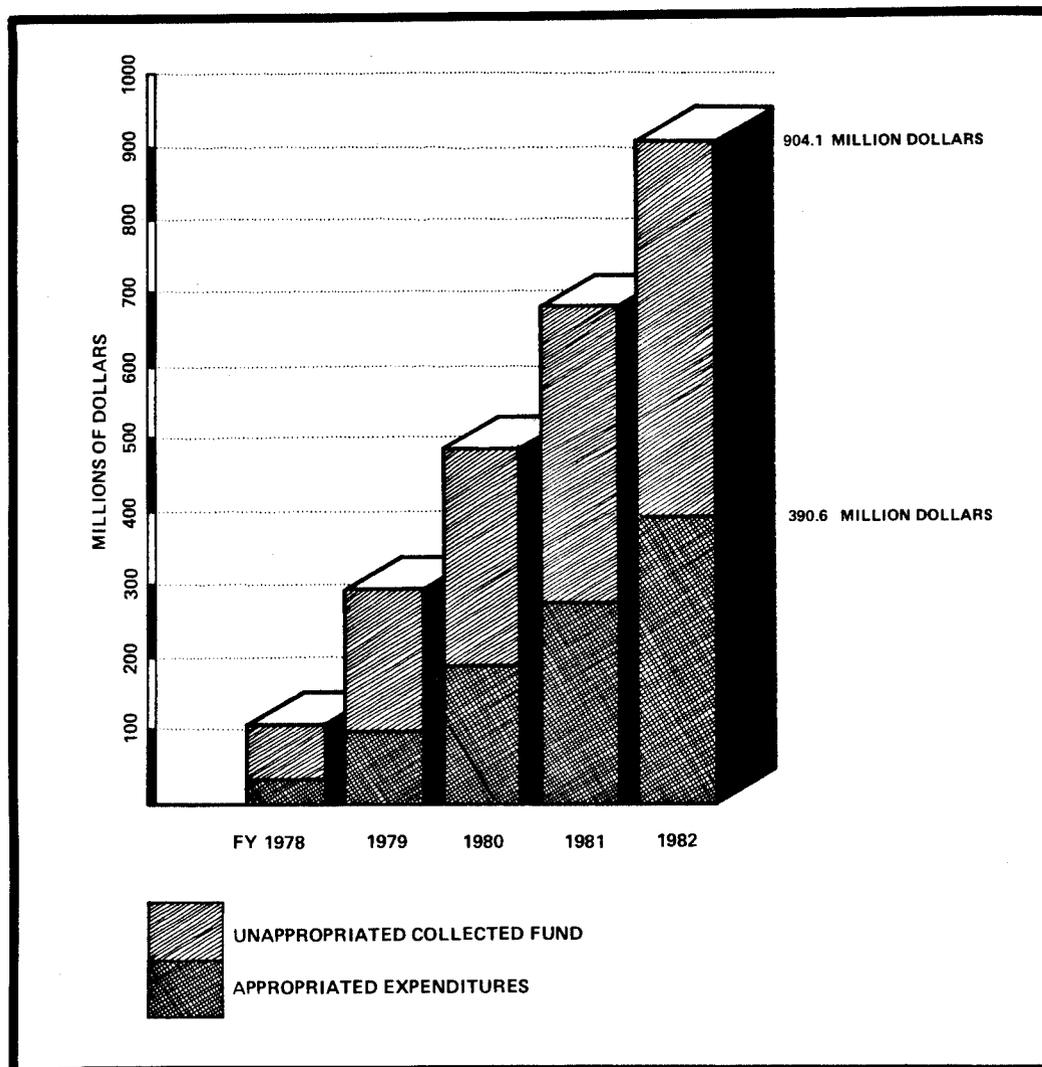


# ABANDONED MINE LANDS

All States with regulatory primacy either have abandoned mine land reclamation (AMLR) programs approved or have indicated intent to seek approval. To minimize delays in the States' implementation of AMLR projects, efforts were made to have the regulatory and AMLR programs processed simultaneously. During FY 1982, 14 State AMLR programs were approved, bringing the total to 18 States with approved AMLR programs. In addition, two States and two Indian tribes submitted their programs for review during FY 1982:

During FY 1982, grant request from 15 States were approved for \$89.5 million dollars. These projects reflected the highest reclamation priorities as required by the Act. In addition, approximately \$28.2 million for Federal construction projects or cooperative agreements with the States for emergency AMLR projects was awarded, \$14.3 million was provided to the Rural Abandoned Mine Program (RAMP), and \$2.2 million was granted to small operators through the small operator assistance program (SOAP).



## **FY 1982 Accomplishments**

On June 30, 1982, in response to the administration's request for regulatory review, OSM published a major revision of the abandoned mine land reclamation (AMLR) program rules. These revised rules removed unnecessary and burdensome regulations and clarified the relationships and responsibilities in implementing a coordinated AMLR program.

Major AMLR policy initiatives undertaken in FY 1982 include:

- making the States the primary delivery mechanism for AMLR. This was accomplished by consolidating the Federal reclamation programs that pertain only to reclamation activities that cannot be efficiently performed at the State level,
- preparing an equitable policy and formula for allocating Federal discretionary reclamation funds,
- giving the States the opportunity to assume responsibility for the emergency reclamation program,
- increasing AMLR fee collection activities in order to gain additional funds for reclamation,
- reorganizing the Office of Surface Mining's grant function to provide more efficient service,
- preparing a programmatic environmental impact statement that will reduce the burden on the States for compliance with the National Environmental Policy Act, and
- developing legislative options to allow the Indian tribes to gain primacy over their surface mining regulatory and abandoned mine land reclamation programs.

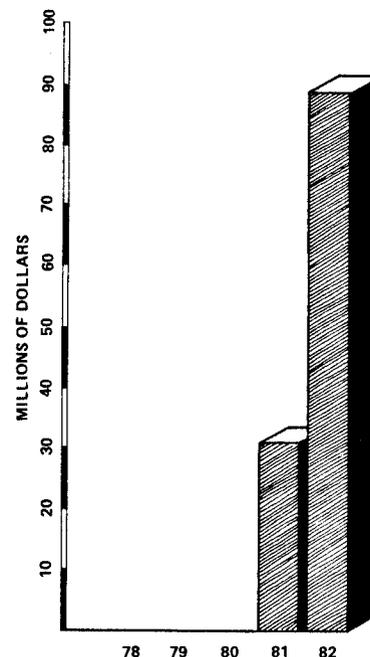
## State And Indian Program Assistance

STATE	PLAN PREPARATION	FIRST ANNUAL SUBMISSION OF PROJECTS	PROGRAM GRANTS FY 82
ALABAMA	\$ 176,300	\$ 300,104	\$ 3,977,002
ARKANSAS	29,769	127,992	---
COLORADO	688,764	447,693	1,180,640
ILLINOIS	130,000	951,754	4,940,689
INDIANA	107,740	650,458	6,699,381
IOWA	7,600	---	---
KANSAS	28,800	121,530*	---
KENTUCKY	466,293	712,367	15,893,953
MARYLAND	---	70,794	576,748
MISSOURI	64,621	253,524	3,545,740
MONTANA	220,047	---	6,772,017
NEW MEXICO	227,905	222,492	803,070
NORTH DAKOTA	250,766	470,963	---
OHIO	341,300	755,830	12,450,284
OKLAHOMA	71,488	205,598	1,588,892
PENNSYLVANIA	259,820		10,859,550
TENNESSEE	146,491	109,485	1,023,751
TEXAS	53,284	---	51,800***
UTAH	192,713*	---	---
VIRGINIA	182,677	1,443,927	7,573,561
WEST VIRGINIA	82,302	1,397,635	10,975,186
WYOMING	897,882	393,782	---
CROW	181,749	560,004	---
HOPI	205,149	114,968*	---
NAVAJO	259,722	---	---
<b>TOTAL</b>	<b>\$5,273,182**</b>	<b>\$9,310,900**</b>	<b>\$88,882,264</b>

\*FY 1982

\*\*CUMULATIVE TOTAL

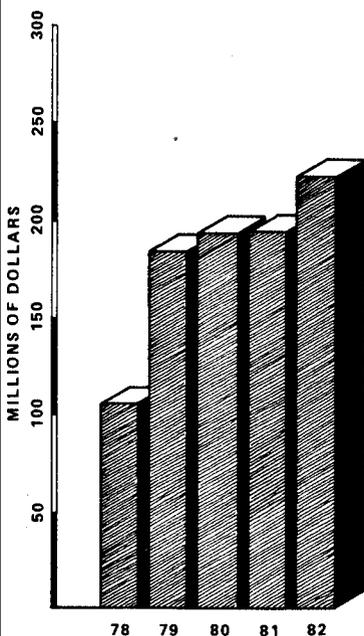
\*\*\*PENDING



FY 1978 - 1982 AML STATE & INDIAN PROGRAM GRANTS

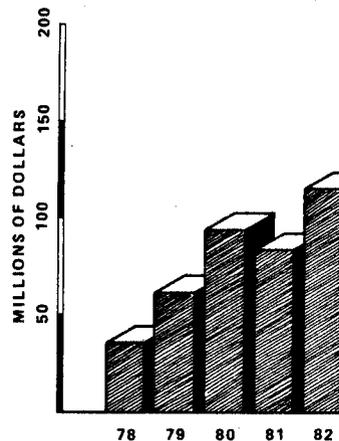
# AML Fund Status

STATE	FEEES COLLECTED (FY 1982)	INTERIOR PROJECTS (FY 1982)	RAMP PROJECTS (FY 1982)
ALABAMA	\$7,665,513	\$936,000	\$365,847
ALASKA	285,627	0	0
ARKANSAS	44,229	0	418,999
COLORADO	5,725,830	227,000	0
GEORGIA	2,414	0	0
ILLINOIS	14,939,399	1,480,000	47,370
INDIANA	11,196,531	292,000	0
IOWA	257,555	0	2,047,990
KANSAS	513,956	690,000	0
KENTUCKY	38,603,653	1,135,000	1,700,061
MARYLAND	1,051,003	0	7,782
MISSOURI	1,894,885	696,000	150,755
MONTANA	9,276,595	0	0
NEW MEXICO	3,037,437	12,000	0
NORTH DAKOTA	1,743,829	339,000	147,421
OHIO	11,590,763	2,182,000	1,415,886
OKLAHOMA	1,970,178	718,000	1,039,495
PENNSYLVANIA	23,498,196	8,971,000	4,274,713
SOUTH DAKOTA	0	0	2,734
TENNESSEE	2,094,171	984,000	2,461
TEXAS	3,511,774	0	10,589
UTAH	2,497,666	0	0
VIRGINIA	7,473,823	1,642,000	0
WASHINGTON	1,632,831	91,000	0
WEST VIRGINIA	26,653,408	2,368,000	2,745,696
WYOMING	36,387,484	484,000	173,703
CROW TRIBE	1,271,515	0	0
HOPI TRIBE	506,889	0	0
NAVAJO TRIBE	7,231,417	0	0
OTHER STATES	0	1,272,000	0
TOTAL	\$222,558,571	\$24,519,000	\$14,551,502



FY 1978-1982 ANNUAL FUND COLLECTION

SOAP EXPENDITURES (FY 1982)	FY 1982 STATE ALLOCATION	REVENUES COLLECTED (FY 78 - 82)	STATE
\$177,313	\$3,832,756	\$27,991,723	ALABAMA
0	142,813	1,275,256	ALASKA
0	22,114	408,860	ARKANSAS
0	2,862,915	23,557,773	COLORADO
129,841	1,207	25,830	GEORGIA
0	7,469,699	63,222,451	ILLINOIS
1,500,000	5,598,265	44,620,702	INDIANA
0	128,777	912,133	IOWA
0	256,978	1,761,439	KANSAS
0	19,301,826	159,331,654	KENTUCKY
0	525,501	4,339,227	MARYLAND
0	947,442	8,986,365	MISSOURI
0	4,638,297	43,103,591	MONTANA
0	1,518,718	15,729,773	NEW MEXICO
0	871,914	7,326,019	NORTH DAKOTA
0	5,795,381	52,613,365	OHIO
0	985,089	8,581,574	OKLAHOMA
0	11,749,098	102,403,680	PENNSYLVANIA
0	0	0	SOUTH DAKOTA
1,428,000	1,047,085	10,549,692	TENNESSEE
0	1,755,887	12,866,388	TEXAS
0	1,248,833	8,630,907	UTAH
34,000	3,736,911	31,188,844	VIRGINIA
0	816,415	7,493,200	WASHINGTON
0	13,326,704	95,737,739	WEST VIRGINIA
0	18,193,742	135,938,823	WYOMING
0	635,757	6,256,469	CROW TRIBE
0	253,444	2,187,174	HOPI TRIBE
0	3,615,708	30,072,156	NAVAJO TRIBE
0	0	0	OTHER STATES
\$3,269,154	\$111,279,292	\$904,190,204	TOTAL



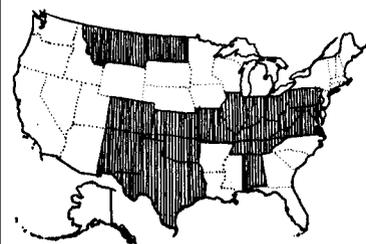
FY 1978-1982 FUND APPROPRIATION

# AML Program Status (As Of Sept. 30, 1982)

STATE	SUBMITTED PROGRAM OR WORK PLAN	SUBMISSION PENDING	APPROVED
ALABAMA			
ALASKA			
ARKANSAS			
COLORADO			
ILLINOIS			
INDIANA			
IOWA			
KANSAS			
KENTUCKY			
MARYLAND			
MISSOURI			
MONTANA			
NEW MEXICO			
NORTH DAKOTA			
OHIO			
OKLAHOMA			
PENNSYLVANIA			
TENNESSEE			
TEXAS			
UTAH			
VIRGINIA			
WEST VIRGINIA			
WYOMING			
CROW TRIBE			
HOPI TRIBE			
NAVAJO TRIBE			
<b>TOTAL</b>	<b>4</b>	<b>4</b>	<b>18</b>



FY 1981 APPROVED PROGRAMS



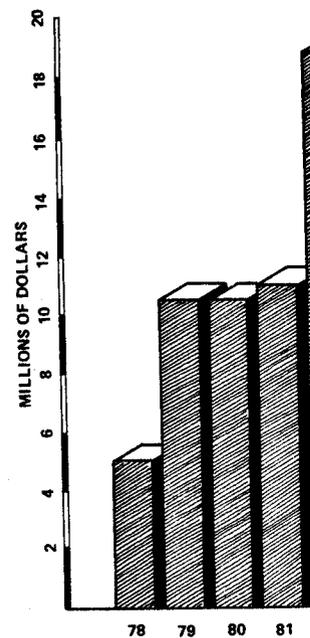
FY 1982 APPROVED PROGRAMS

## Rural Abandoned Mine Program Projects

STATES	FISCAL YEAR 1982			CUMULATIVE TO DATE		
	NUMBER	ACRES	DOLLARS 1/ 2/	NUMBER	ACRES	DOLLARS
ALABAMA	2	37	365,847	32	390	1,767,218
ARKANSAS	1	120	418,999	7	201	1,171,399
ILLINOIS	0	0	47,370	6	31	545,250
INDIANA	0	0	0	30	549	406,738
IOWA	4	306	2,047,990	18	648	3,918,609
KANSAS	0	0	0	1	81	116,782
KENTUCKY	15	416	1,700,061	31	813	3,577,082
MARYLAND	0	0	7,782	5	52	601,746
MISSOURI	0	0	150,755	4	177	926,602
MONTANA	0	0	0	0	0	0
NORTH DAKOTA	0	0	-147,421	5	501	90,395
OHIO	19	233	1,415,886	51	478	4,198,139
OKLAHOMA	3	145	1,039,495	6	353	1,686,347
PENNSYLVANIA	26	357	4,274,713	63	777	8,600,371
SOUTH DAKOTA	0	0	2,734	2	55	198,344
TENNESSEE	0	0	2,461	13	78	265,950
TEXAS	0	0	10,589	19	530	880,418
VIRGINIA	0	0	0	0	0	0
WEST VIRGINIA	4	61	2,745,696	19	122	4,084,583
WYOMING	1	30	173,703	10	330	1,615,129
<b>TOTAL</b>	<b>75</b>	<b>1,705</b>	<b>\$14,551,502</b>	<b>322</b>	<b>6166</b>	<b>\$34,651,102</b>

1/ Includes funds for contract modifications

2/ Includes \$13,251,000 supplemental appropriations



FY 1978 - 1982 RAMP APPROPRIATIONS

# Interior Department Projects

(Completed Or Under  
Contract In FY 1982)

STATE	HIGH PRIORITY		EMERGENCY	
	NO.	DOLLAR AMOUNT	NO.	DOLLAR AMOUNT
ALABAMA	9	\$1,471,464	3	\$478,115
ALASKA	1	73,645		
ARIZONA	---	---	1	380,000
ARKANSAS	1	74,135	---	---
CALIFORNIA	1	603,277	---	---
COLORADO	---		2	233,166
ILLINOIS	12	3,190,103	12	266,194
INDIANA	4	356,000	2	13,468
KANSAS	1	850,000	12	163,450
KENTUCKY	13	10,756,158	8	1,266,006
MARYLAND	1	300,000	---	---
MISSOURI	6	4,944,000	---	---
MONTANA	4	372,472	---	---
NEW MEXICO	5	229,740	3	65,220
NORTH DAKOTA	5	1,306,392	---	---
OHIO	17	7,653,795	8	414,354
OKLAHOMA	4	781,114	1	29,747
PENNSYLVANIA	51	24,341,220	45	9,995,700
TENNESSEE	5	6,041,261	---	---
TEXAS	3	770,050	---	---
VIRGINIA	13	4,458,284	1	6,635
WASHINGTON	---	---	4	90,757
WEST VIRGINIA	10	8,604,381	35	3,529,393
WYOMING	6	680,080	6	84,343
OTHER STATES	5	1,294,933	---	---
<b>TOTAL</b>	<b>177</b>	<b>\$79,152,504</b>	<b>143</b>	<b>\$17,016,548</b>

Secretarial Order No. 3074 dated February 1, 1982, transferred several Bureau of Mines programs to the Office of Surface Mining. Programs transferred to OSM were:

## Functions Transferred To O

- The Bureau of Mines, Mined Land Demonstration Program;
- P.L. 738, Extinguishment of Outcrop and Underground Fires of 1954;
- P.L. 162, Anthracite Mine Drainage Act of 1955 as amended by P.L. 87-818 1962; and
- P.L. 89-4, Appalachian Regional Development Act of 1965, Section 205.

Only one of the above programs is a continuing program that will require annual budget requests to continue the program. This is the "Extinguishment of Outcrop and Underground Fires." The other programs transferred existing funded projects that will be completed by OSM with no additional legislated funds to start new projects.

FUNDING SOURCE	STATE	NUMBER OF PROJECTS	FEDERAL FUNDS
Anthracite Mine Drainage Act P.L. 162 (1955) and P.L. 87-818 (1962)	Pennsylvania	1	\$720,000
Extinguishment of Outcrop and Underground Fires P.L. 738 (1954)	Montana	1	40,000
Appalachian Regional Development Act P.L. 89-4 (1965)	Maryland	2	2,173,725
	Ohio	2	727,675
	Pennsylvania	2	2,600,000
Mined Land Demonstrations - Appropriations/Anthracite	Pennsylvania	2	6,700,000
Mined Land Demonstrations - Appropriations/Bituminous	Illinois	1	1,150,000
	Pennsylvania	4	865,500
<b>TOTAL</b>		<b>15</b>	<b>\$14,976,900</b>

## Non-AMLR Fundi Sources And Projects Active In FY 1982

## Nelson—Jordan AML Emergency Project

When officials and users of the Nelson-Jordan Recreation Center, in Wheeling, West Virginia, began to notice a huge crack developing along the building's wall and the disintegration of their swimming pool, they suspected poor foundations and loose soil conditions were causing the damage. Engineers were called and plans were made to sink pilings to reinforce the supposed failing foundations.

Much to their surprise, borehole drilling revealed mine voids. When the equipment penetrated the empty space they discovered long forgotten coal mines that were now making their presence known. Old coal mine roof supports were decaying allowing the earth to begin its shift downward.

What might have been an even greater tragedy was the possible effect the collapsing earth could have on the nearby Simpson United Methodist Church. The church is listed as an historical site due to the importance of the long-standing house of worship to the community and the parish.

Prior to OSM becoming involved, extensive damage had already occurred and the assessment of the effects had already caused the swimming pool to be closed. If corrective action were delayed, the subsidence would threaten the structural integrity of the recreation center and the church. This land collapse and landslide also would have resulted in complete failure of the hill and would have required the street at the bottom of the site to be permanently closed to traffic. As soon as the cause for the damage was determined, the Office of Surface Mining (OSM) was contacted for possible corrective action under the agency's abandoned mine lands program.

OSM officials working with abandoned mine land specialists used exploratory drilling techniques to identify the precise location of the mine voids. Holes were drilled into the mine void areas allowing the engineers to pump flyash into the caverns beneath the earth. Constant testing determined when the mine tunnels and shafts were completely filled.

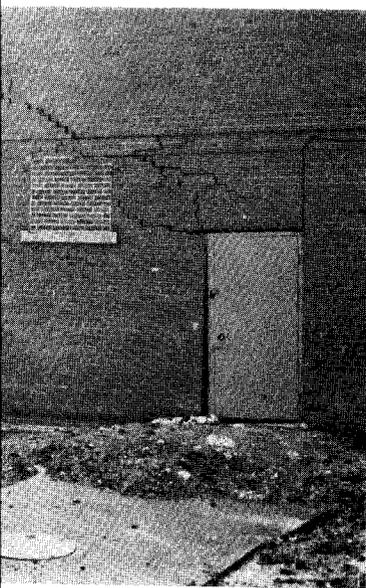
Construction of a lateral subgrade drain helped eliminate water seepage problems and stabilized the fill. Drains were installed to allow water from the mine voids to be released where it could not cause further damage. Removal of the swimming pool was necessary because the intense weight of the pool was creating land shifting problems that could have offset the corrective actions.

Finally, gabions, or baskets filled with rocks and earth, were strategically placed on the adjacent hillside to prevent any land erosion. The gabions added sufficient weight at the bottom of the hill, to compact the soil as it drained. Ditches were constructed to prevent surfacewater runoff from saturating the bottom of the hill.

To provide an esthetic finish, the entire disturbed area was graded and seeded and the areas around the church were landscaped to blend with the existing surroundings.



INITIAL SITE INSPECTION



STRUCTURAL DAMAGE TO THE  
COMMUNITY CENTER

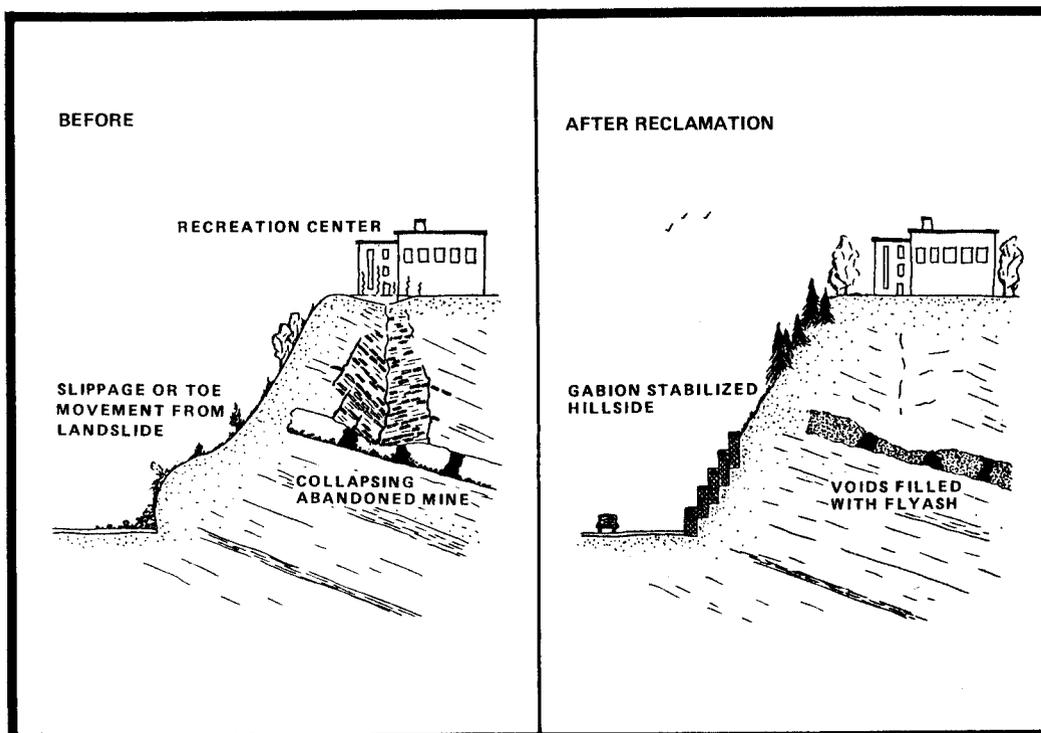
OSM's efforts saved the church and the recreation center from becoming a complete loss to the community. More important, an historic structure was saved. Moreover, an abandoned mine almost always represents a potential danger to human life. The importance of corrective action becomes evident, and the cost is secondary.

For the record, \$356,816 from OSM's Abandoned Mine Reclamation Fund was used for reclamation of the Nelson-Jordan Recreation Center project. This project took 19 months from the time the surface mining reclamation crews evaluated the situation until they planted the seed for the new lawn.

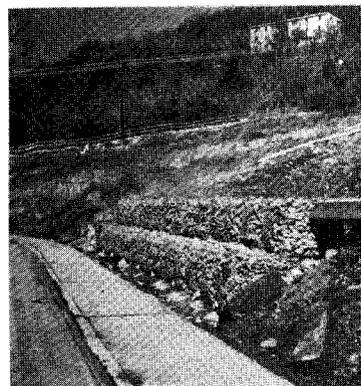
According to OSM engineers the mine was over 80 years old and existed before the church was constructed on the site. Although reliable records do not exist for the majority of abandoned coal mines which are quite prevalent in coal country, the estimate is based on local residents who said families in the area mined the coal for their own use.

According to OSM engineers, Claude Downing, Robert Fleming, and Paul Shogren, "The mine was probably worked in the days before machinery was used to extract coal from the ground, and recordkeeping consisted primarily of how many dollars you collected for the coal sold."

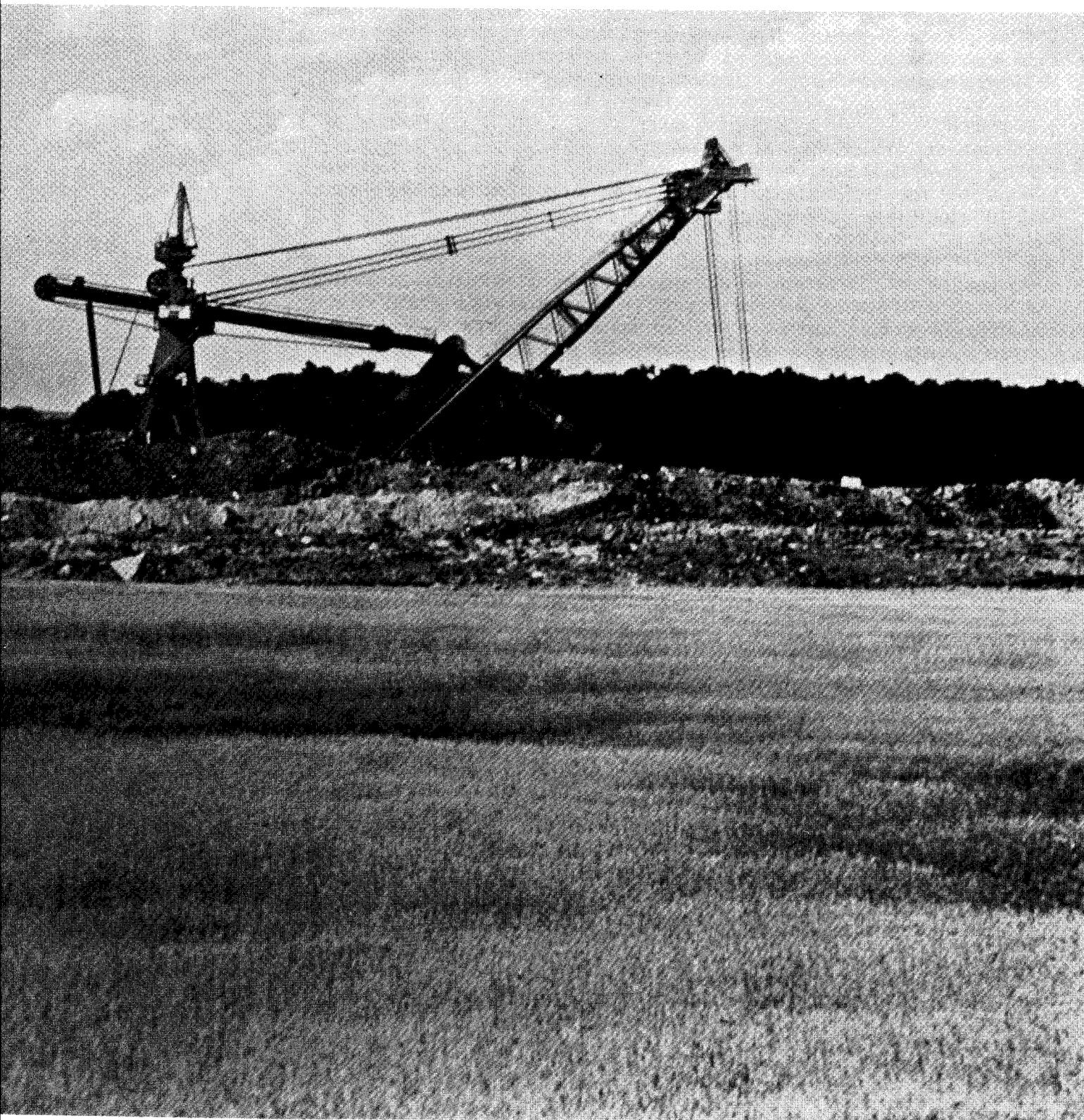
But for residents of Wheeling, and parishioners of Simpson church, OSM's abandoned mine land program resulted in something beyond any monetary value.



REGRADING THE HILLSIDE



STABILIZED SLOPE



RECLAMATION FOLLOWS CLOSELY BEHIND MINING.