

Project Area No. 15

Location Forestville

Township Mercer

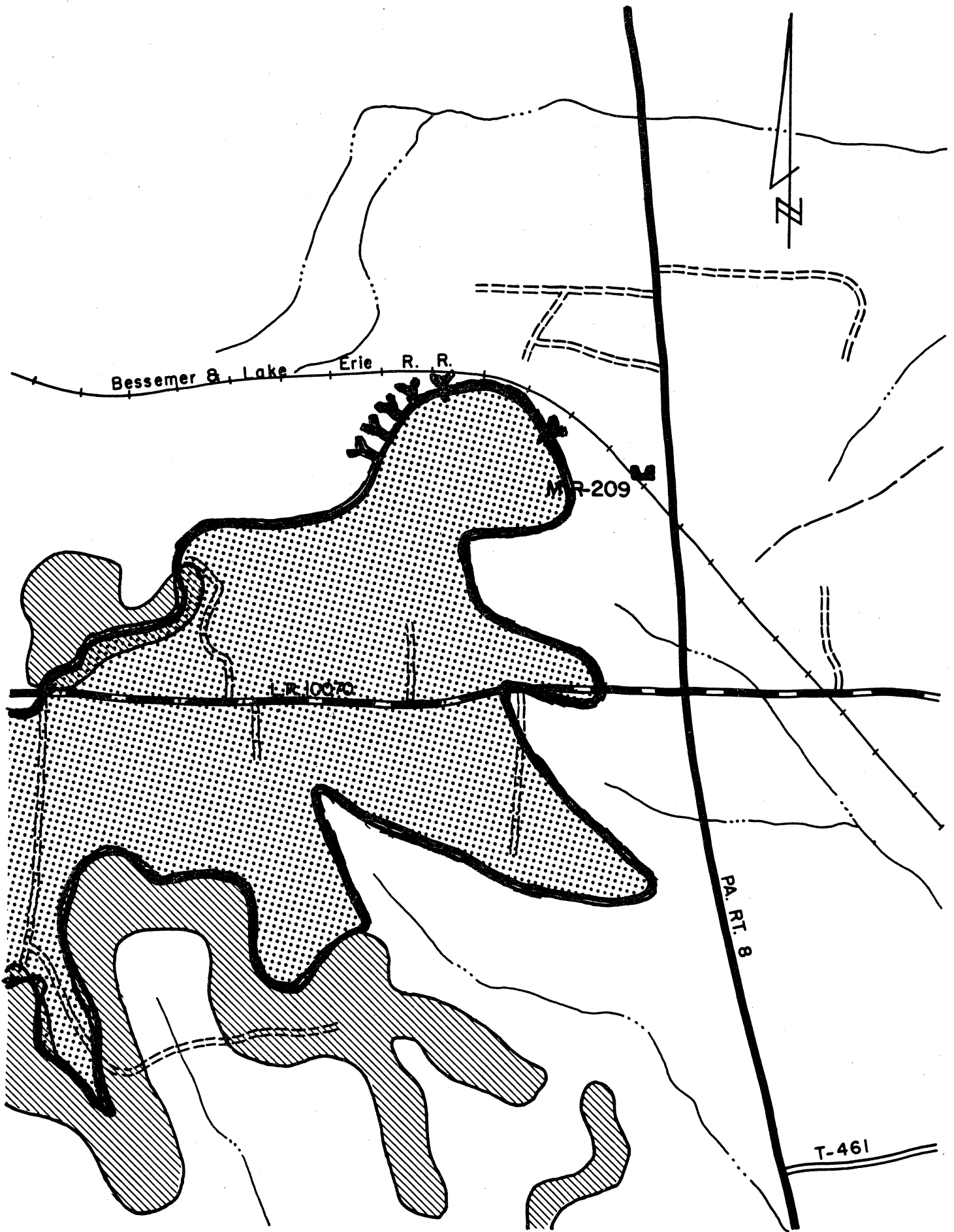
County Butler

Priority Rating 3

This area includes several deep mine openings associated with the Barnes Mine which operated in the Middle Kittanning seam. The coal seam is relatively level in this vicinity. The water discharge is flowing through Weir MR 209 into McMurray Run. This discharge produces an average acid load of 10 pounds per day and a maximum load of 430 pounds of acid per day. The proposed abatement project consists of surface sealing 6 deep mine drifts in the area.

The following are the estimated costs for the recommended abatement measures in the project area:

Deep Mine Surface Seals	\$3,000
Design, Supervision and Inspection	<u>1,000</u>
Estimated Reclamation Costs	\$4,000



PROJECT MAP NO. 15
DEEP MINE NEAR FORRESTVILLE

Project Area No. 16

Location Forestville

Township Marion

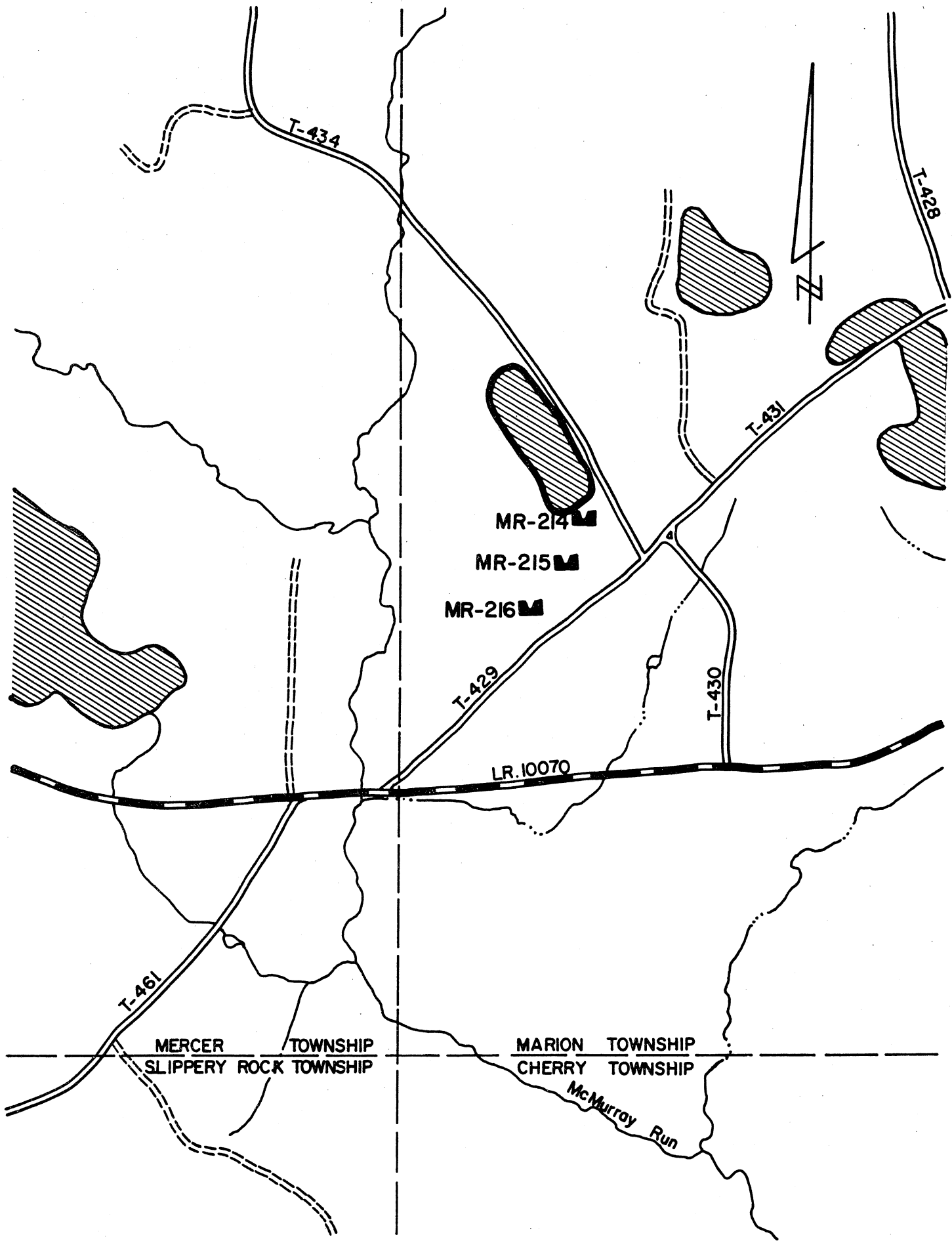
County Butler

Priority Rating 3

This area consists of a small strip mine in the Clarion seam of coal which has not been backfilled or planted. The discharge flows through MR 214 into McMurray Run. This discharge has an average acid load of 17 pounds per day and a maximum acid load of 60 pounds per day. The proposed abatement project consists of strip mine restoration for an estimated 15 acres of affected area.

The following are the estimated costs for the recommended abatement measures in the project area:

Strip Mine Reclamation	\$15,000
Design, Supervision and Inspection	<u>2,000</u>
Estimated Reclamation Costs	\$17,000



PROJECT MAP NO. 16
STRIP MINE NEAR FORRESTVILLE

Project Area No. 17

Location Atwells Crossing

Township Cherry

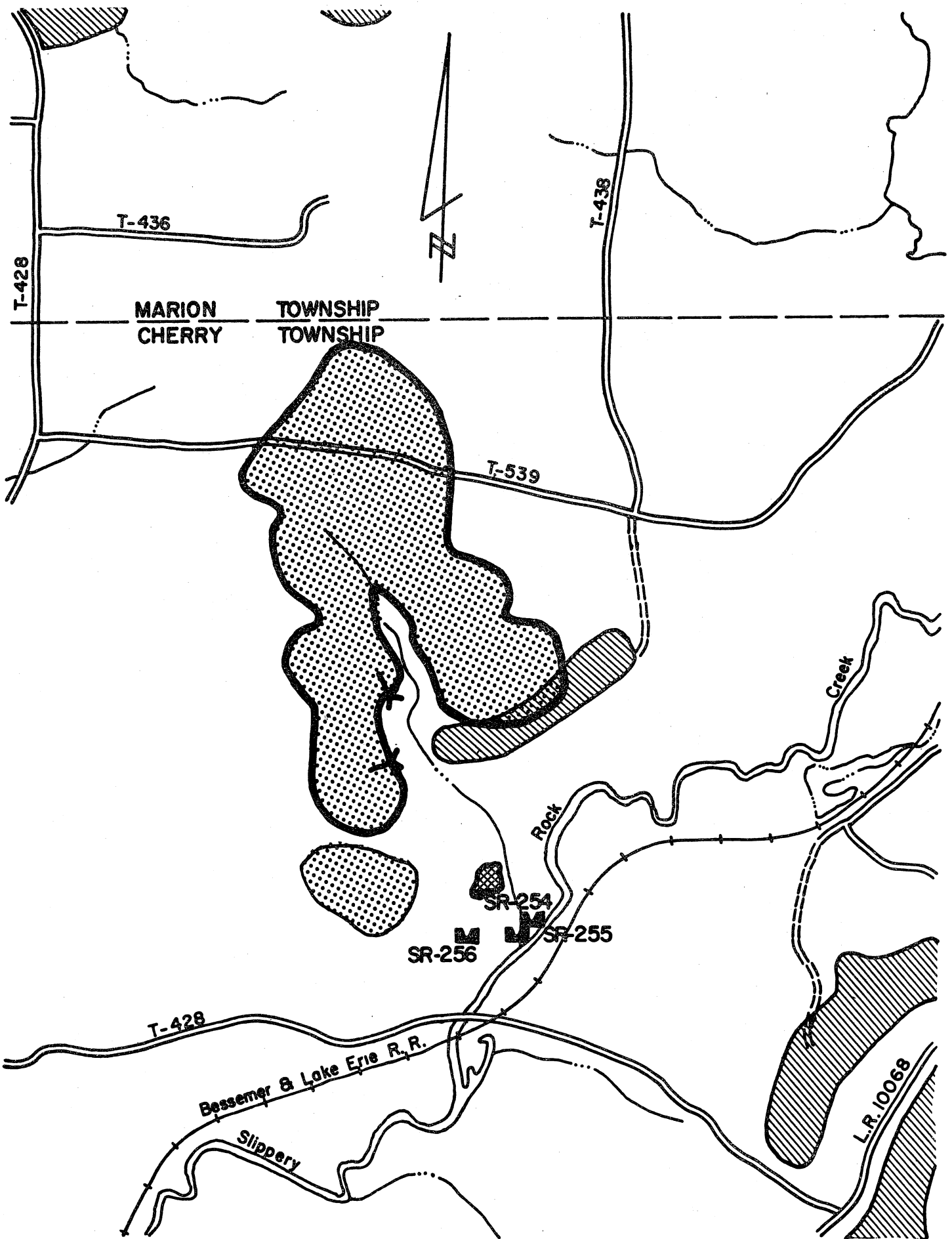
County Butler

Priority Rating 3

This area consists of a small deep mine in the Clarion seam with the associated refuse pile. The discharges flow through Weirs SR 254, 255 and 256 into Slippery Rock Creek. In 1969 these discharges had an average acid loading of 42 pounds per day and a maximum acid loading of 220 pounds per day. The proposed abatement project consists of hydraulic deep mine seals for two entries and a 7,000 cubic yard refuse pile reclamation.

The following are the estimated costs for the recommended abatement measures in the project area:

Deep Mine Hydraulic Seals	\$40,000
Refuse Pile Reclamation	14,000
Design, Supervision and Inspection	<u>6,000</u>
Estimated Reclamation Costs	\$60,000



PROJECT MAP NO. 17
DEEP MINE & REFUSE PILE NEAR ATWELLS CROSSING

Project Area No. 18

Location Keenan

Township Venango

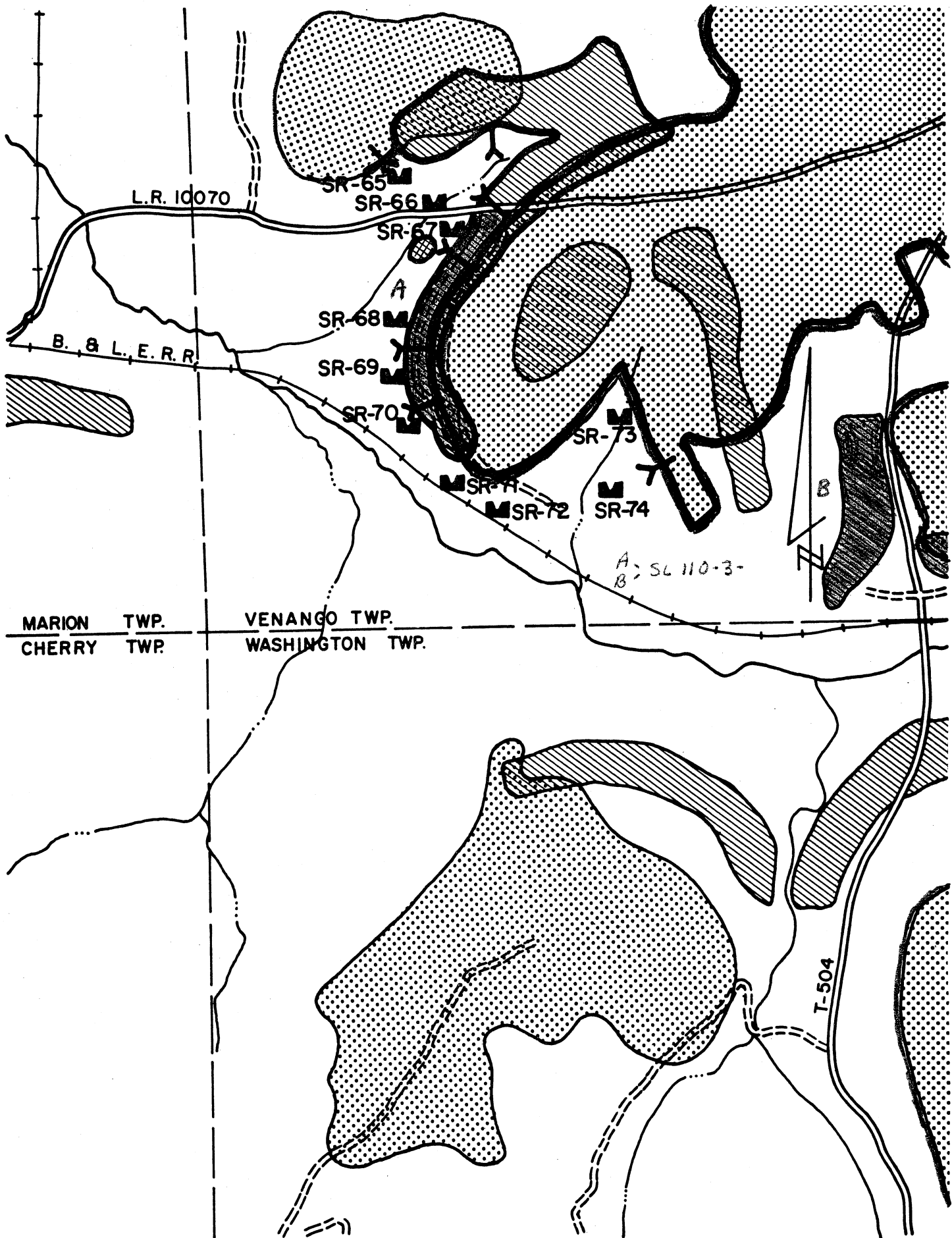
County Butler

Priority Rating 2

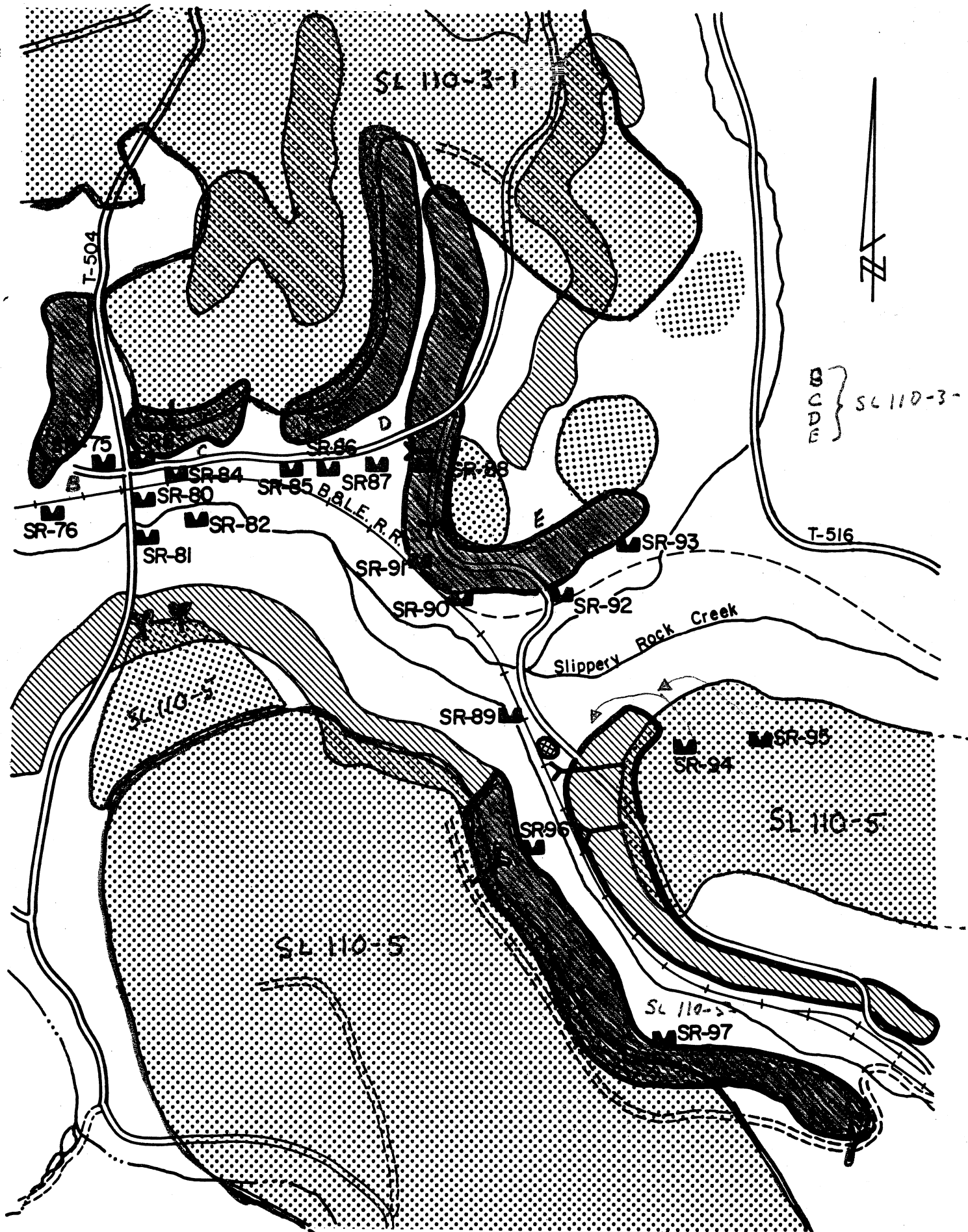
This area comprises several interconnected deep and strip mines in the Clarion seam of coal, most of which are in State Game Lands. The discharges flow through Weirs SR 65 to SR 74 into Slippery Rock Creek. These discharges have an average acid loading of 113 pounds per day and a maximum acid loading of 220 pounds per day. The proposed abatement work consists of hydraulic sealing for 8 deep mine entries, grout curtain installation along the applicable highwall and outcrop areas, strip mine restoration for an estimated 50 acres and a 5,000 cubic yard refuse pile removal project.

The following are the estimated costs for the recommended abatement measures in the project area:

Deep Mine Hydraulic Seals	\$160,000
Grout Curtain Installation	40,000
Strip Mine Reclamation	75,000
Refuse Pile Reclamation	5,000
Design, Supervision and Inspection	<u>25,000</u>
Estimated Reclamation Costs	\$305,000



PROJECT MAP NO. 18
KEENAN AREA



PROJECT MAP NO. 19
KEYSTONE MINE AREA