

Project Area No. 5

Location Murrinsville

Township Irwin  
Marion

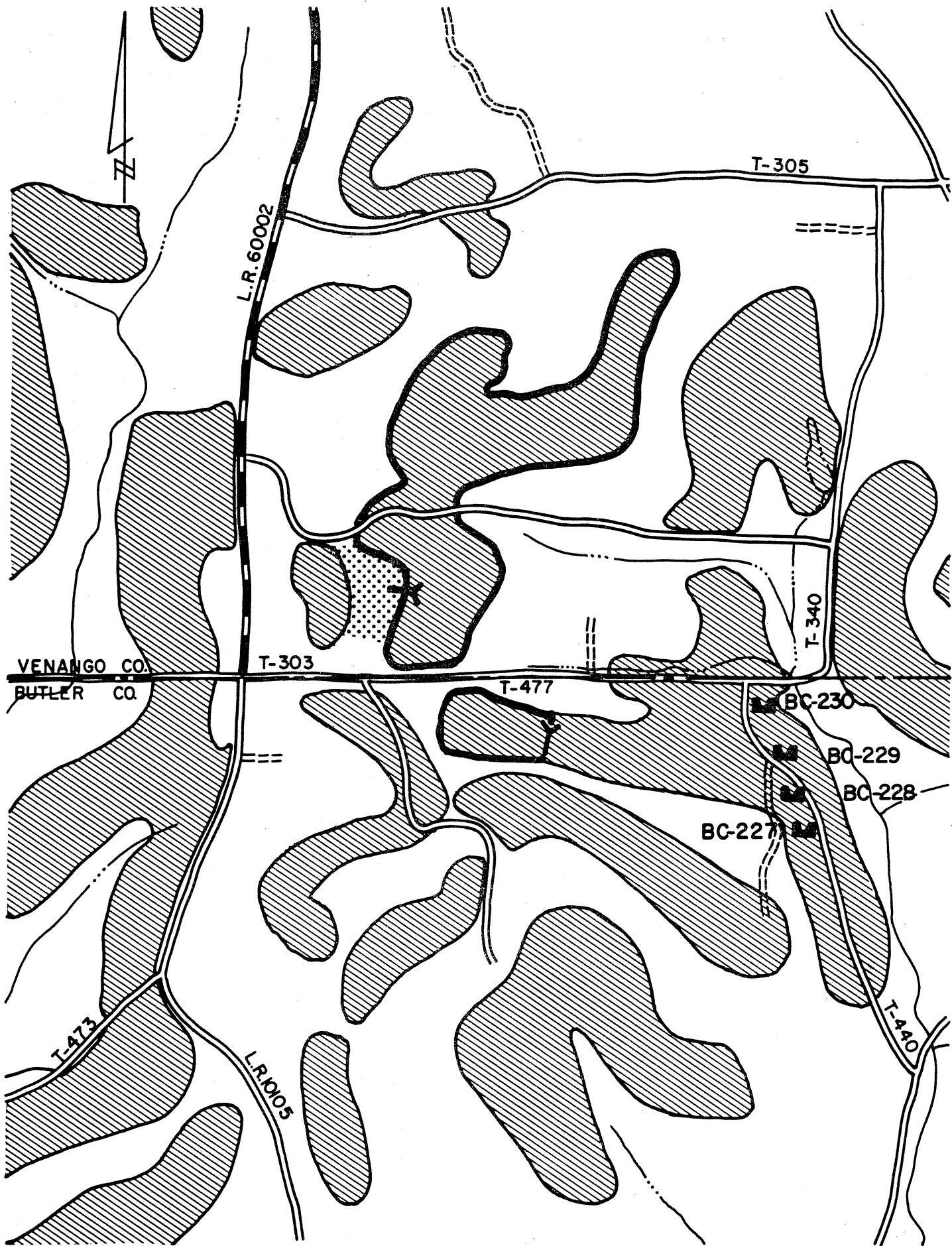
County Venango  
Butler

Priority Rating 2

In this area, the Middle Kittanning seam of coal was deep mined and then stripped. A large flow of water is coming out through the spoil at Weir BC 230 and flowing into Blacks Creek. During 1969, this discharge produced an average of 88 pounds of acid per day with a maximum in the range of 390 pounds of acid per day. The proposed abatement work for this project consists of surface sealing two or more deep mine entries, grout curtains installation along the highwall and outcrop areas and strip mine restoration for an estimated 90 acres of affected area.

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

Deep Mine Surface Seal	\$ 1,000
Grout Curtain installation	100,000
Strip Mine Reclamation	90,000
Design, Supervision and Inspection	<u>19,000</u>
Estimated Reclamation Costs	\$210,000



PROJECT MAP NO. 5  
STRIP MINE NEAR MURRINSVILLE

Project Area No. 6

Location Murrinsville

Township Marion

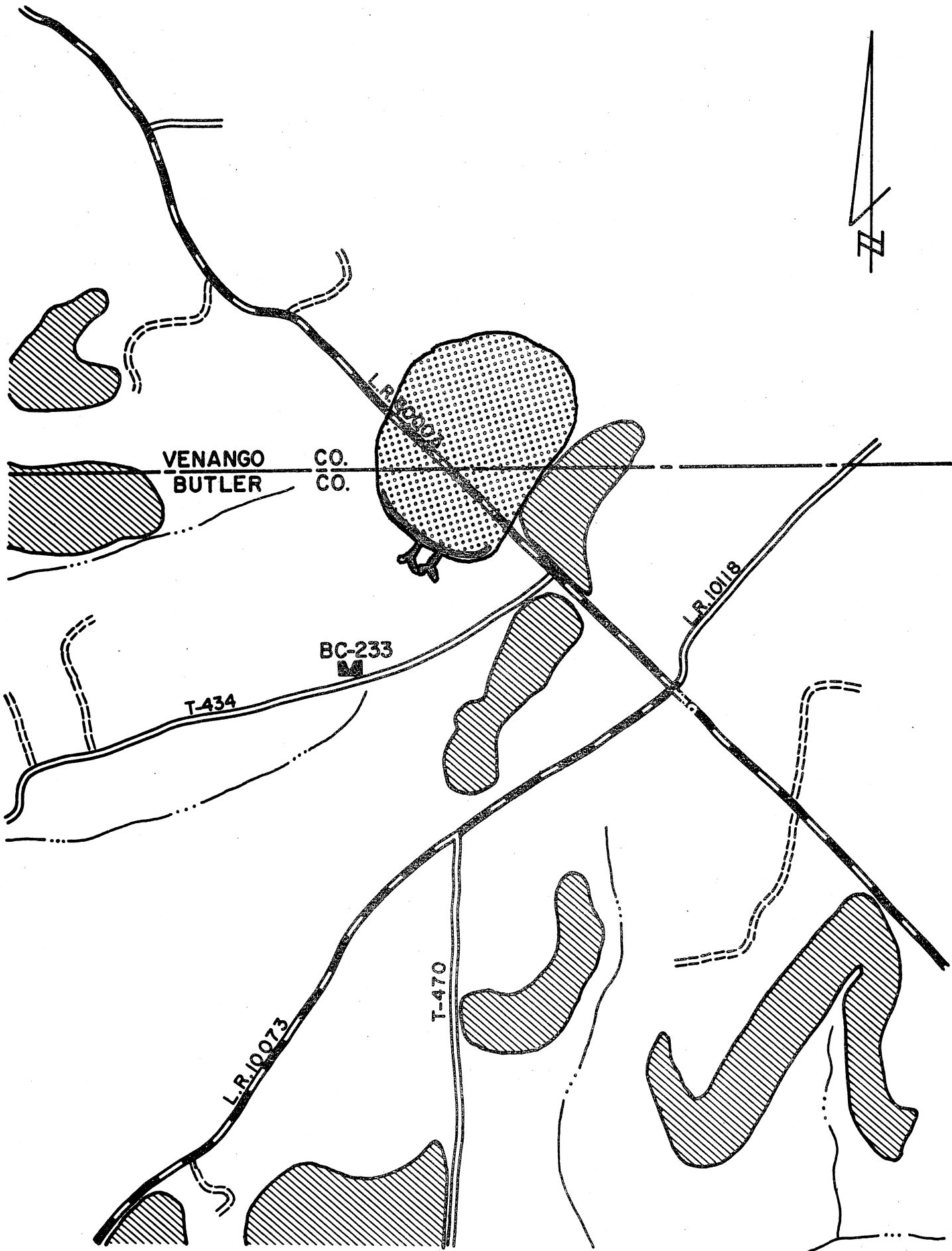
County Butler

Priority Rating 3

This area has two small deep mine drifts in the Middle Kittanning seam. The water discharge flows through Weir BC 233 into Blacks Creek. This discharge has an average acid load of 49 pounds per day and a maximum acid load in the range of 120 pounds per day. The proposed abatement work for the project area consists of the construction of deep mine hydraulic seals in the two mine drifts.

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

Deep Mine Hydraulic Seals	\$40,000
Design, Supervision and Inspection	<u>5,000</u>
Estimated Reclamation Costs	\$45,000



PROJECT MAP NO. 6  
DEEP MINE NEAR MURRINSVILLE

Project Area No. 7

Location Murrinsville

Township Marion

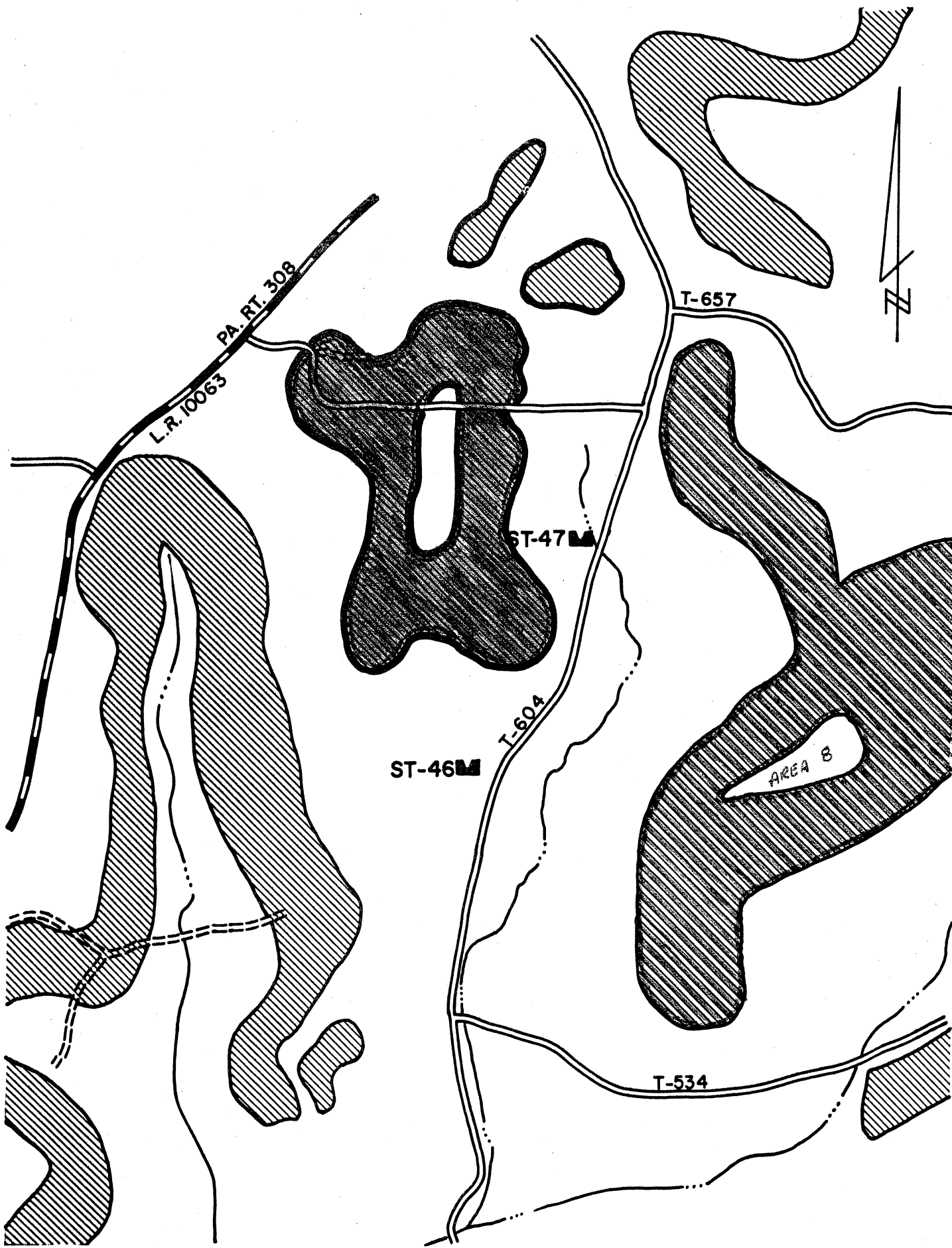
County Butler

Priority Rating 2

This area consists of a strip mine in the Upper Freeport seam of coal with discharges through Weirs ST 46 and ST 47 into Seaton Creek. In 1969 these discharges produced an average acid load of 192 pounds per day and a maximum loading in the range of 520 pounds per day. The proposed abatement project consists of an estimated 85 acres of strip mine restoration work.

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

Strip Mine Reclamation	\$85,000
Design, Supervision and Inspection	<u>8,000</u>
Estimated Reclamation Costs	\$93,000



PROJECT MAP NO. 7  
STRIP MINES NEAR MURRINSVILLE

Project Area No. 8

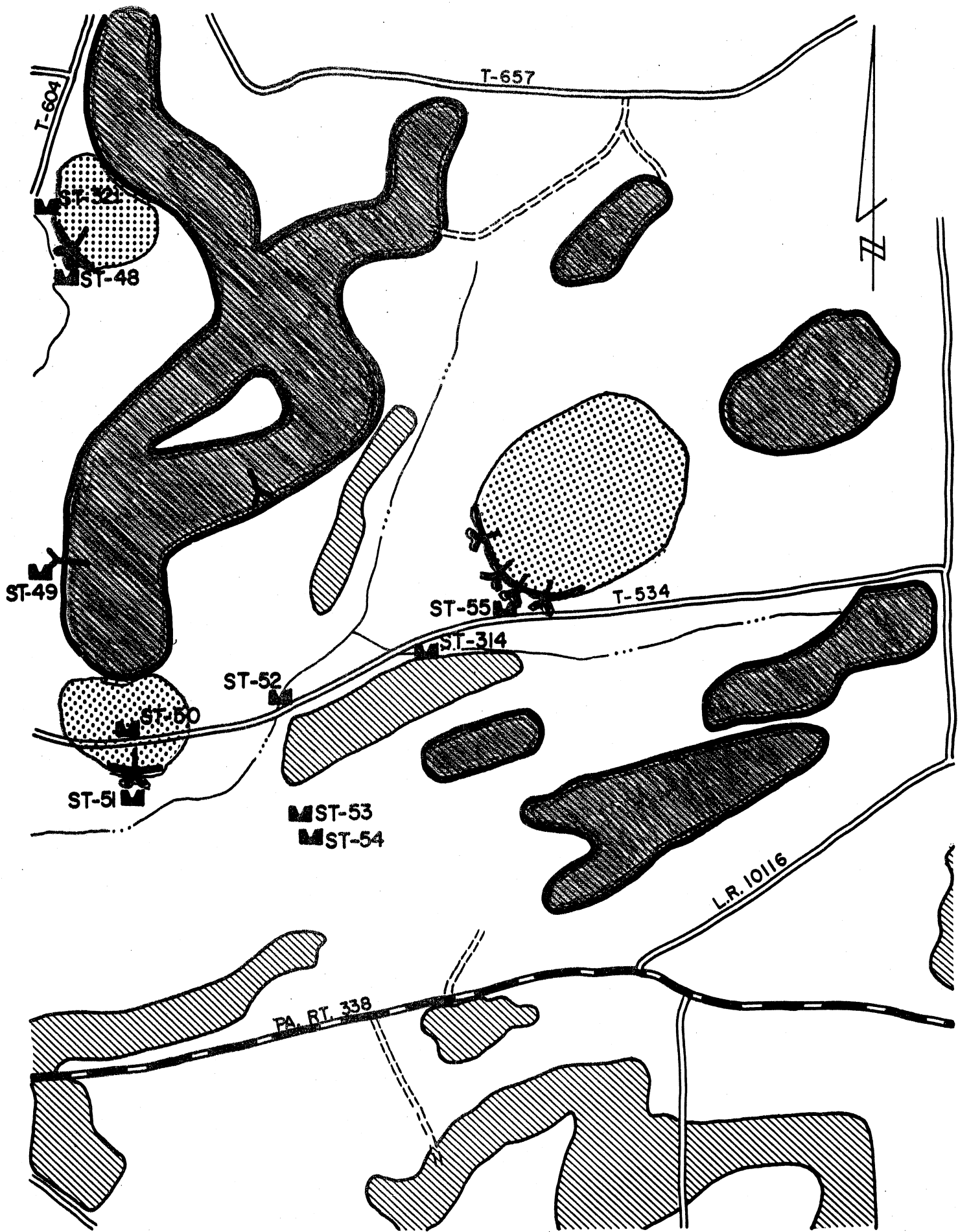
Location Kohlmeyers Corners                      Township Venango                      County Butler

Priority Rating 1

This area consists of several small deep mines with associated strip mines in the Middle Kittanning and strip mines in the Upper Freeport seams of coal. The water discharges flow through Weirs ST 48, ST 55, ST 314 and ST 321 into Seaton Creek. In 1969 these discharges had an average acid load of 433 pounds per day with a maximum of 1270 pounds per day. The proposed abatement work for this area consists of four deep mine hydraulic seals, three or four deep mine surface seals and an estimated 260 acres of strip mine reclamation work.

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

Deep Mine Hydraulic Seals	\$ 45,000
Deep Mine Surface Seals	2,000
Strip Mine Reclamation	260,000
Design, Supervision and Inspection	<u>30,000</u>
Estimated Reclamation Costs	\$337,000



PROJECT MAP NO. 8  
 DEEP AND STRIP MINES NEAR KOHLMAYER CORNER



Project Area No. 9

Location Murrinsville

Township Marion

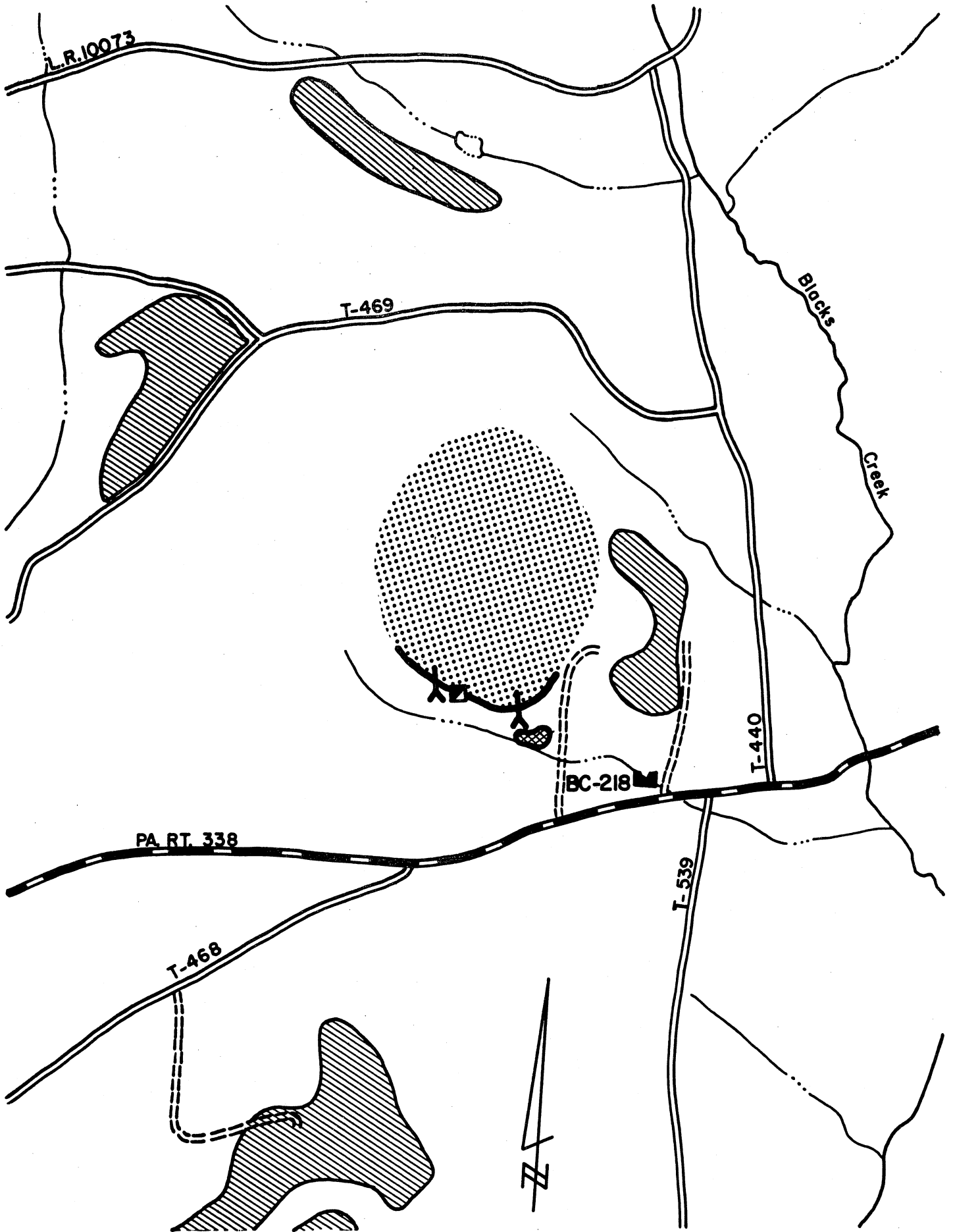
County Butler

Priority Rating 3

This area consists of two small deep mines in the Clarion seam of coal. The water discharge flows through Weir BC 218 into Blacks Creek. This discharge has an average acid loading of 27 pounds per day with a maximum in the range of 90 pounds per day. The abatement work proposed consists of sealing two deep mine drifts and a shaft opening plus a refuse reclamation project containing an estimated 5000 cubic yards of material.

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

Deep Mine Hydraulic Seals	\$60,000
Refuse Pile Reclamation	10,000
Design, Supervision and Inspection	<u>8,000</u>
Estimated Reclamation Costs	\$78,000



PROJECT MAP NO. 9  
DEEP MINE NEAR MURRINSVILLE