# Remining Update

Ohio Mined Land Partnership
Annual Meeting

October 13th, 2009

Burr Oak State Park

*www.ohiodnr.com/mineral/remining/tabid/21630/default.aspx*

# Definition of Remining

- Current 1513 def- “Remining” means conducting coal mining and reclamation operations which affect previously mined areas

# New proposed definition

- “Remining” is a secondary recovery of coal reserves by an active mine operator that will re-affect and reclaim previously unreclaimed mined lands in the permitted area or outside the permit limits that results in <u>improvements to water quality or land use, and/or the elimination of hazards to the public’s health and safety.</u>

# Remining Incentives on and off the permit

- Water Quality Improvements
- Land Reclamation improvements

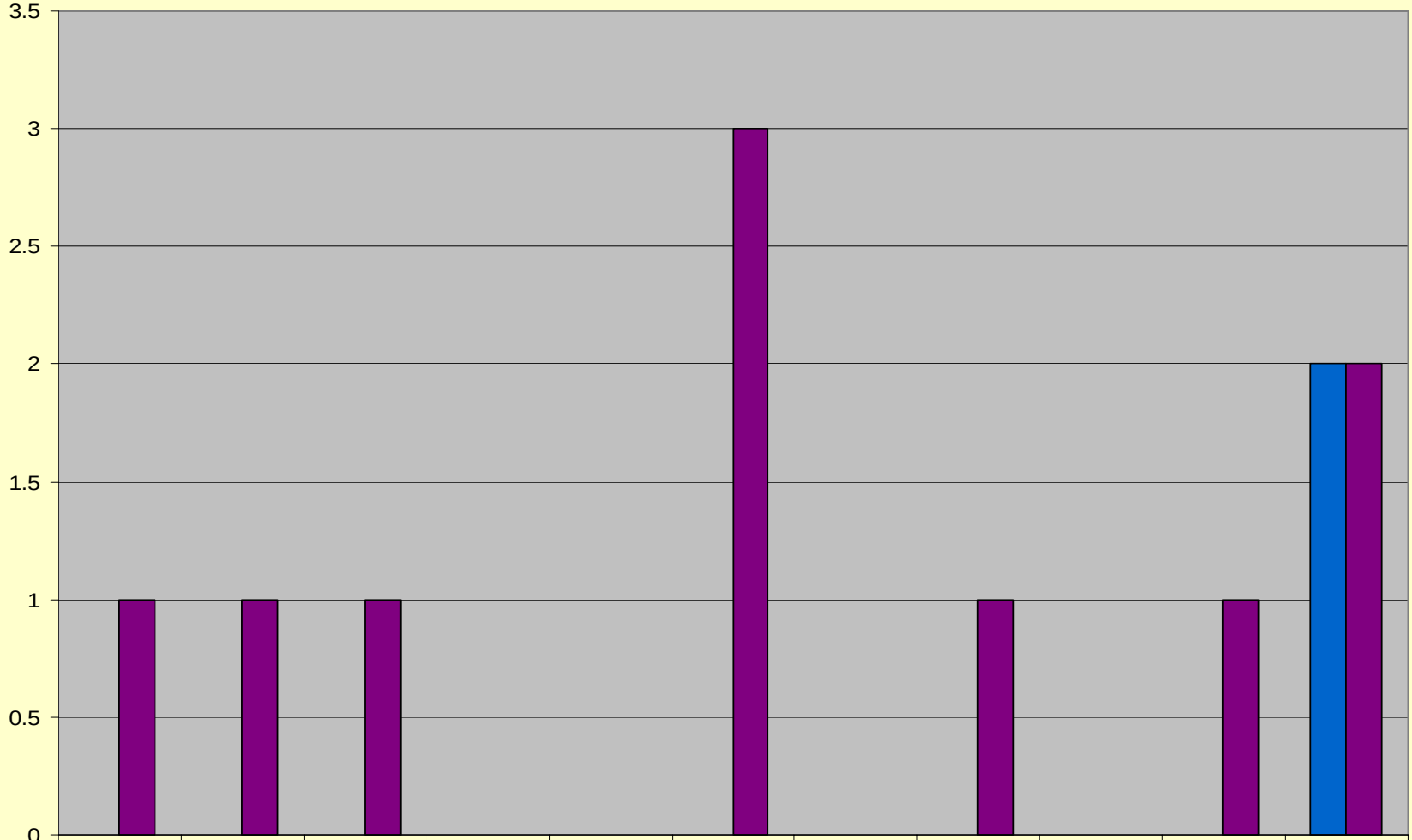
# Water- Rahall amendment to CWA( 1987)

- Throughout the Appalachian region AML exist which, due to erosion and acidic discharges, pose a serious threat to water quality (WQ)
- However, in many instances, coal remining is not economically and technically feasible because industry becomes liable for treating the preexisting water discharges under stringent national effluent guidelines

# Water- Rahall amendment to CWA( 1987)

- This coal remining provision will enable industry to enter AML sites and engage in mining <u>under modified WQ standards established on a case-by-case basis</u>.
- The end result of this effort will be the <u>reclamation of the site</u> and as such, <u>improvement in WQ over that which existed at the site prior to remining</u>

## DMRM Modified Effluent Permits History




| | 1995 | 1997 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| under review | | | | | | | | | | | 2 |
| totals | 1 | 1 | 1 | | | 3 | | 1 | | 1 | 2 |

## USEPA “Economic and Environmental Impact Assessment of Remining rules” - March 2000

- Unfortunately, the potential of the Rahall Amendment to remove the disincentives and derive the maximum environmental benefits from remining has not been fully realized in the absence of implementing regulations

# Excerpts from USEPA rulemaking (2000)

- EPA recognizes that one of the <u>most successful means for improvement of abandoned mine</u> lands is for coal mining companies to remine abandoned areas and extract the coal reserves that remain
- EPA also recognizes that if abandoned mine lands <u>(AML) are ignored during coal mining</u> of adjacent areas, <u>a time critical opportunity of reclaiming the abandoned mine land is lost.</u>

# Water- Modified NPDES effluent limits- <u>numeric and non numeric</u>

# Potential BMPs from USEPA web site include

- Daylighting of abandoned UGM
- Removing coal refuse piles
- Reducing the volume of AMD through the proper handling of acid forming materials
- Eliminating abandoned highwalls
- Reconstructing streambeds
- Draining and backfilling abandoned pits
- Establishing vegetation

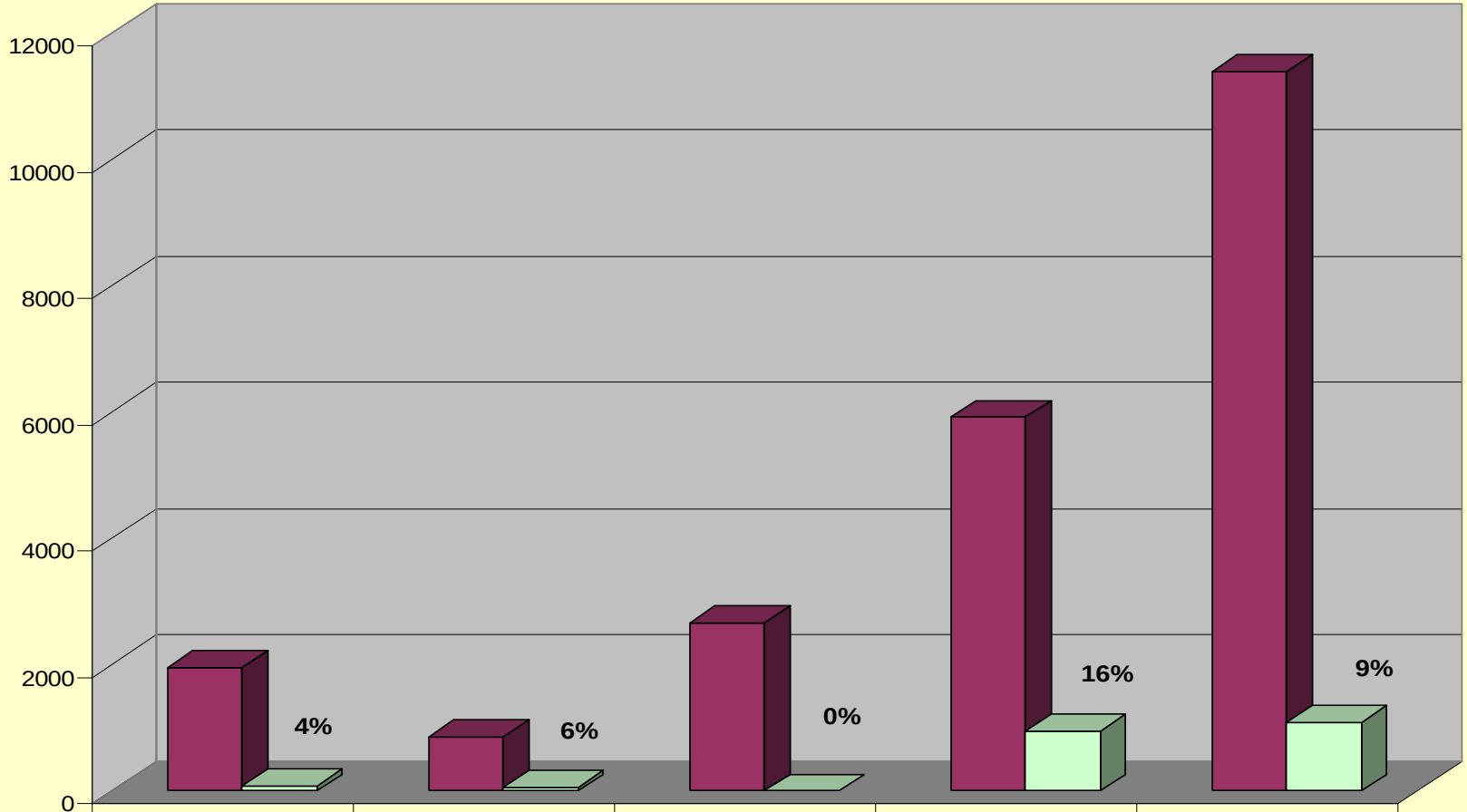
# Lands Eligible for remining (1993)

Energy Policy Act

- Eligible lands ( pre-1977) are identified on a coal permit

- These reclaimed acres are eligible for a reduced maintenance period from 5 years to 2 years

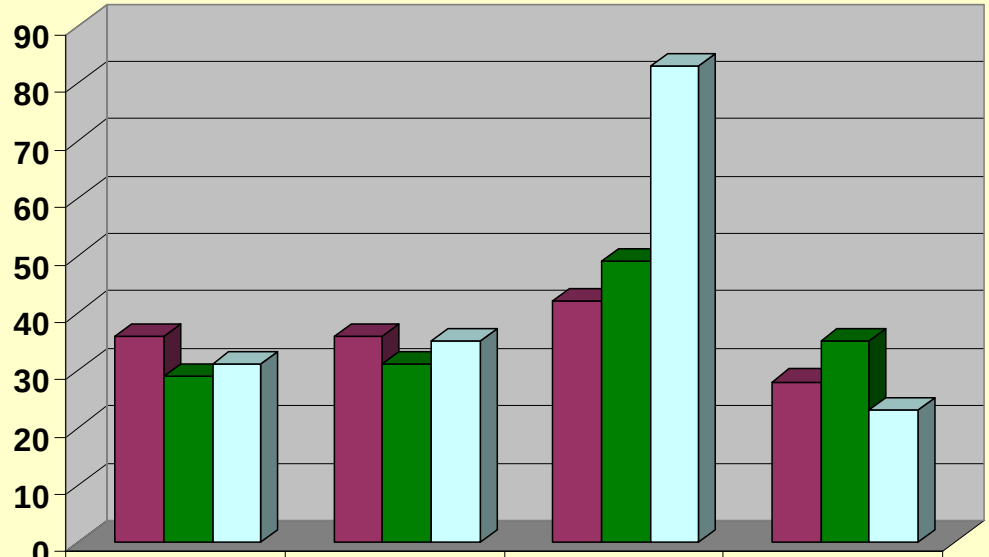
# OSMRE success report compared to DMRM reduced maintenance acres




| | 2005 | 2006 | 2007 | 2008 | totals |
|---|---|---|---|---|---|
| OSMRE acres | 1950 | 862 | 2668 | 5919 | 11399 |
| DMRM acres | 80 | 50 | 0 | 951 | 1081 |

# OSMRE report on reclamation success

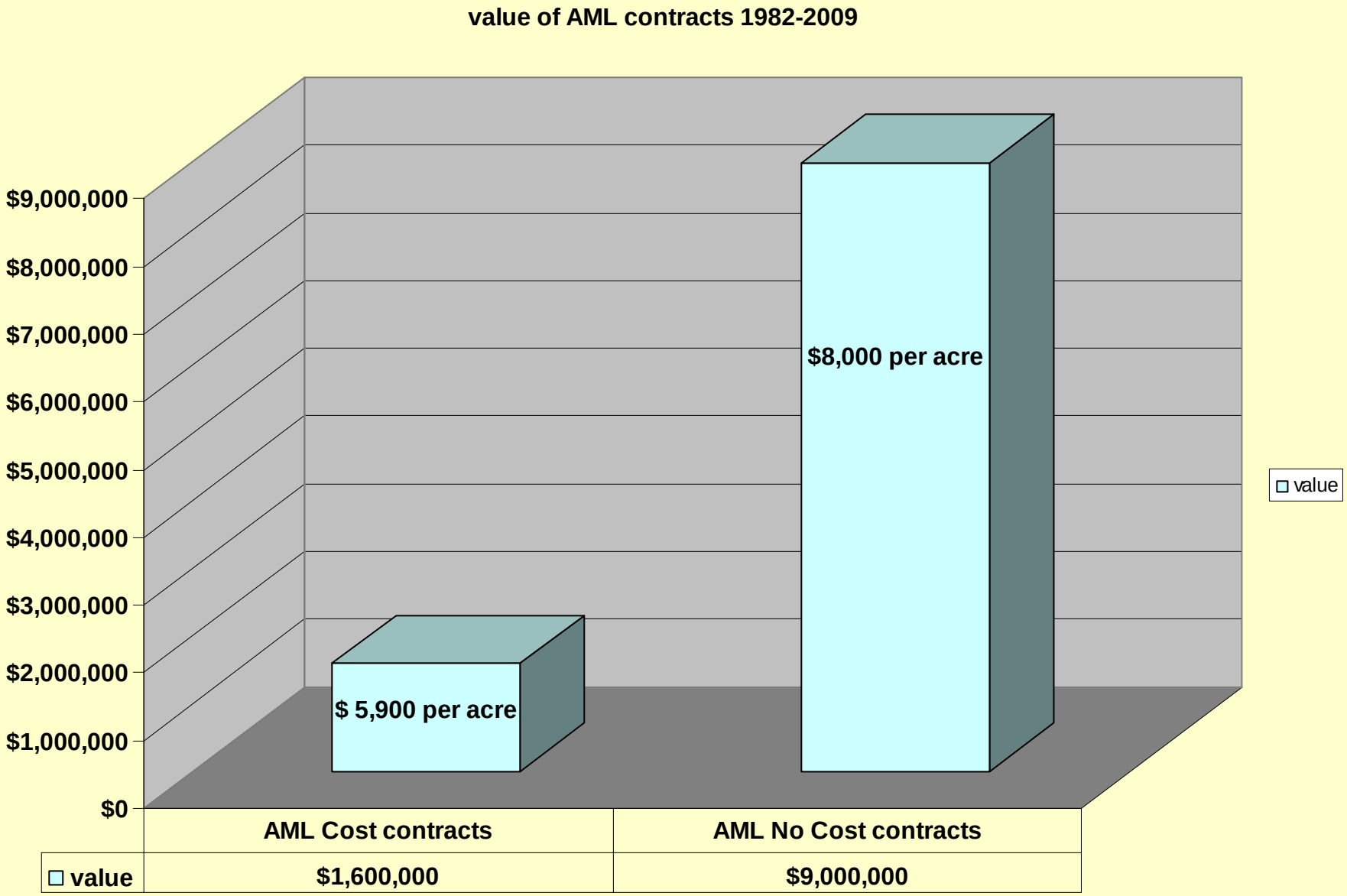
**improvements due to proposed remining on permits**



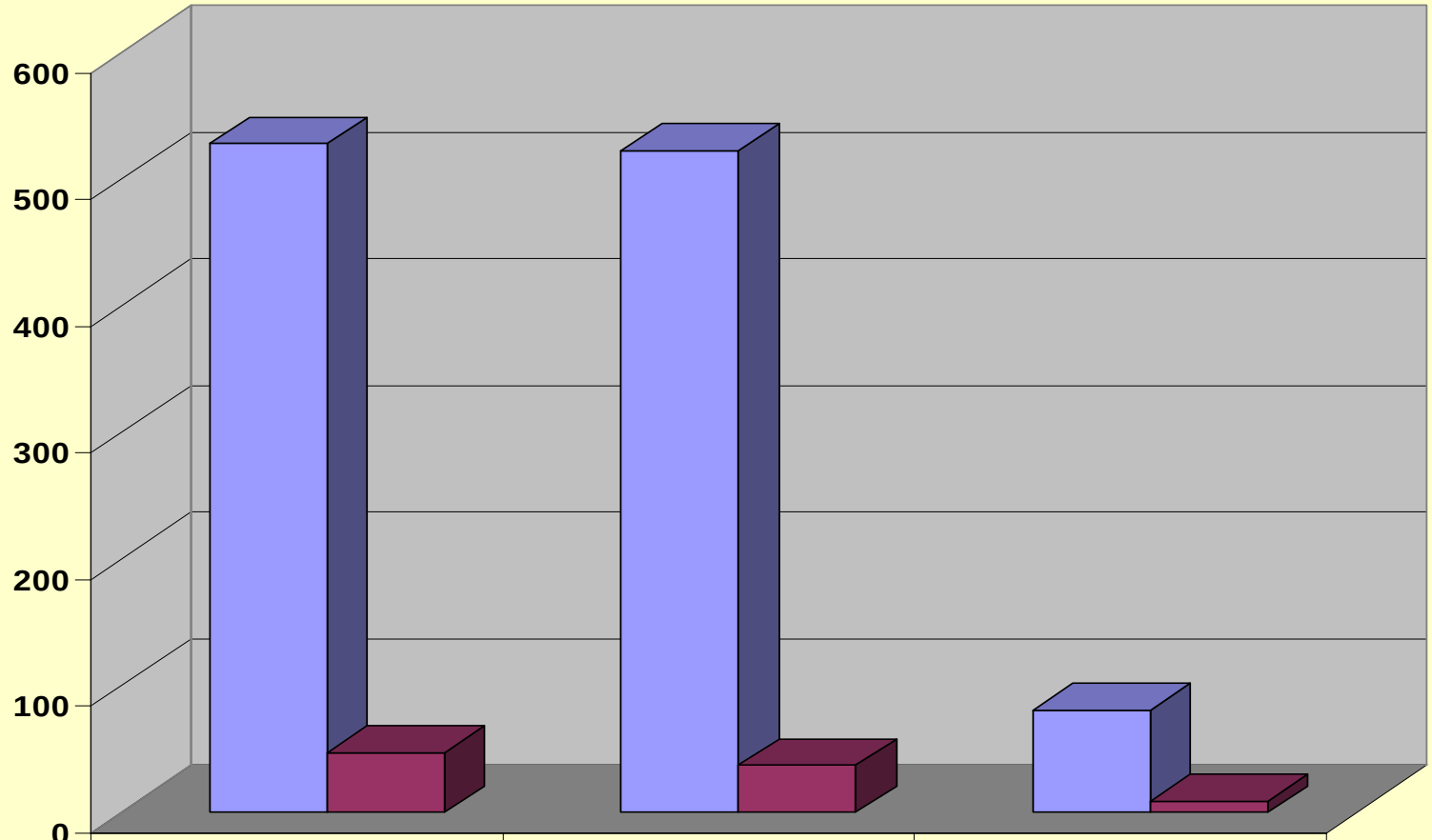

| | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|
| permtis | 36 | 36 | 42 | 28 |
| miles of highwalls | 29 | 31 | 49 | 35 |
| mine openings | 31 | 35 | 83 | 23 |

# Remining incentives off the permit-AML contracts

- Excess disposal of spoil ( no cost contracts)
- Direct negotiated contracts for AML sites
- Incidental coal removal associated with reclamation of AML sites


value of AML contracts 1982-2009
$9,000,000
$8,000,000
$7,000,000
$6,000,000
$5,000,000
$4,000,000
$3,000,000
$2,000,000
$1,000,000
$0
$ 5,900 per acre
$8,000 per acre
value
AML Cost contracts
AML No Cost contracts
value
$1,600,000
$9,000,000

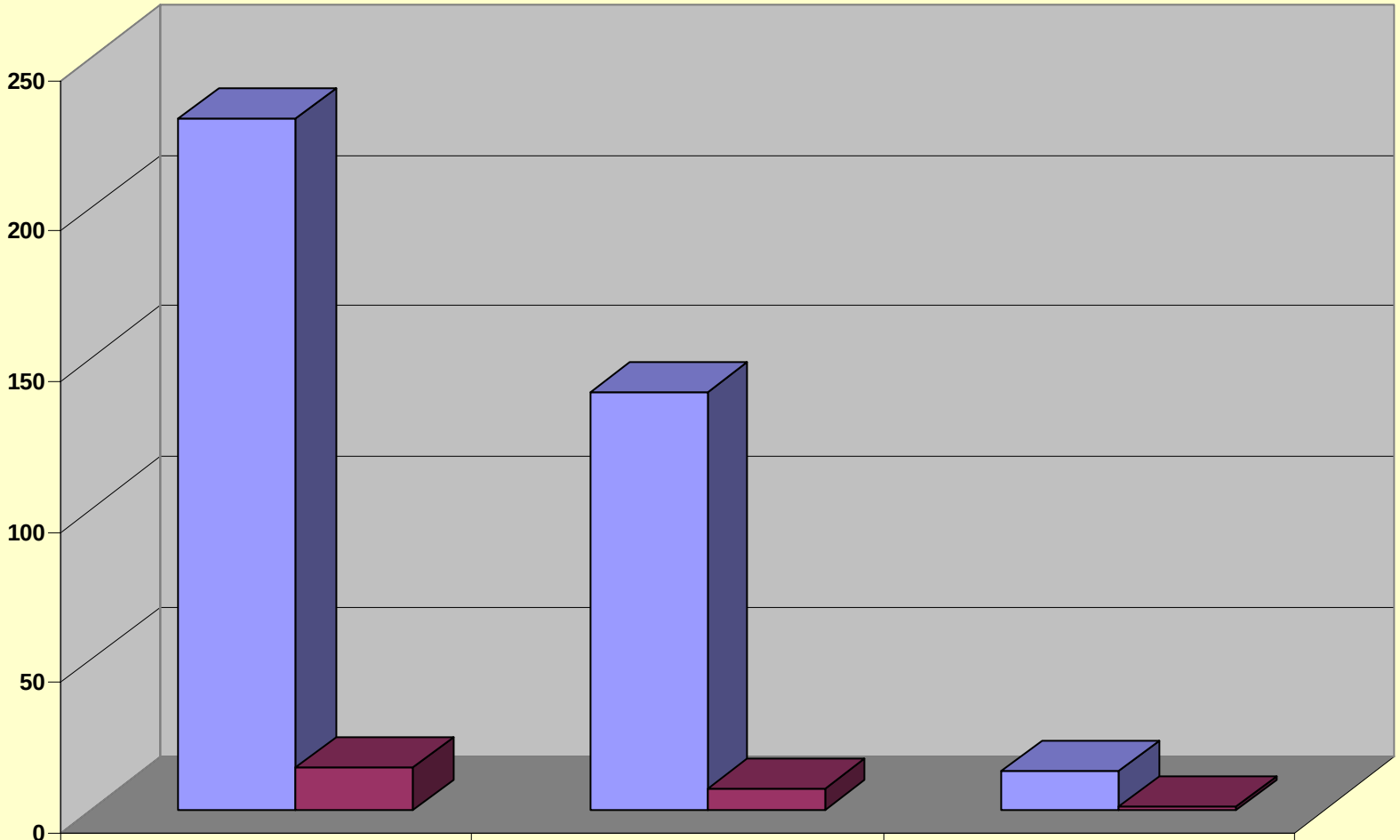
## AML No Cost Contracts by Decade




| | 1980's | 1990's | 2000's |
|---|---|---|---|
| acres | 528 | 523 | 81 |
| contracts | 47 | 37 | 9 |

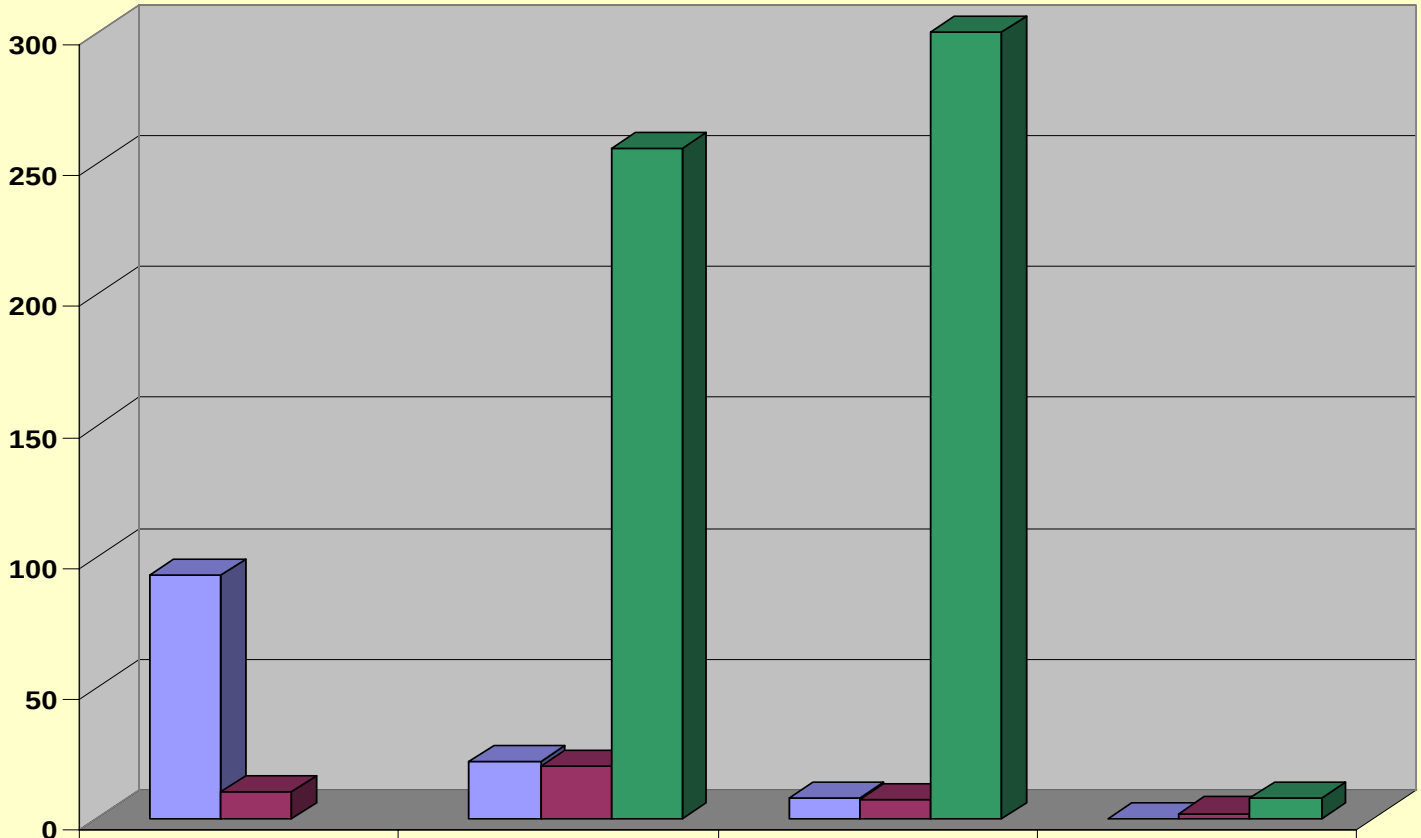
acres and number of contracts

## AML Cost Contracts by Decade




| | 1980's | 1990's | 2000's |
|---|---|---|---|
| acres | 230 | 139 | 13 |
| contracts | 14 | 7 | 1 |

## Comparison with other States during program history




| | no-cost contracts | GFCC | NPDES modified numeric | NPDES modified non numeric |
|---|---|---|---|---|
| Ohio | 93 | 22 | 8 | 0 |
| Virginia | 10 | 20 | 7 | 2 |
| Pennsylvania | | 256 | 300 | 8 |

# 10 Steps to Reinvigorating Ohio's Remining Program

# Step one

## Excerpts from Stakeholder letter

- This second tour of duty will allow me to focus primarily on the Remining program

- Like many of you, I have experienced first hand the evolution of this program and applaud the great strides made and work on the ground that has been accomplished. But, I also feel that much more can be done to take advantage of remining opportunities as they present themselves in a distinct time sensitive window of opportunity.

- Remining is a very dynamic process with many different components.

- I encourage you to participate to your fullest extent possible. This program deserves our best effort because we have witnessed first hand the benefits to the environment that can be realized through remining.

- One of my first duties is to reach out to the stakeholders to seek your input, ideas, and suggestions for improving the Remining Program. The stakeholders include involved DMRM staff, mine consultants, coal industry, watershed groups, and involved agencies.

- One of my first outreach efforts will occur at the upcoming coal workgroup meeting planned for the later part of April.

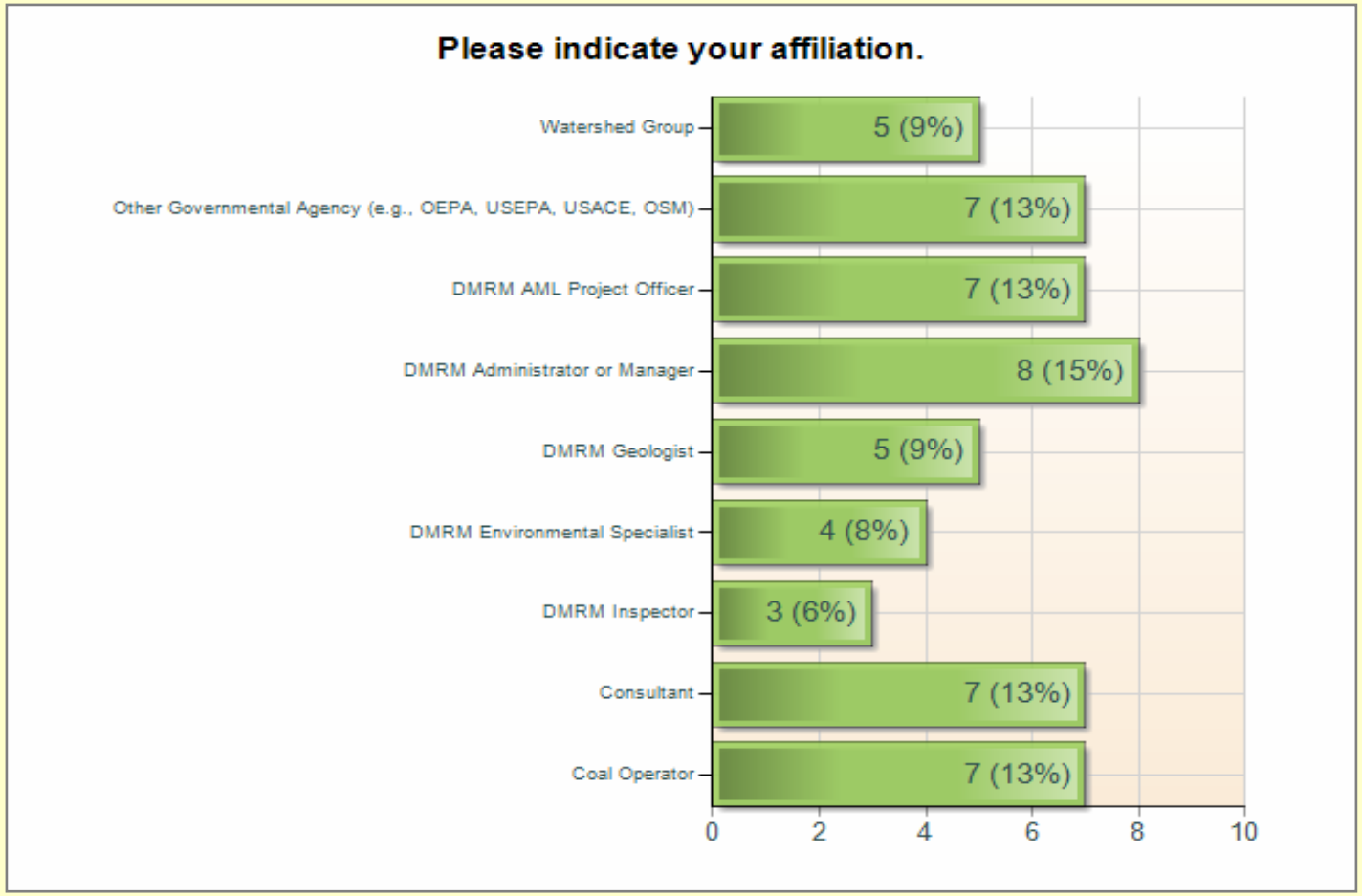
# Step two- Review existing program and background material

- Remining baseline data from CTS
- Program rules and policies
- Other states
- Existing files
- OSMRE data

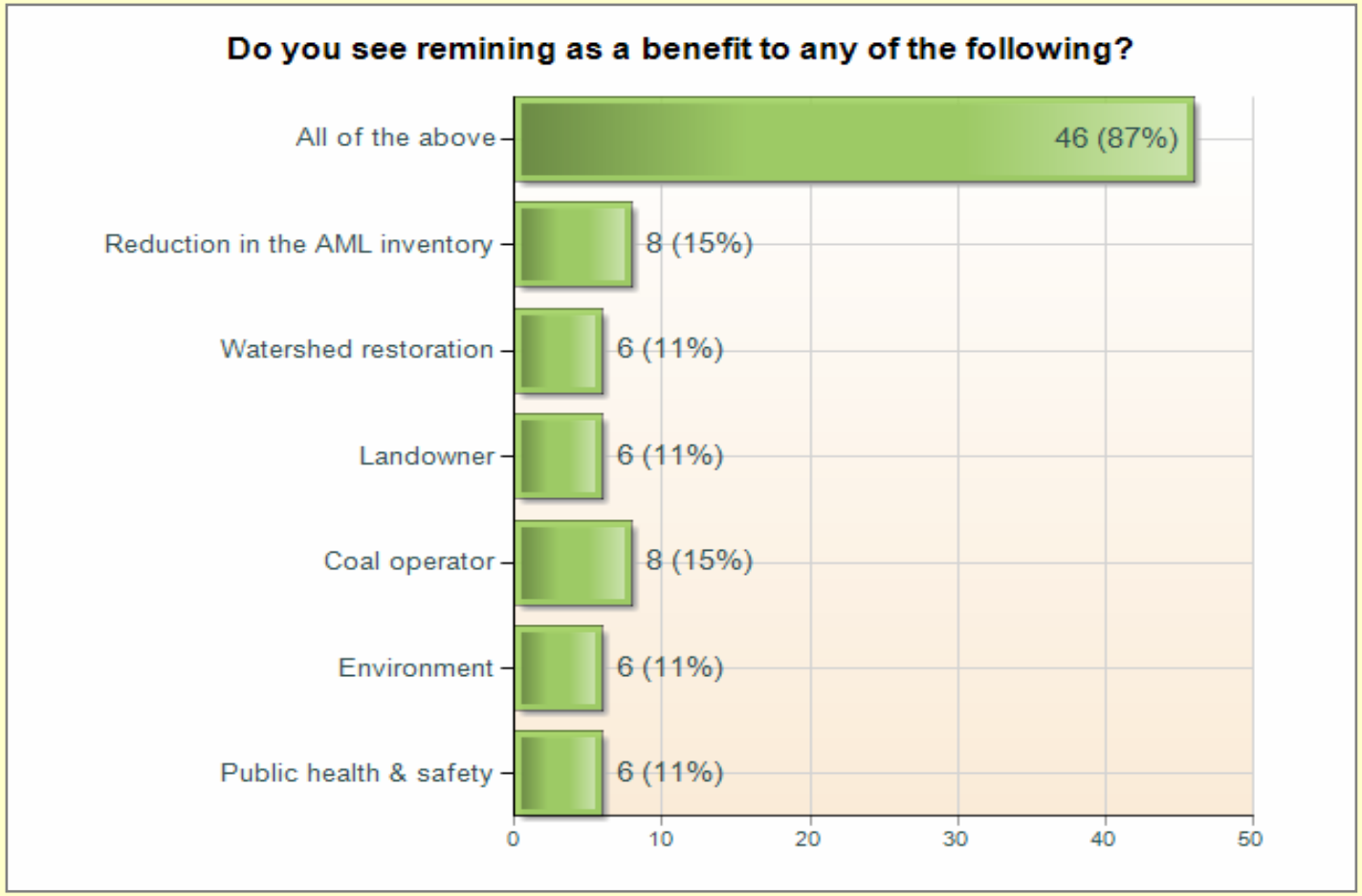
# Step three- Survey/questionnaire

- To act as a tool to gather input from stakeholders
- Available as a link in e-mail to stakeholders
- Available on DMRM's  web site-remining page
- Will be used at outreach meetings
- Fact sheet to be developed

# *MRM Remining Survey 2009: Question # 1- Baker*



# *MRM Remining Survey 2009: Question # 2- Baker*



**“Effectiveness of PA. remining program in abating AMD:water quality impacts” ( Smith, Brady, Hawkins)**

- The combined impact of remining on the 110 study sites was to reduce acidity loadings by 61% or 15,916 lbs/day, over one year reduced annual acid load by approx. 6 million lbs.

- The geologic and hydrologic conditions in other Appalachian States are similar enough and should be at least as successful

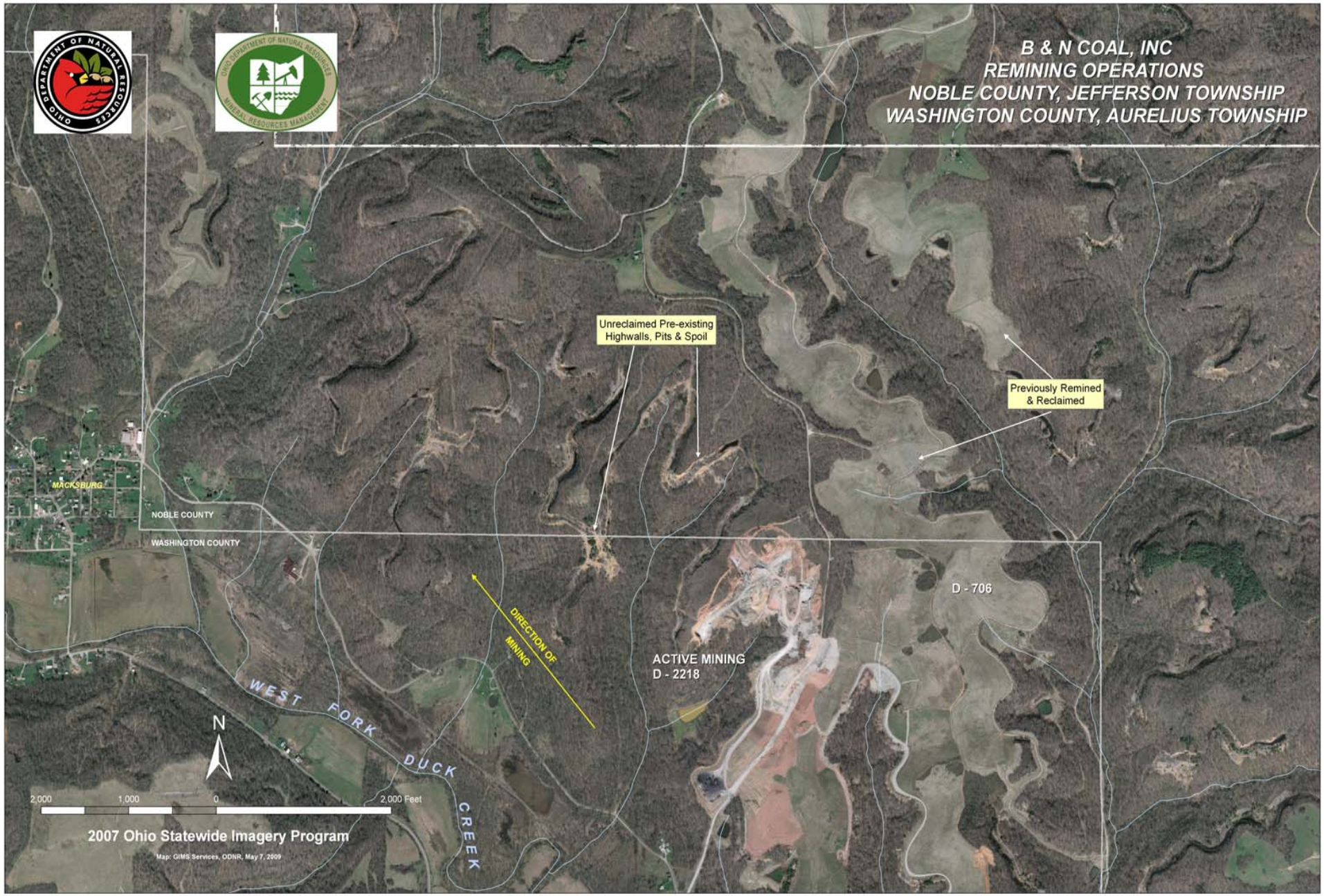
# Step seven- Assemble remining task force to review any new proposals and discuss improvements and enhancements to the existing remining program

# Color code to characterize comments

| | |
|---|---|
| red | disincentive |
| orange | concerns |
| brown | supportive |
| purple | Great idea worth more development |
| green | Recommend immediate action |
| blue | Good idea may not be practical |

# Suite of actions

- A. develop a Division policy or procedure
- B. implement rules
- C. develop an interagency agreement
- D. conduct training
- E. conduct outreach
- **F**. establish a sub committee for further review and assessment
- G. recommend legislative change
- H. conduct study
- I. table
- J. Establish goals


B & N COAL, INC
REMINING OPERATIONS
NOBLE COUNTY, JEFFERSON TOWNSHIP
WASHINGTON COUNTY, AURELIUS TOWNSHIP
Unreclaimed Pre-existing Highwalls, Pits & Spoil
Previously Remined & Reclaimed
MACKSBURG
NOBLE COUNTY
WASHINGTON COUNTY
D - 706
DIRECTION OF MINING
ACTIVE MINING
D - 2218
WEST FORK DUCK CREEK
N
2,000
1,000
0
2,000 Feet
2007 Ohio Statewide Imagery Program
Map: GIMS Services, ODNR, May 7, 2009

# Step ten-implement the program